



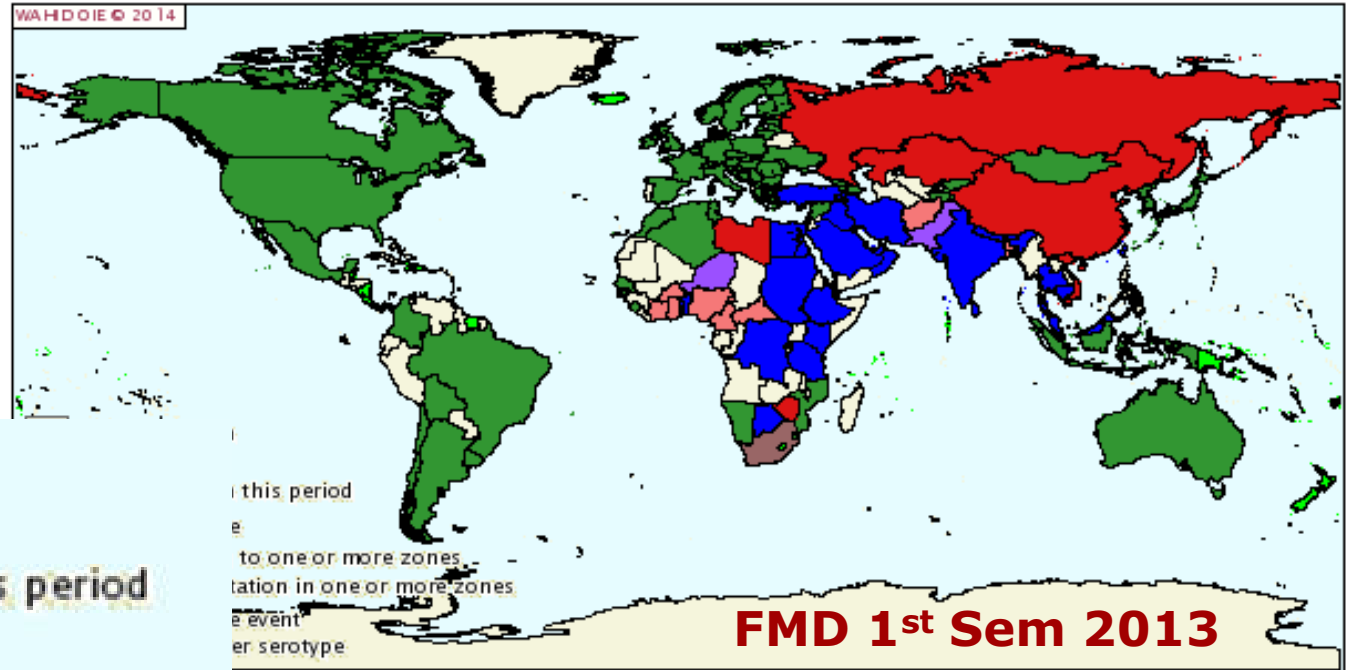
Foot and Mouth Disease
Global situation and
support to control activities
in countries and regions
(apart of Americas)

Joseph Domenech
OIE Paris

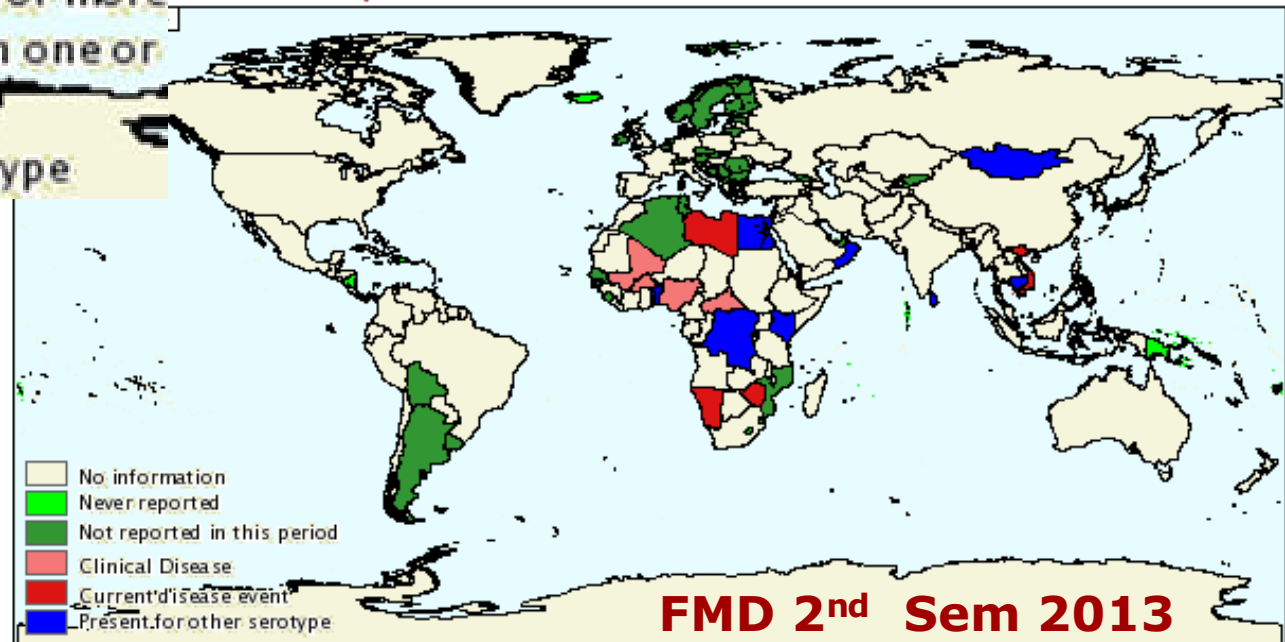
41th COSALFA Ordinary Meeting
Lima, Peru, 10-11 April 2014

FMD reports 2013

Disease distribution maps

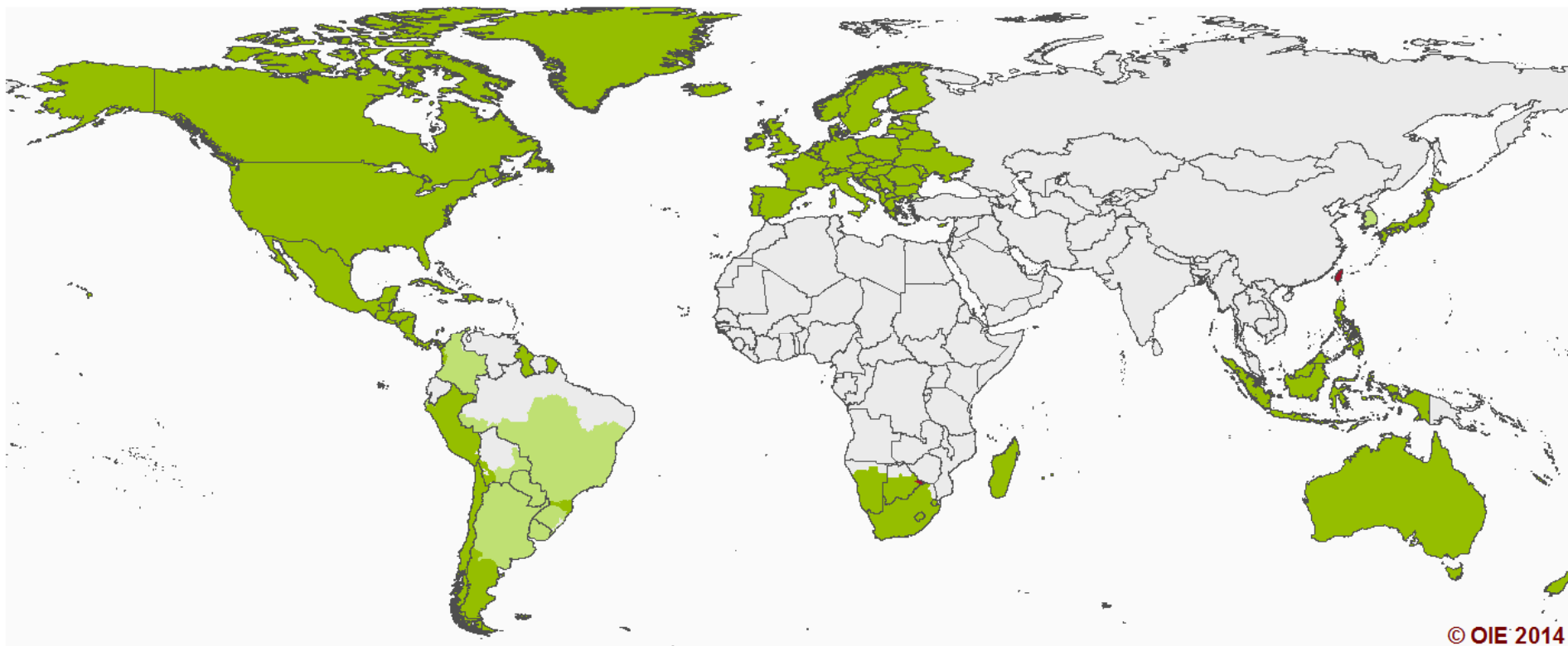


Disease distribution maps




OIE Member Countries' official FMD status map


Last update February 2014





© OIE 2014


Official FMD status of Member Countries - Whole country or zone(s)


 Country/zone free without vaccination

 Suspension of the status free without vaccination

 Containment zone

 Country/zone free with vaccination

 Suspension of the status free with vaccination

 No recognised status

67 countries in the world are recognised as officially free (66 without vaccination and 1 with vaccination)

13 countries have officially free zones (with or without vaccination, 4 of them being entirely free: Argentine, Pérou, Paraguay, Philippines).

Of the OIE's 178 Member Countries, 98 do not have FMD-free status.

A total of 10 dossiers have been submitted to the OIE since the adoption of the new Code article on official endorsement of National Control Plans. 5 have been accepted, 5 were rejected.

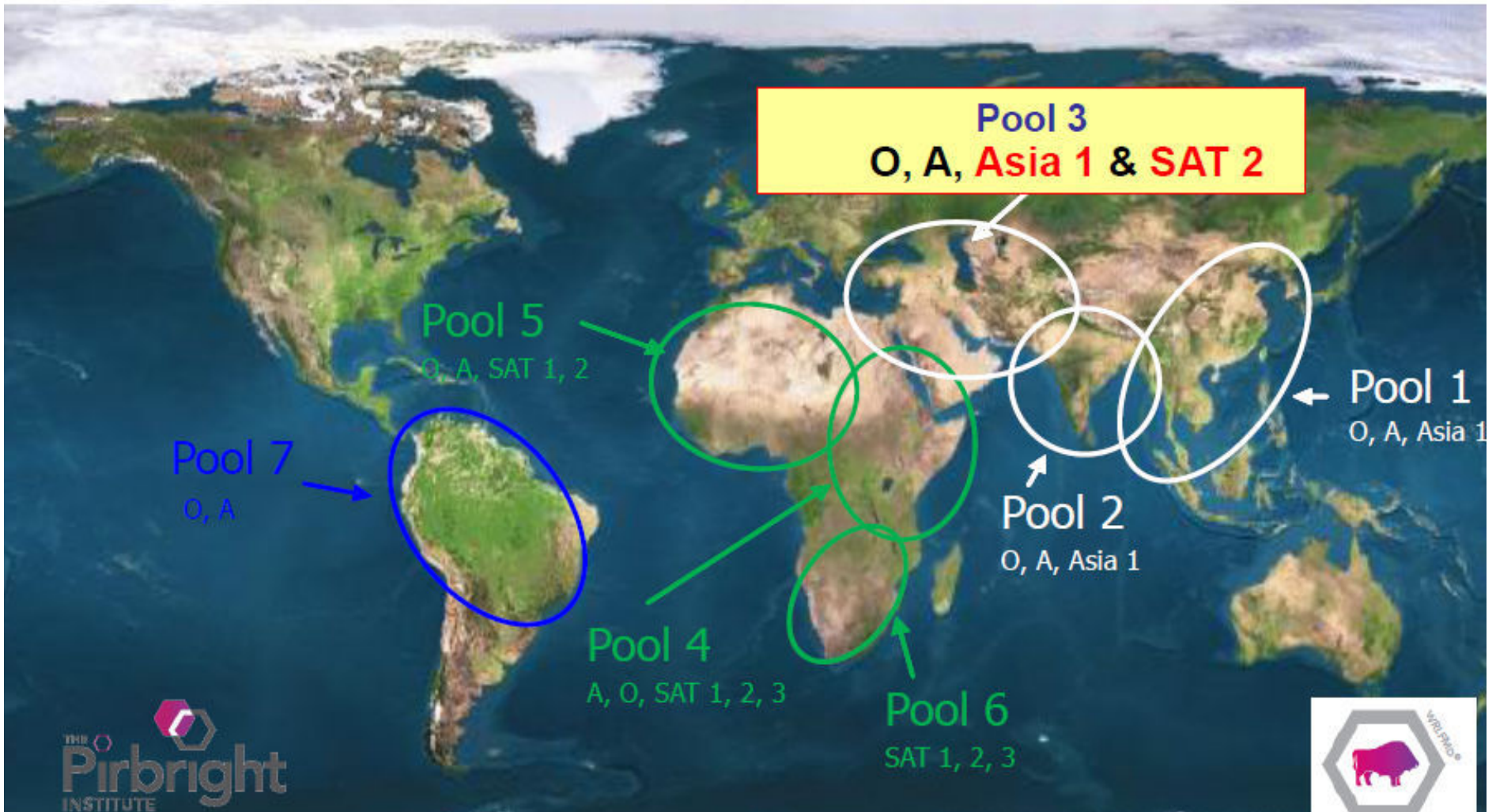
As of May 2013, 4 Countries in the world have officially endorsed national control plans including Bolivia and 3 Northern African countries.

1 new countries to come in May 2014 (OIE General Assembly)

Jeff Hammon, Pirbright Laboratory
40th AG EUFMD Rome Apr 2013

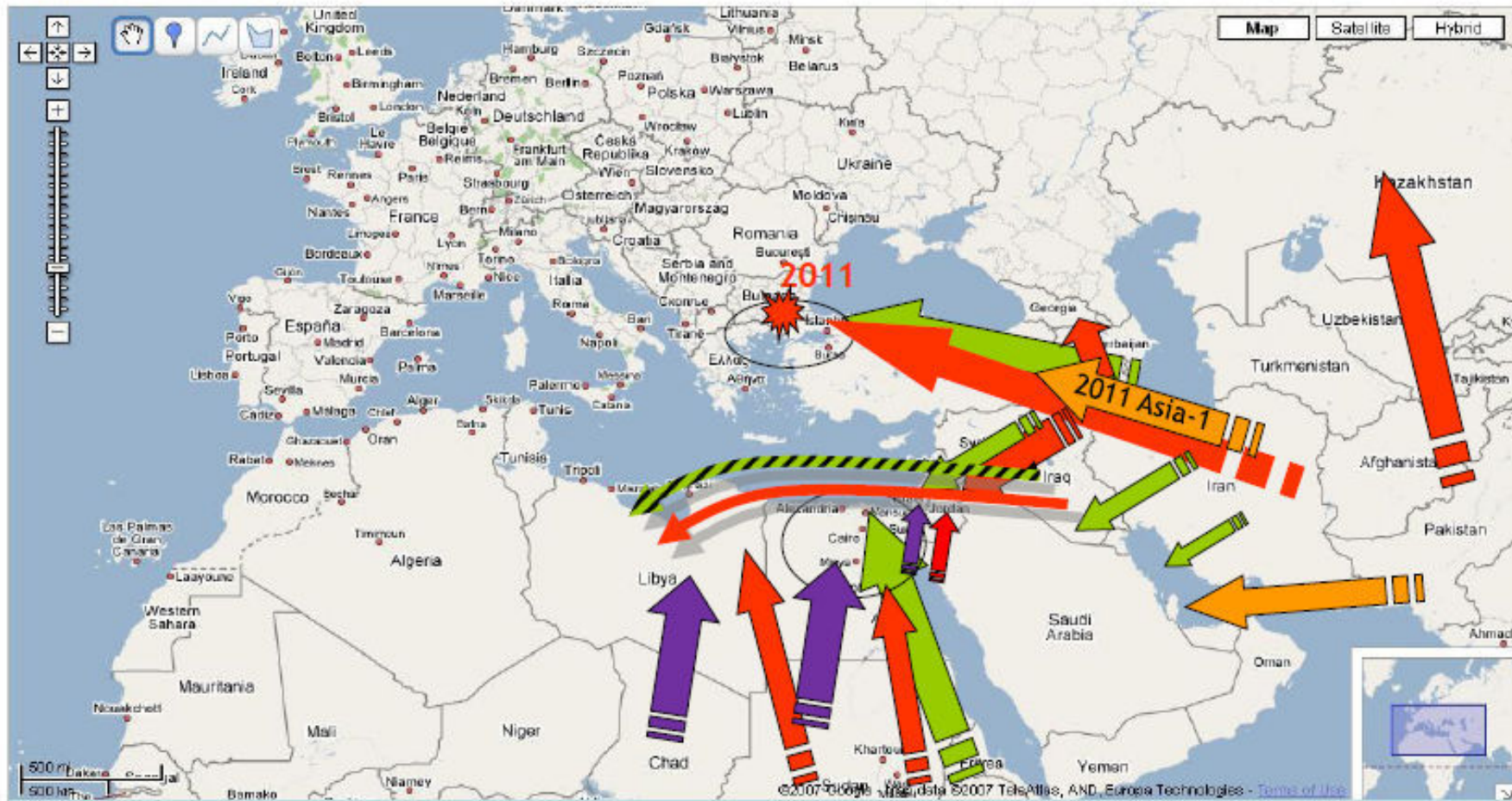
WRLFMD® Regional Analysis- 2012

Asia 1 and SAT 2 on the move

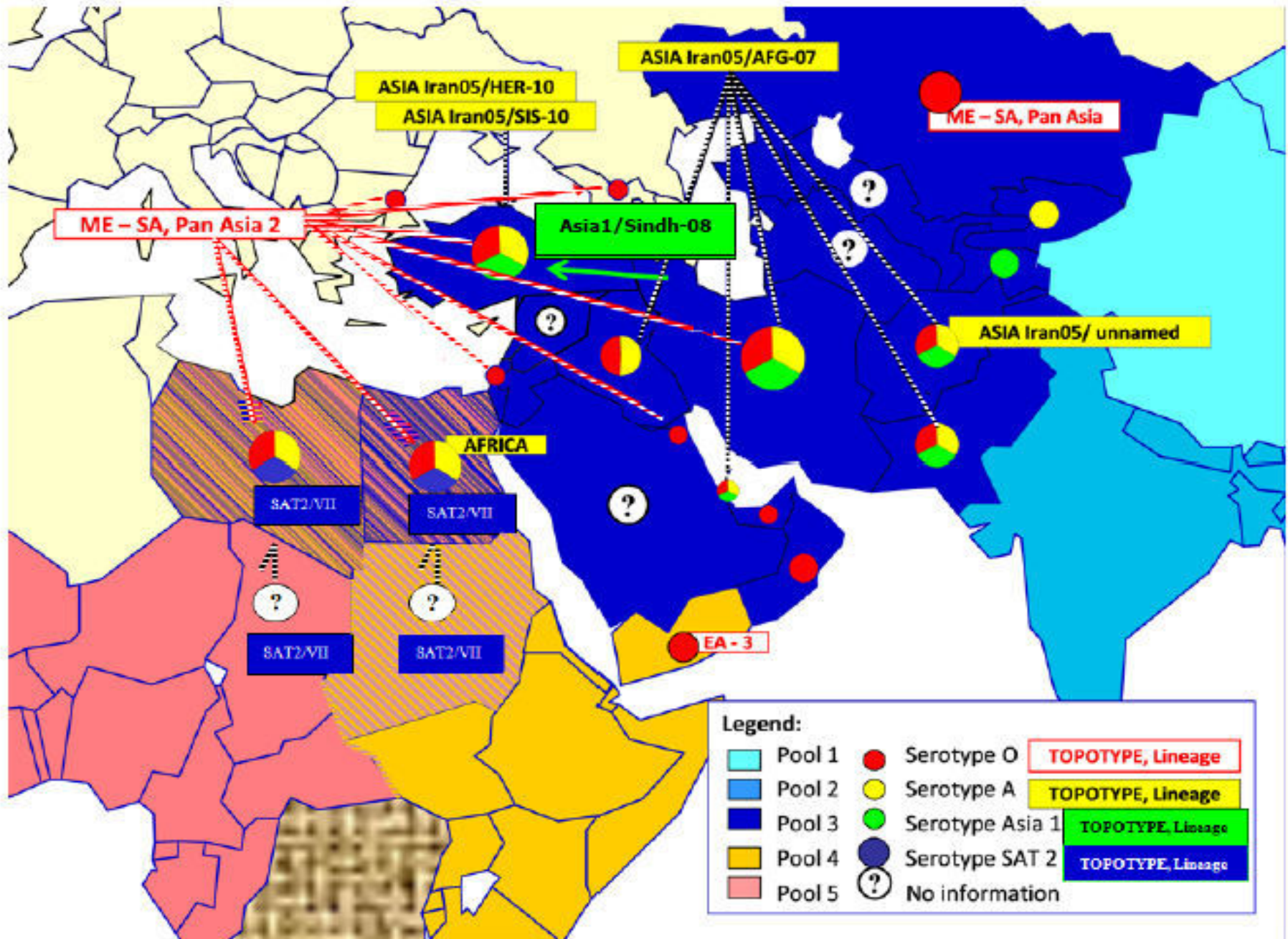




2010-2013: FMD incursions into North Africa and West Eurasia

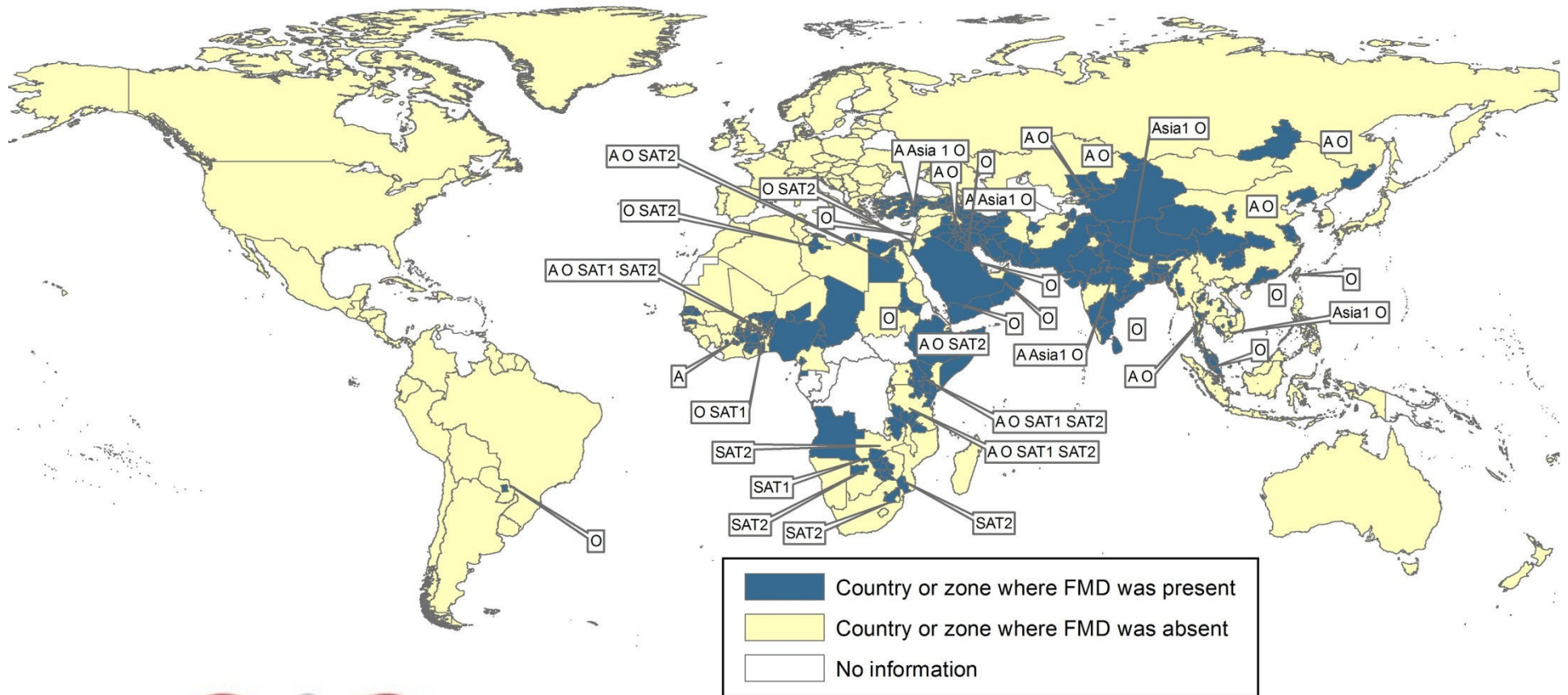


Type O, Type A, Type Asia-1, Type SAT2



FMD distribution by serotypes 2010 – 2013

Foot and mouth disease distribution by serotype and zones affected in 2012 and early 2013



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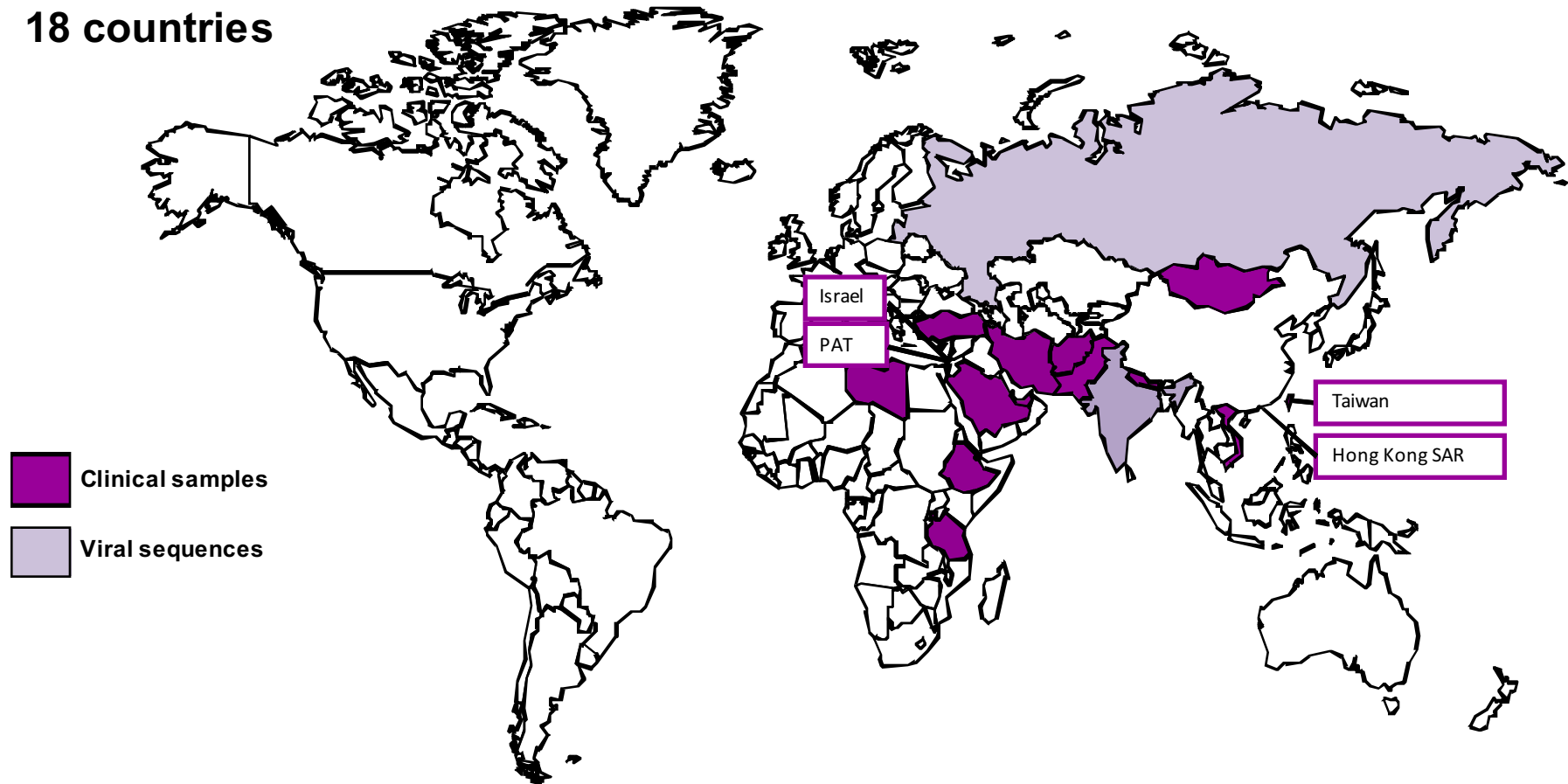
Recent submissions to WRLFMD

Since October 2014

October 2013 – April 2014

373 samples

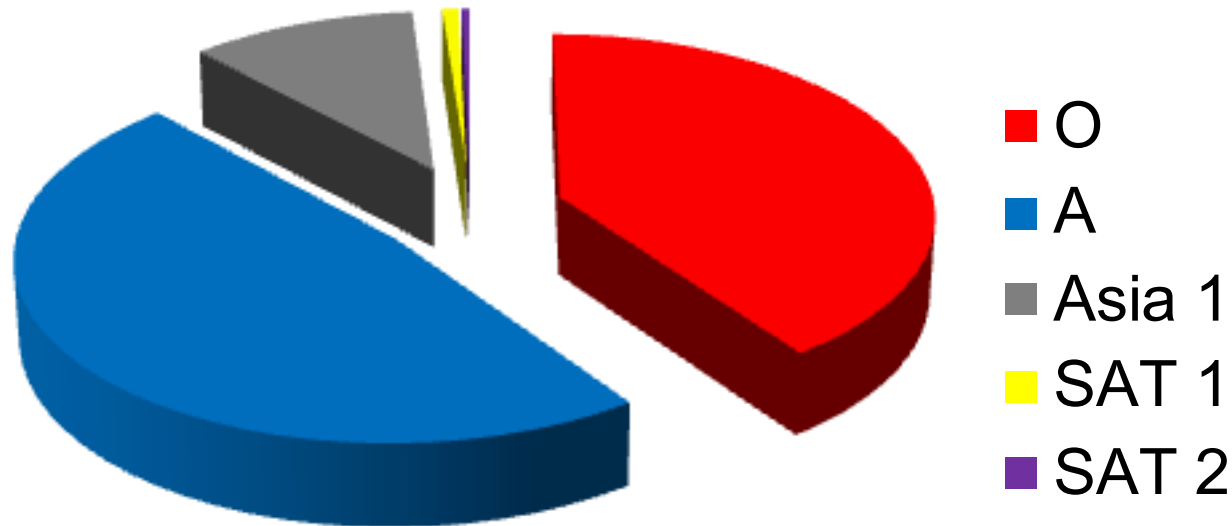
18 countries



Multiple shipments received from Saudi Arabia, Libya, Hong Kong

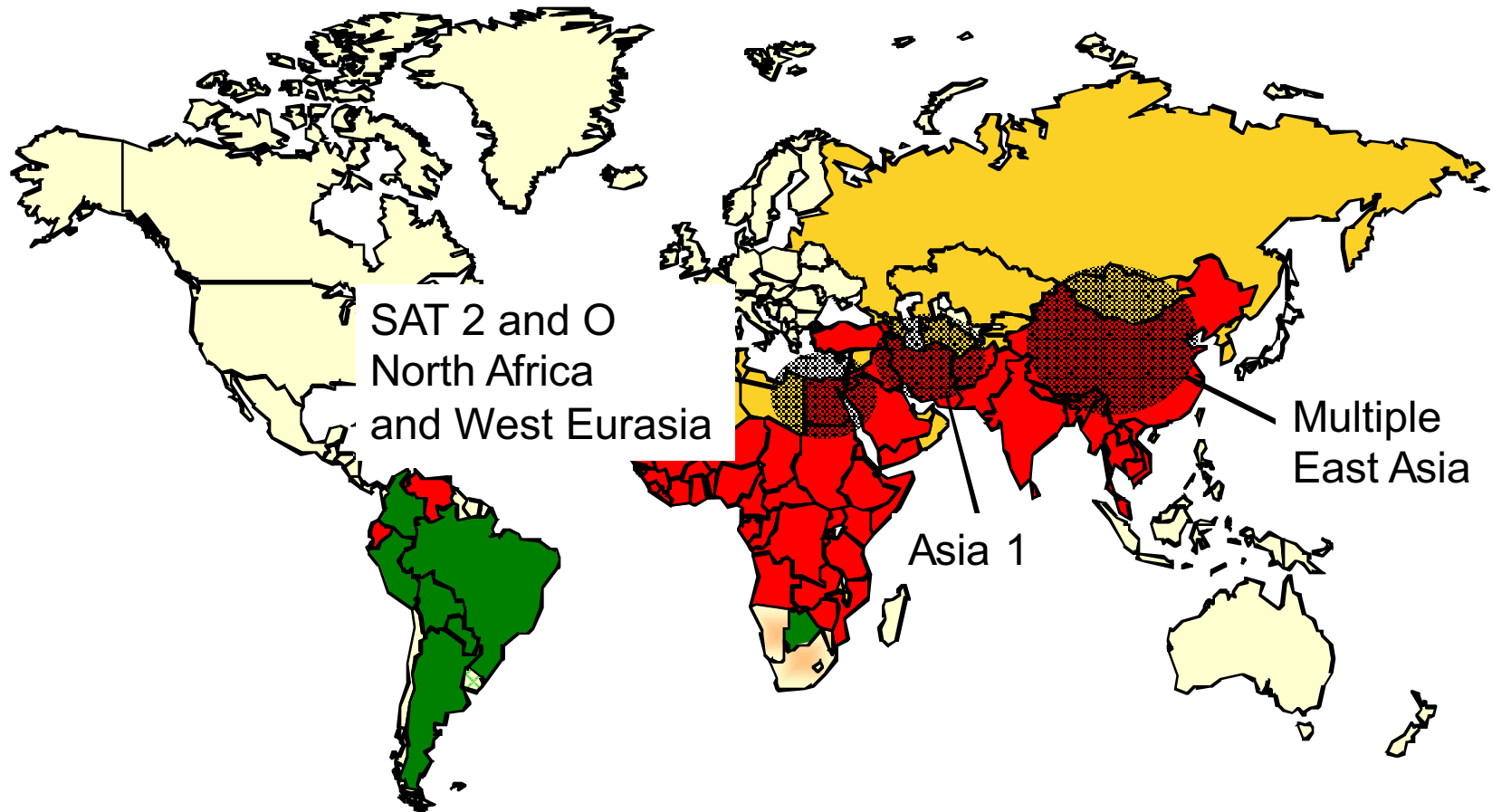
Recent submissions to WRLFMD

- Jan – Dec 2013: 401 samples
- 259 isolates
- Represent 5 FMDV serotypes:



- No virus isolated 32.4% of samples
- RT-PCR negative in 17.7% samples
- No serotype C since 2004

2010-2014: Changing patterns and threats



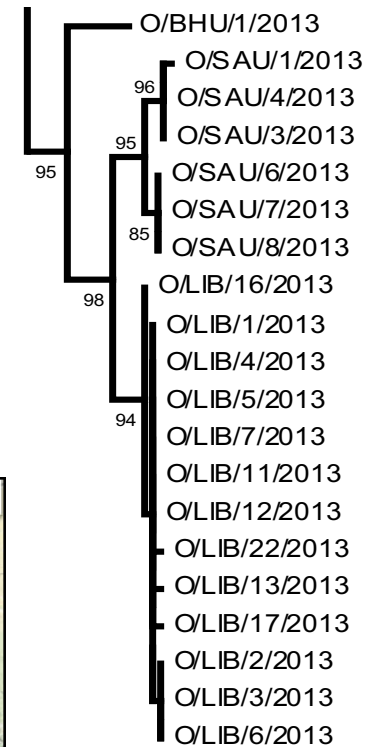
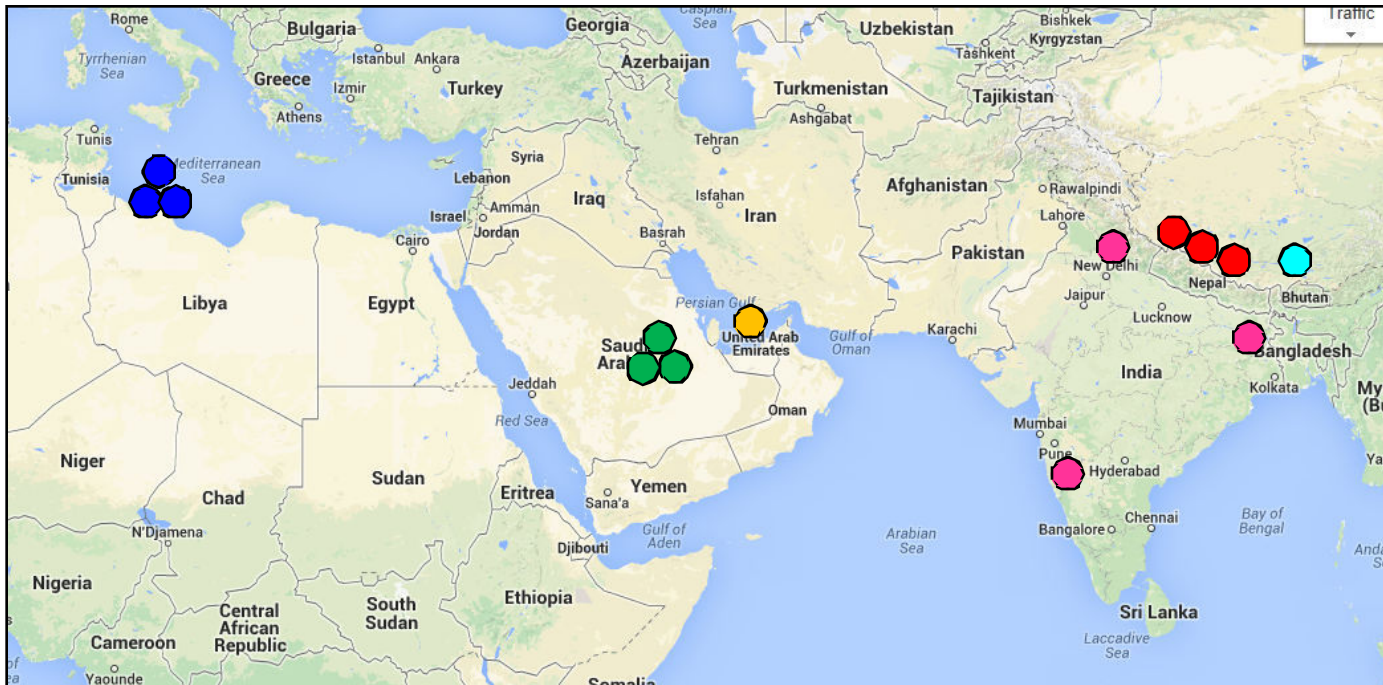
Detailed reports can be found at: www.wrlfmd.org

www.pirbright.ac.uk

Changing global patterns: Pool 3

Serotype O from Indian sub-cont in Libya and Saudi Arabia

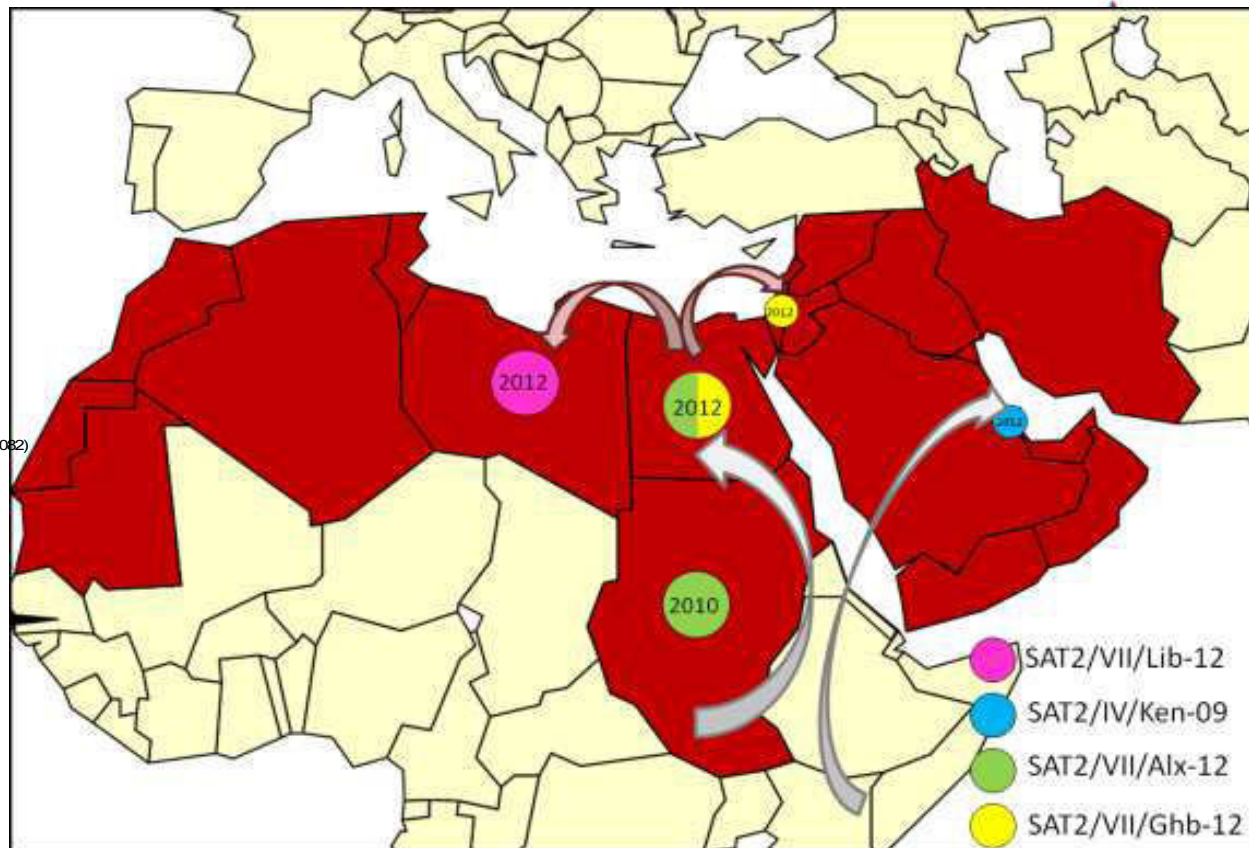
- **O/ME-SA/Ind-2001 lineage most closely related to viruses from Bhutan and India. Indicates multiple independent introductions of this lineage from the Indian sub-continent**



Dr Ibrahim Eldaghayes



www.pirbright.ac.uk



- **Sequence data supported at least two introductions of SAT 2 FMDV into Egypt,**
- **Distinct from other contemporary SAT 2 lineages in the Middle East and North Africa**
 - **topotype VII from Libya**
 - **topotype IV from Bahrain**

Pool 1: O/ME-SA/PanAsia

Recent detection in the Russia Federation and Mongolia

- **O/ME-SA/PanAsia**
not **O/SEA/Mya-98**
 - **Appear to be separate from sequences sent from China in 2011**
-

Pool 1: A/ASIA/Sea-97

Recent detection in the Russia Federation

- **Outbreaks in Eastern Russia**
 - **O/SEA/Mya-98**
 - **O/ME-SA/PanAsia**
 - **A/ASIA/Sea-97**
- **Outbreaks in Black Sea region**
 - **A/ASIA/Iran-05**

Pool 3. A/ASIA/Iran-05

- Replaced the A-Iran-96 and A-Iran-99 strains that were previously circulating in the west Eurasian region
- Initially A22/Iraq vaccine provided protection
- After 2006, a new vaccines were required (A/Iran2005 and A/TUR/2006)
- Evidence that these vaccines are now no longer fully matched using *in-vitro* tests
- Full capsid sequences reveal amino acid changes in antigenic sites that may underpin these antigenic changes

OIE/FAO Laboratory Network

Annual meeting

- Communication between partners
- Update on global and regional FMD situation during 2013
- Regional FMD vaccine strain recommendations
- Activities of the Network in connection with the OIE/FAO plan control of FMD
- Update on regional quality assurance undertaken in support of FMD laboratory testing
- Agreement on action plan for 2014



Revised vaccine bank recommendations?

	Vaccine strain (for each category are not listed in order of Importance)
High Priority	<ul style="list-style-type: none"> O Manisa O PanAsia-2 (or equivalent) O BFS or Campos A24 Cruzeiro Asia 1 Shamir A Iran-05 (or A TUR 06) A22 Iraq SAT 2 Saudi Arabia (or equivalent i.e. SAT 2 Eritrea)
Medium Priority	<ul style="list-style-type: none"> A Eritrea SAT 2 Zimbabwe SAT 1 South Africa A Malaysia 97 (or Thai equivalent such as A/NPT/TAI/86) A Argentina 2001 O Taiwan 97 (pig-adapted strain or Philippine equivalent)
Low priority	<ul style="list-style-type: none"> A Iran '96 A Iran '99 A Iran 87 or A Saudi Arabia 23/86 (or equivalent) A15 Bangkok related strain A87 Argentina related strain C Noville SAT 2 Kenya SAT 1 Kenya SAT 3 Zimbabwe A Kenya



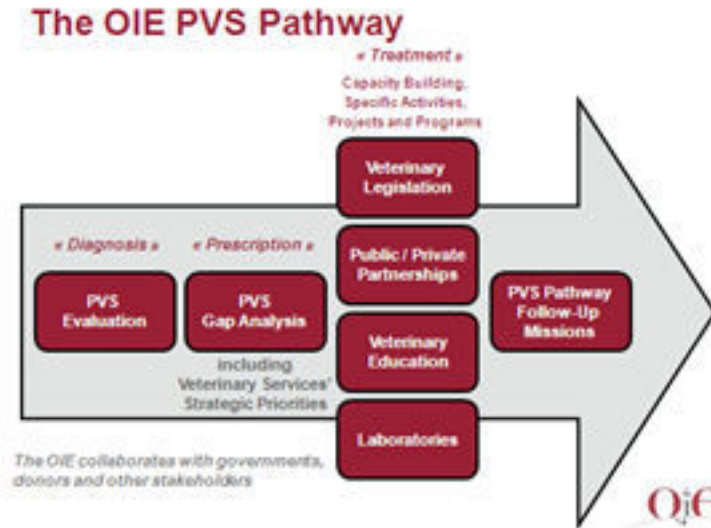
OIE activities on FMD Control

- **Information system WAHIS**
- **OIE Ad Hoc Group on FMD**
Status: evaluations 2 to 3 times every year
- **OIE Scientific Commission for Animal Diseases (SCAD): 2 times every year**



**2013: 14 eval. of applications for OIE disease status recognition and 5 for official control programs;
Review of the OIE Terrestrial Code Chap 8.5 on FMD;
Finalisation of the Handbook on Animal Health Surveillance; Expert missions to OIE Member countries (Kazakhstan, Mongolia)...**

- Support to Veterinary Services: PVS Pathway tools



- Permanent institutional cooperation

And cooperation with Regional public organisations and private sector bodies (more than 50 agreements)

FAO - OIE GF TADS
Global Framework for the Progressive Control of Transboundary Animal Diseases



OIE Support to countries and regions

Workshop on PPR and FMD Tunis, 11-13 November 2013

Technical workshop to assist countries in preparing submissions to the OIE for FMD and PPR status and endorsement of control plans



Algérie



Egypte



Espagne



France



Italie



Lybie



Maroc



Mauritanie



Portugal



Tunisie



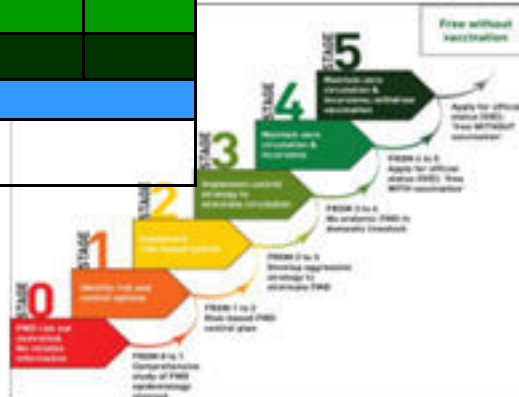
**Establishment of an OIE FMD Unit
for Central Asia in Astana, Kazakhstan**

SEACFMD, Myanmar March 2014, PCP stages 2014)



Country	2012	2013	2014	2015	2016	2017	2018	2020
Cambodia	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green
China	Light Green	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green
Thailand	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
Malaysia	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
Myanmar	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green
Lao PDR	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green
Vietnam	Yellow	Light Green	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green

	National	Zone
Level 0	Red	Red
Level 1	Orange	Orange
Level 2	Yellow	Yellow
Level 3	Light Green	Light Green
Level 4	Dark Green	Dark Green
Level 5	Dark Green	Dark Green
Other	Blue	Blue
No response		



East Asia (2014)

	2011/12	2012/13	2013/14	2014/15	2015/16
PR China	3	3	3	3	3
Chinese	3	3	3	4*	
Hong SAR	1		2		3
Japan	Maintain FMD freedom without vaccination				
RO Korea	3	4*	4*		5
Mongolia	3	3	3	4	4



GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

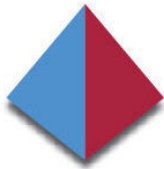


Joint FAO/OIE FMD Working Group

Meets every two months

- **PCP guide update and Assessment tool preparation with EUFMD**
- **Support to the preparation of regional control strategies**
- **Resource mobilization: support countries to bring resources for national projects: see Seminar on 3rd April 2013, Regional and global resources**
- **Promotion of socioeconomic impact studies**
- **Annual report to the Global GF TADs Steering Committee**

Support to regional meetings



GF-TADs
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 PROGRESSIVE CONTROL OF
 TRANSBOUNDARY ANIMAL DISEASES




Meeting on FMD and PPR

in Middle East and North Africa

Amman, Jordan March 2014

Country ^α	2012 ^α	2013 ^α	2014 ^α	2015 ^α	2016 ^α	2017 ^α	2018 ^α	2019 ^α	2020 ^α	2021 ^α
Algeria ^α	OIE-CP ^α	α	α	α	α	α	α	α	α	α
Bahrain ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Egypt ^α	1 ^α	1 ^α	1 ^α	2 ^{xα}	2 ^α	2 ^α	2 ^α	3 ^α	3 ^α	3 ^α
Iran ^α	2 ^α	2 ^α	2 ^α	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Iraq ^α	2 ^α	2 ^α	2 ^α	2 ^α	2 ^α	2 ^α	2 ^α	3 ^α	3 ^α	3 ^α
Jordan ^α	1 ^α	1 ^α	2 ^α	2 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Kuwait ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Lebanon ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Libya ^α	1 ^α	1 ^{xα}	1 ^α	2 ^α	2 ^α	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α
Morocco ^α	OIE-CP ^α	α	α	α	α	α	α	α	α	α
Mauritania ^α	α	α	α	α	α	α	α	α	α	α
Oman ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Qatar ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Saudi-Arabia ^α	1 ^α	1 ^α	1 ^α	2 ^{xα}	2 ^α	2 ^α	3 ^α	3 ^α	4 ^α	4 ^α
Syria ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Tunisia ^α	OIE-CP ^α	α	α	α	α	α	α	α	α	α
UAE ^α	1 ^α	2 ^{xα}	2 ^{xα}	3 ^α	3 ^α	3 ^α	4 ^α	4 ^α	4 ^α	4 ^α
Yemen ^α	1 ^α	1 ^α	1 ^α	2 ^{xα}	2 ^α	2 ^α	3 ^α	3 ^α	4 ^α	4 ^α



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TRANSBOUNDARY ANIMAL DISEASES



WestEurasia Roadmap

5th Annual Meeting

Astana, Kazakhstan, 23-24 April 2014

		2008 Shiraz	2009 Istanbul	2010 Istanbul	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
West Eurasia	Afghanistan	Red	Orange	Orange	Orange	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	
	Armenia	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	
	Azerbaijan	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	
	Georgia	Yellow	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	
	I.R. Iran	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	
	Iraq	Orange	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Light Green
	Kazakhstan	Orange	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green
	Kyrgyzstan	Orange	Red	Red	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Pakistan	Red	Orange	Orange	Orange	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Syria	Light Green	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Tajikistan	Red	Orange	Orange	Orange	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Turkey	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Turkey Thrace	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green	Dark Green
	Turkmenistan	Red	Red	Red	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green
Uzbekistan	Red	Orange	Red	Orange	Orange	Yellow	Yellow	Light Green	Light Green	Light Green	Dark Green	Dark Green	Dark Green	Dark Green	



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TRANSBOUNDARY ANIMAL DISEASES



North Africa

REMESA meetings (Secret OIE-FAO)



Algérie



Egypte



Espagne



France



Italie



Lybie



Maroc



Mauritanie



Portugal



Tunisie

8th JPC REMESA
La Valette, Malta, 27-28 March 2014



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GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



- Global Laboratory Network

- Post Vaccination Monitoring Guidelines

Coordination: first WG of the OIE-FAO FMD Reference Laboratory Network. And then a GF TADs product with external experts

Objective: to describe methodologies to use PVM in different epidemiological situations with regard to FMD status in a country.



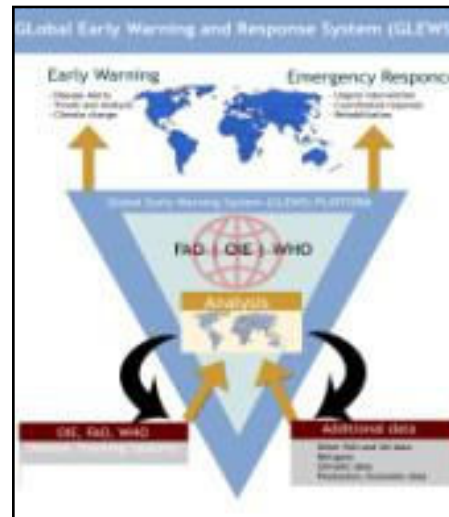
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GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



Other FAO OIE GF TADs tools

**- Global Early
Warning System**



**- Crisis
Management
Center-AH**



CMC-AH Crisis Management Centre
Animal Health

Activity Summary
Fifth Steering Committee Meeting

September 2010 – October 2011



OIE

