



Update from WRLFMD

Donald King

donald.king@pirbright.ac.uk

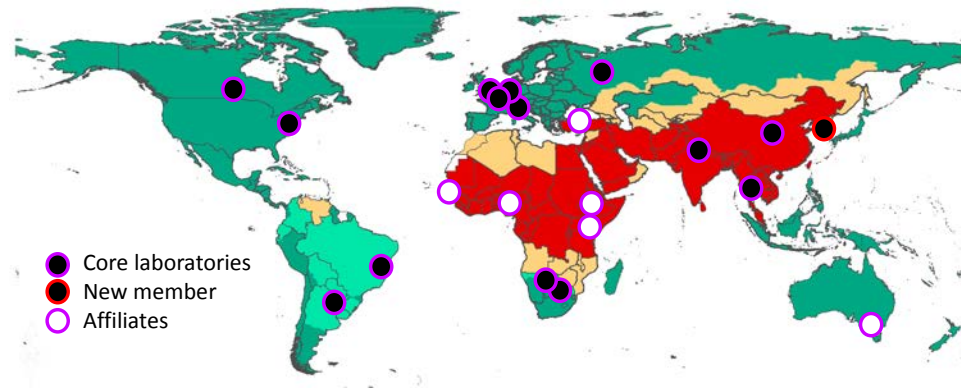
WRLFMD Team: Valerie Mioulet, Nick Knowles, Anna Ludi, Ginette Wilsden, Bryony Armson, Pip Hamblin, Kasia Bachanek-Bankowska, Lissie Henry, Antonello Di Nardo, Beatriz Sanz-Bernardo, Veronica Fowler, Emma Howson, Jemma Wadsworth, Clare Browning, Britta Wood, Bob Statham, Abid Bin-Tarif, Ashley Gray, Beth Johns, Mark Henstock, Alison Morris, David Paton, Nick Lyons, Dexter Wiseman, Julie Maryan, Sarah Belgrave



OIE/FAO FMD Laboratory Network



- OIE and FAO Reference Centres (+ affiliates)
- **Global surveillance and changing patterns in risk pathways**
- **Harmonised and improved lab capacity**
 - Working Groups (nomenclature and PVM)
 - Meeting reports available <http://www.foot-and-mouth.org/>
 - Annual report being prepared



Paris – November 2016

Recent submissions to WRLFMD Pirbright

Since last EuFMD Exec. Comm. (Paris, September 2016)

Reports for:

Afghanistan, Botswana, Bhutan, China*, Egypt, Hong Kong SAR, Mauritius, Malaysia, Mongolia*, Mozambique, Myanmar, Nigeria, Russia*, Saudi Arabia, South Korea, Thailand, Vietnam, Zimbabwe (18 countries)

**via sequence exchange*

Results pending for:

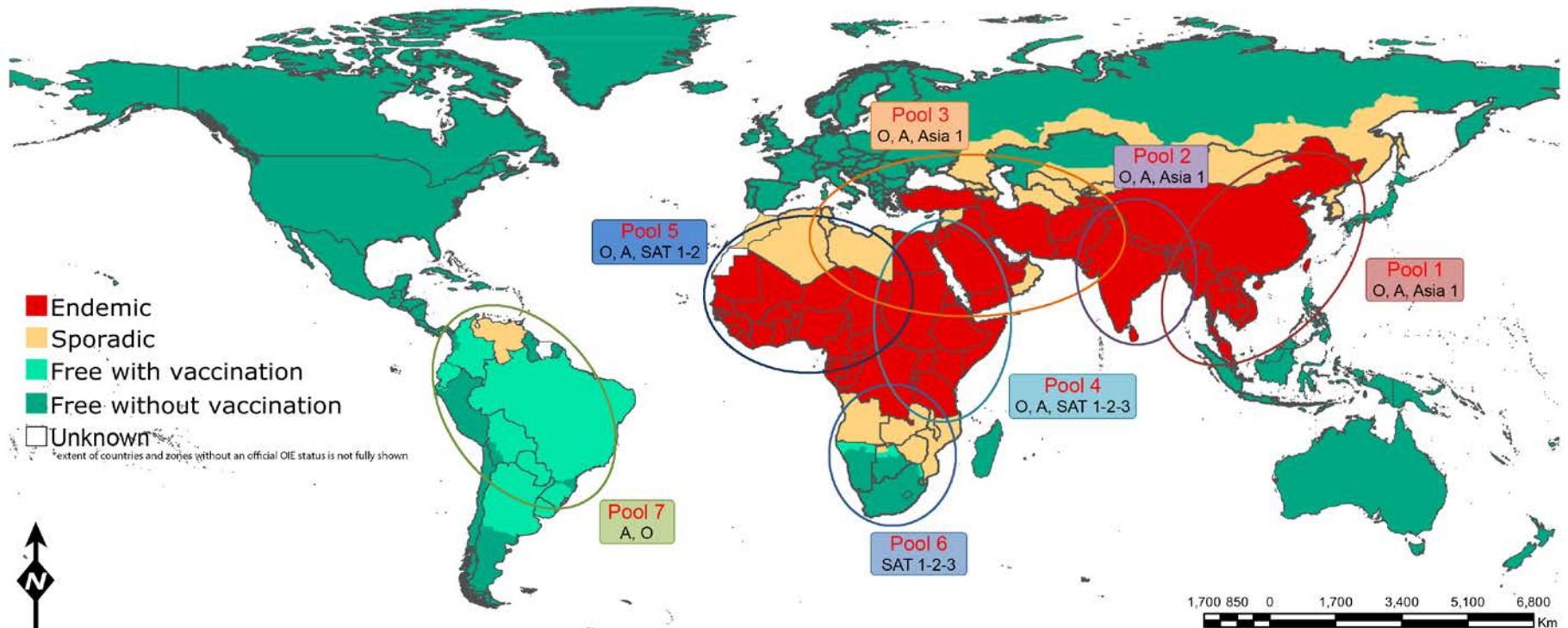
Bhutan (post-vaccination serology), Israel, Nepal, PAT, Saudi Arabia

Arranging shipments:

Iran, Jordan, Turkey

FMD: Headline summary and conjectured global status

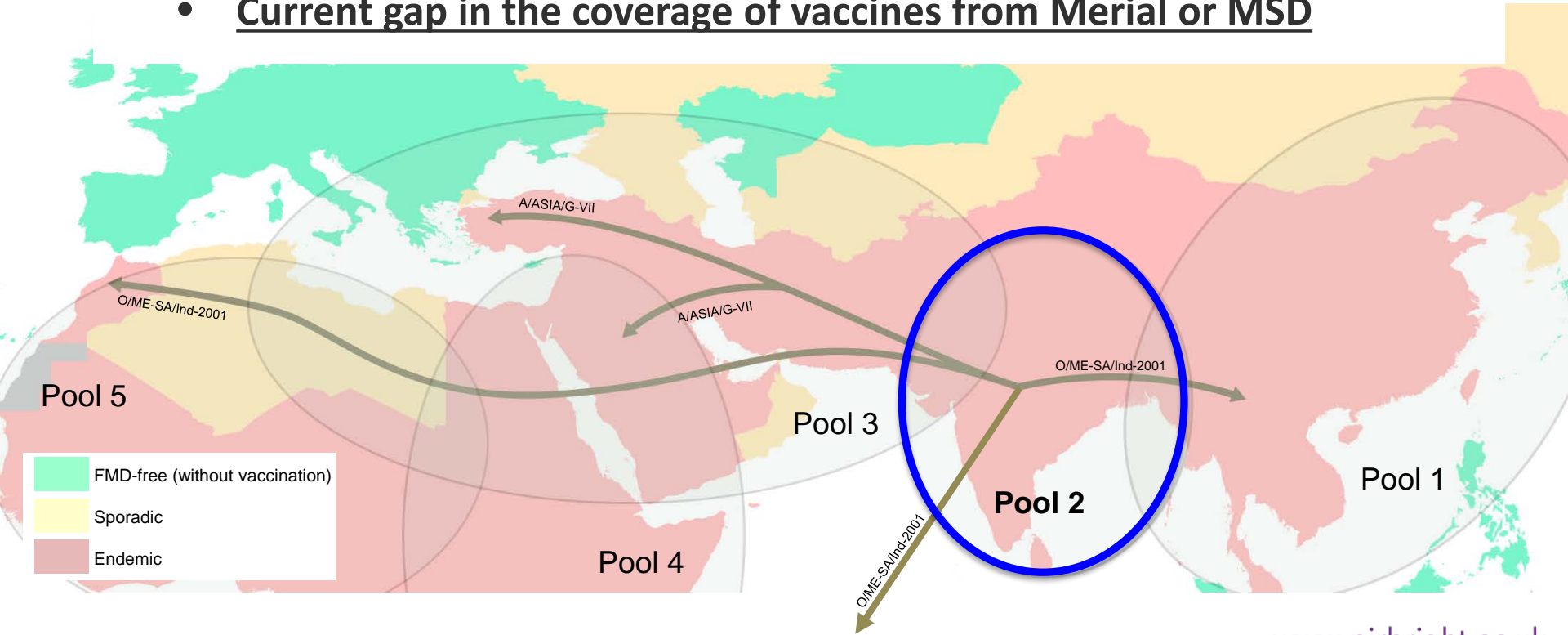
- Seven FMDV serotypes
- **Seven endemic pools** requiring tailored diagnostics and vaccines



- No reported outbreaks in South America since **2013 (Venezuela)**
- No serotype C since 2004
- New FMD-free zone (without vaccination) established in northern Kazakhstan and **Russia (except a new containment zone)**

Long-distance “trans-pool” movements from Pool 2

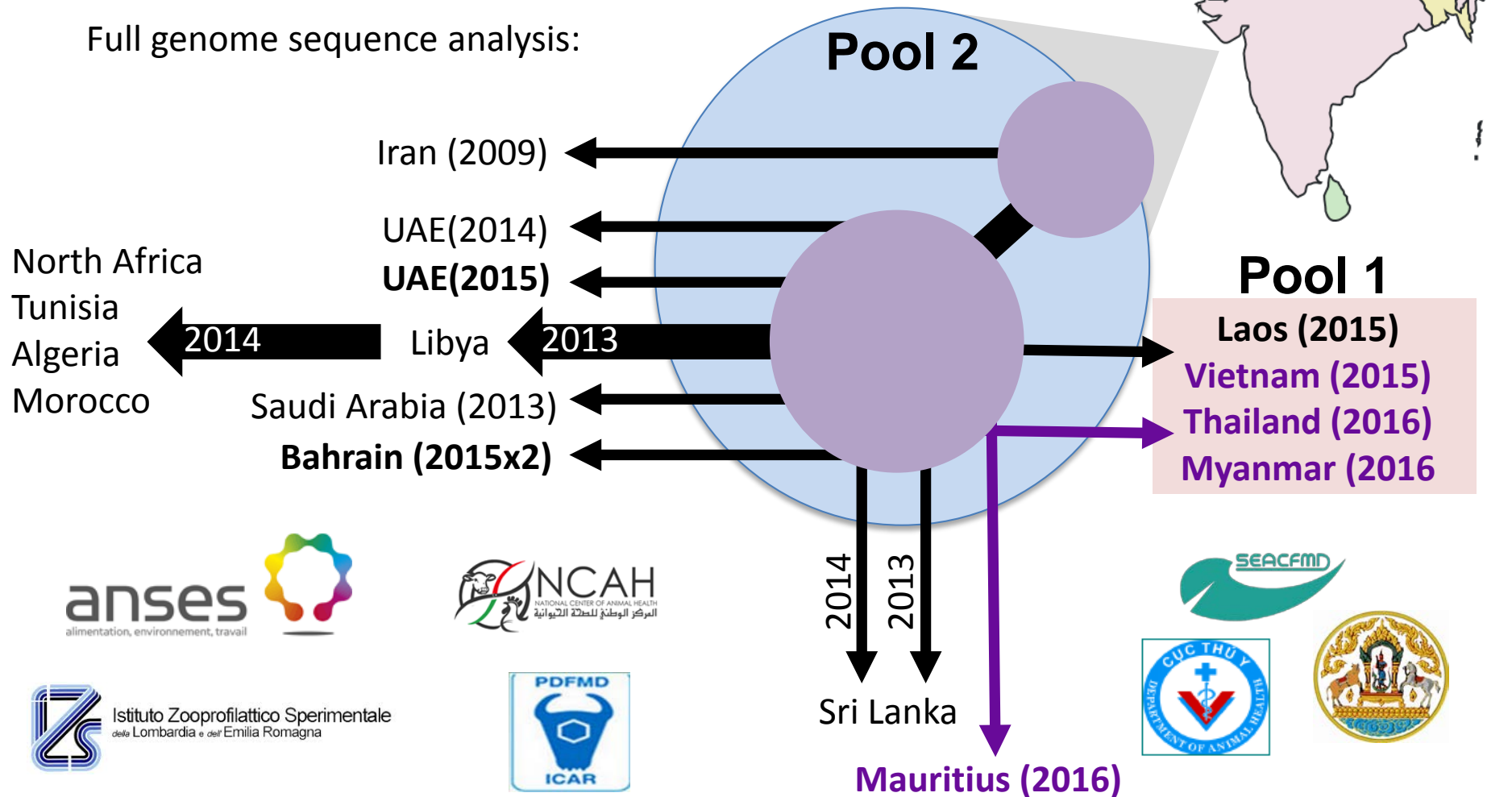
- **O/ME-SA/Ind-2001d**
 - Expanding range of this lineage (East Asia and Middle East)
 - Data from *in vivo* and field studies regarding suitability of vaccines
- **A/ASIA/G-VII**
 - Emerged in 2015
 - Rapid spread in parts of West EurAsia
 - Current gap in the coverage of vaccines from Merial or MSD



O/ME-SA/Ind-2001d: the new PanAsia?

Sequence data indicates that there have been multiple “escapes” from the Indian sub-continent

Full genome sequence analysis:



O/ME-SA/Ind-2001d: Onward transmission from POOL 1?

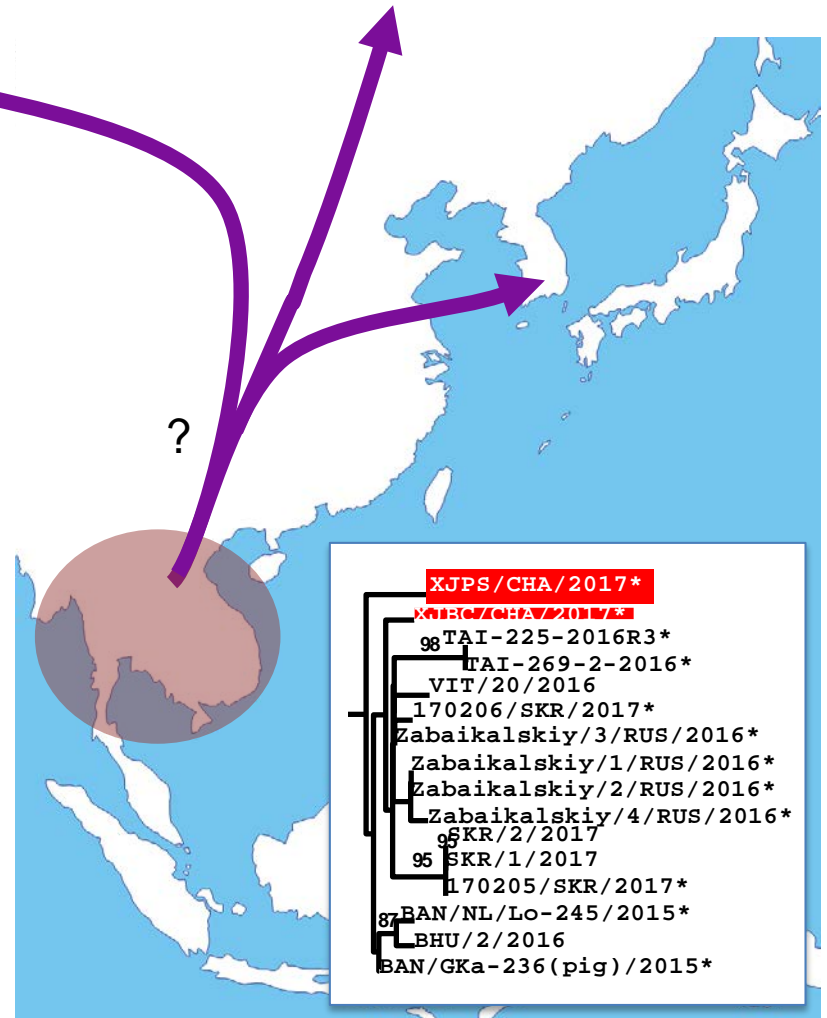
Russian Federation

- November 2016
- Three outbreaks
- Cattle
- Close to the Chinese border



Republic of Korea

- February 2017
- Eight outbreaks
- Cattle

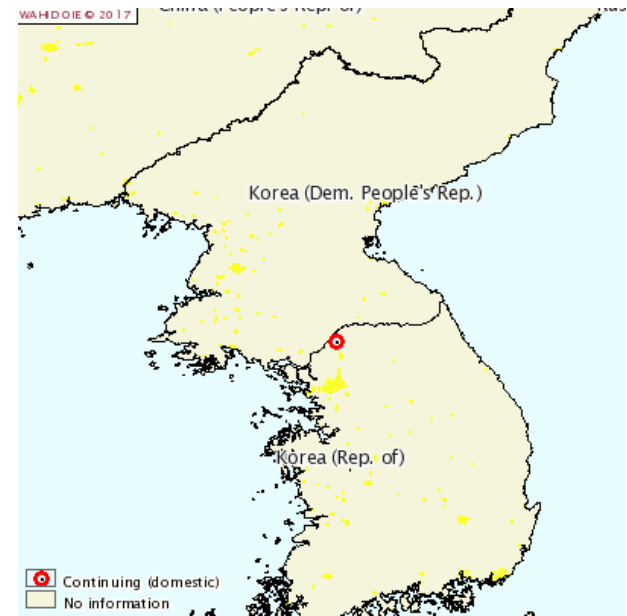


Can this lineage now be found elsewhere in the East Asia region?
Reported at SEACFMD: China (Xinjiang Province in western China)

Republic of Korea

O/ME-SA/Ind-2001d and A/ASIA/Sea-97

- FMD cases in cattle in during February 2017
- **Serotype O (O/ME-SA/Ind-2001d)**
- **Serotype A (A/ASIA/Sea-97)**
 - Cases in cattle
 - Closely related to other sequences recovered from SEA (Vietnam 2016: 99.8% nt identity)
- Two separate introductions into the country
- Since 2010, sequence data indicate >5 separate introductions of O/SEA/Mya-98



O/ME-SA/Ind-2001d: Onward transmission in the Middle East

Jordan

- FMD cases during February 2017
- 3 outbreaks reported to OIE in sheep, goats and cattle
- Preliminary sequence data from Jordan Univ. Science Technology indicates: **Serotype O (O/ME-SA/Ind-2001d)**
- Closely related to field samples from Saudi Arabia (2015/16)



Vaccine matching for O/ME-SA/Ind-2001

Sample	O 3039	O ₁ Manisa	O/TUR/5/2009
ALG/3/2014	0.27	0.13	0.48
BAR/14/2015	0.32	0.13	0.44
BAR/8/2015	0.59	0.22	0.66
BHU/12/2012	0.17	0.12	0.23
BHU/1/2013	0.74	0.17	0.4
LAO/3/2015	0.52	0.18	0.72
LIB/1/2013	0.5	0.13	0.95
LIB/17/2013	0.19	0.12	0.38
LIB/22/2013	0.93	0.38	1.51
LIB/7/2013	0.51	0.16	0.91
MOR/1/2015	0.42	0.27	0.42
MOR/2/2015	0.55	0.32	0.58
MUR/6/2016	0.38	0.65	1
MUR/7/2016	0.35	0.76	0.87
NEP/13/2012	0.51	0.27	0.56
NEP/21/2012	0.24	0.12	0.46
NEP/6/2012	0.36	0.13	0.78
NEP/18/2013	0.4	0.2	0.63
NEP/6/2013	0.36	0.16	0.74
NEP/1/2014	0.37	0.16	0.35
NEP/6/2014	0.63	0.22	1.74
NEP/18/2015	0.54	0.27	0.59
NEP/11/2016	0.47	0.51	0.38
NEP/17/2016	0.41	0.68	0.89
SAU/1/2013	0.45	0.14	0.33
SAU/4/2013	0.63	0.15	0.54
SAU/6/2013	0.5	0.27	0.85
SAU/7/2013	0.54	0.32	1.15
SAU/1/2014	0.28	0.19	0.79
SAU/1/2016	0.89	0.39	0.89
SAU/7/2016	0.32	0.35	0.48
SRL/1/2013	0.46	0.23	0.76
SRL/1/2014	0.48	0.29	0.85
SRL/28/2014	0.58	0.25	0.42
SRL/30/2014	0.43	0.23	0.15
TUN/1/2014	0.26	0.11	0.52
UAE/1/2014	0.25	0.30	1.74
UAE/2/2014	0.42	0.27	1.1
UAE/1/2015	0.66	0.43	0.87
UAE/2/2016	0.55	0.34	0.55
VIT/8/2015	0.71	0.58	0.52
VIT/20/2016	0.66	0.56	0.66

42 field isolates

Using VNT r-value 0.3 cut-off

Not Matched

r-value is <0.28

Borderline

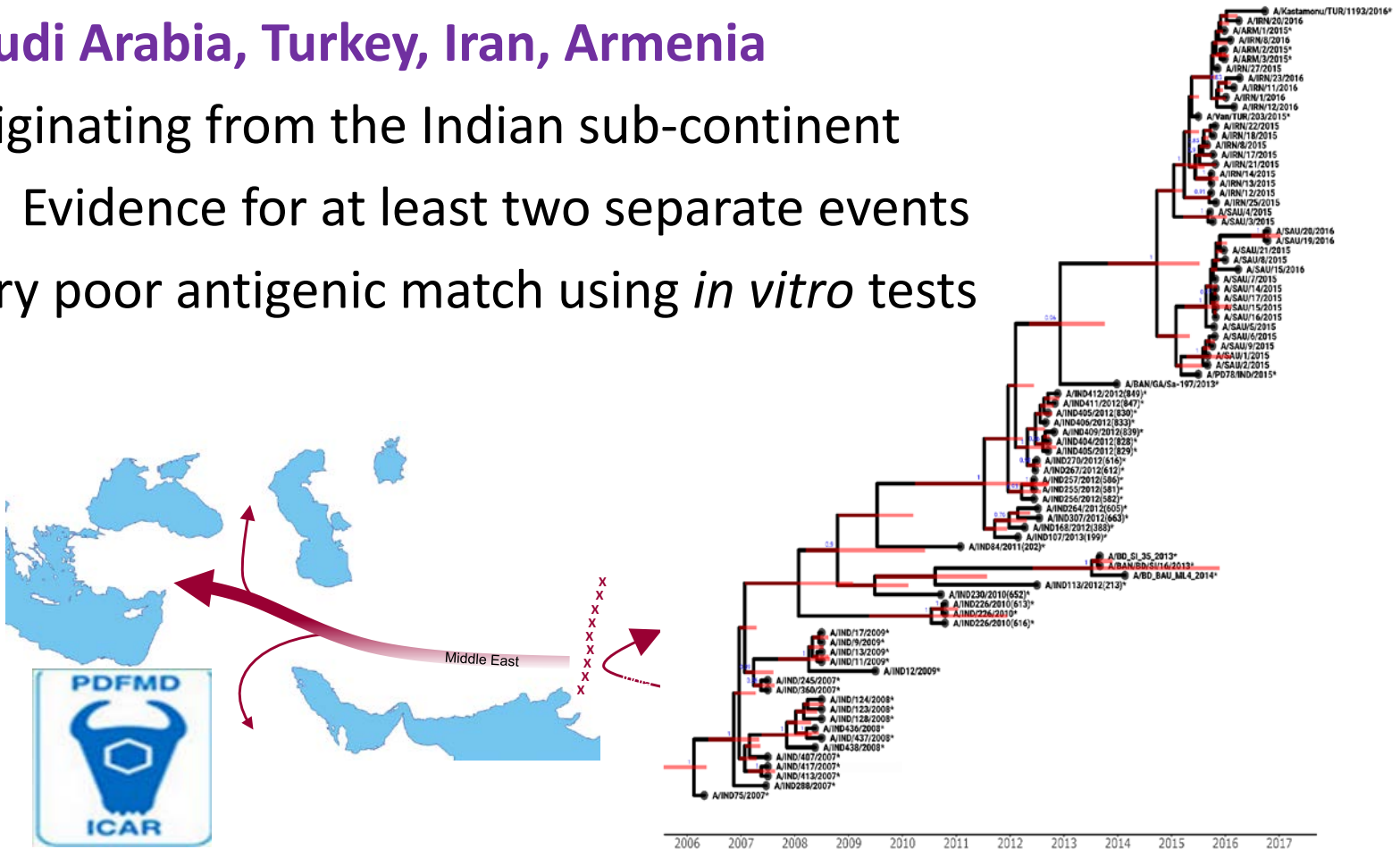
Matched

r-value is >0.32

	Broad coverage: (ME-SA topotype)	O/PanAsia-2
Russian Suppliers	O-Manisa	O-PanAsia2
Vetal, Turkey		O/TUR/07
Merial	O-Manisa	O-3039 (PanAsia-2 equiv.)
MSD	O-Manisa	O/TUR/5/09

Serotype A outbreaks in West EurAsia (A/ASIA/G-VII)

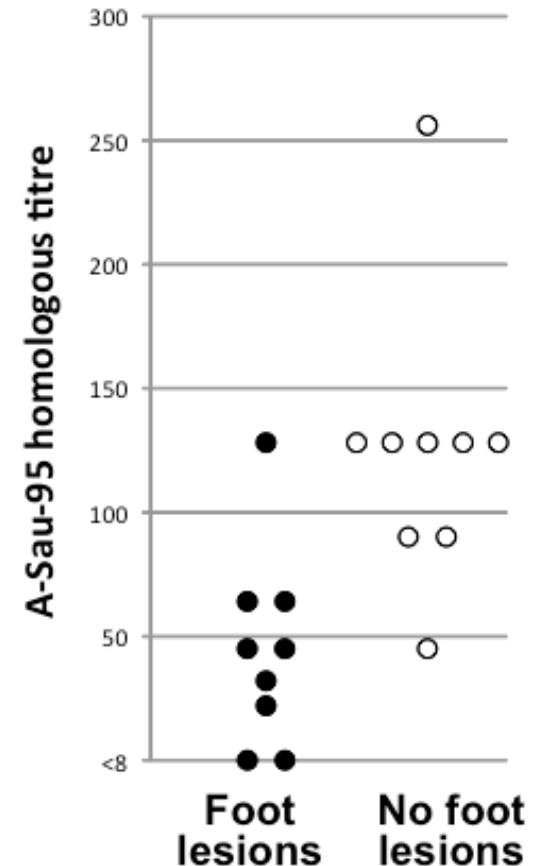
- Initial reports September 2015
- **Saudi Arabia, Turkey, Iran, Armenia**
- Originating from the Indian sub-continent
 - Evidence for at least two separate events
- Very poor antigenic match using *in vitro* tests



TPI Vaccine trial (summary of previous results)

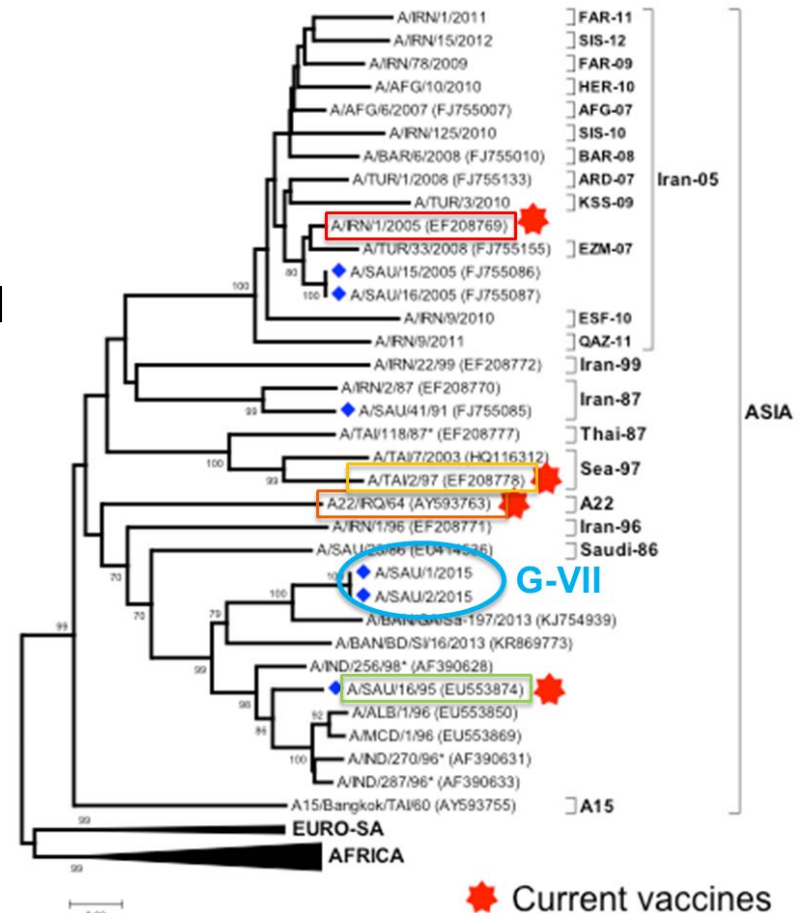
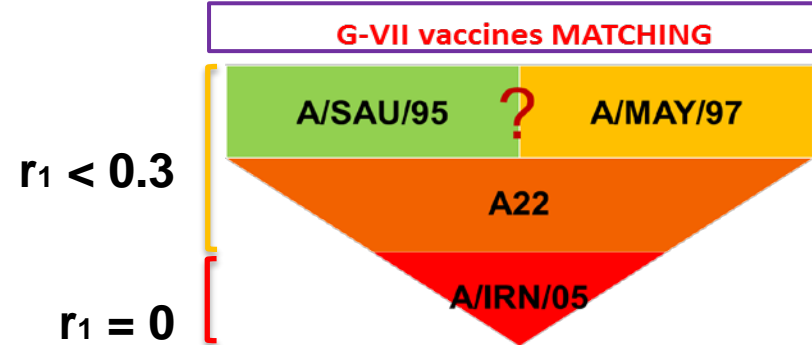
April 2016:

- PPG study design
- Multivalent vaccine containing A-Sau-95 and A-Irn-05
- Both control animals developed foot lesions
- A-Sau-95 titres (measured by VNT) correlated with protection
- 7/16 vaccinates developed foot lesions
- Only **56% protection** from generalisation



Additional vaccine trial

- Pilot trial to evaluate two additional monovalent FMDV vaccines (from Merial)
 - Two groups of cattle administered full dose of vaccine:
 - **A/MAY/97** (n=7)
 - **A/22** (n=7)
 - Unvaccinated controls (n=3)
 - Tongue inoculation: **A/IRN/22/2015**



A/ASIA/G-VII (G18)

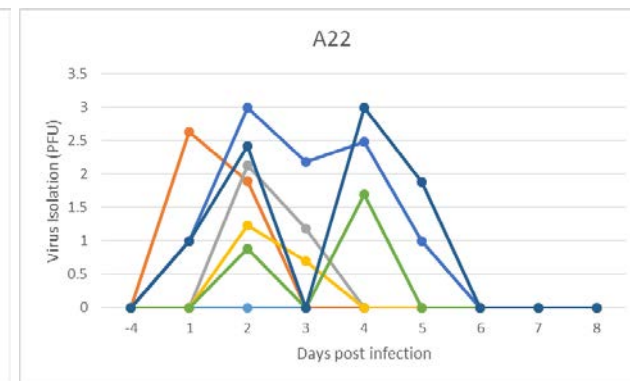
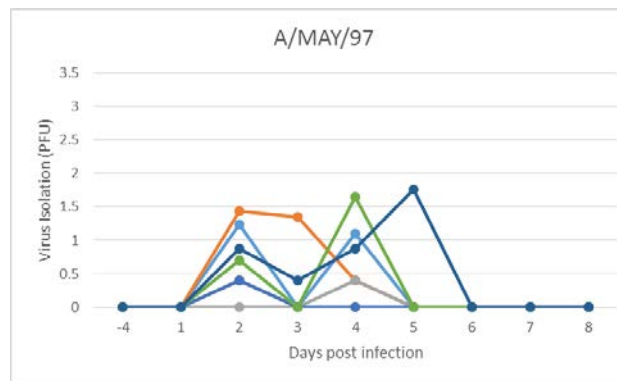
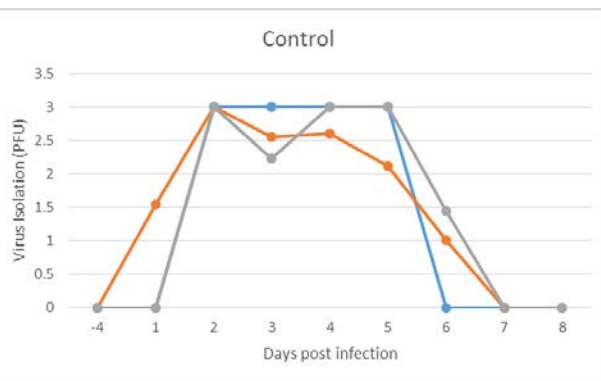
Additional vaccine trial - results

Protection:

Vaccine	Podal generalization	Protected
A/MAY/97	2/7 (28.5%)	5/7 (71.5%)
A22	5/7 (71.5%)	2/7 (28.5%)

~ 3 PD₅₀

Preliminary data - VI from nasal swabs (from CVI):



Serology results – expected soon

A/ASIA/G-VII (G18)

[1] Proposal for a follow up study:

- Encouraging results from the pilot study but with low power.
- PD₅₀ study (full, 1/3 and 1/9 doses) with **A/MAY/97** vaccine
- **A/IRN/22/2015** challenge:
 - Study at WBR
 - CSIRO is the main funder
 - Request that EU (through TPI/EURL) contributes 30K Euros

[2] Proposal for a final study for new G-VII vaccine (from Merial) later in the year:

- *In-vivo* protection test (at TPI): will the **G-VII vaccine** protect against a **A/IRN/05** challenge?



Summary

O/ME-SA/Ind-2001d and A/ASIA/G-VII

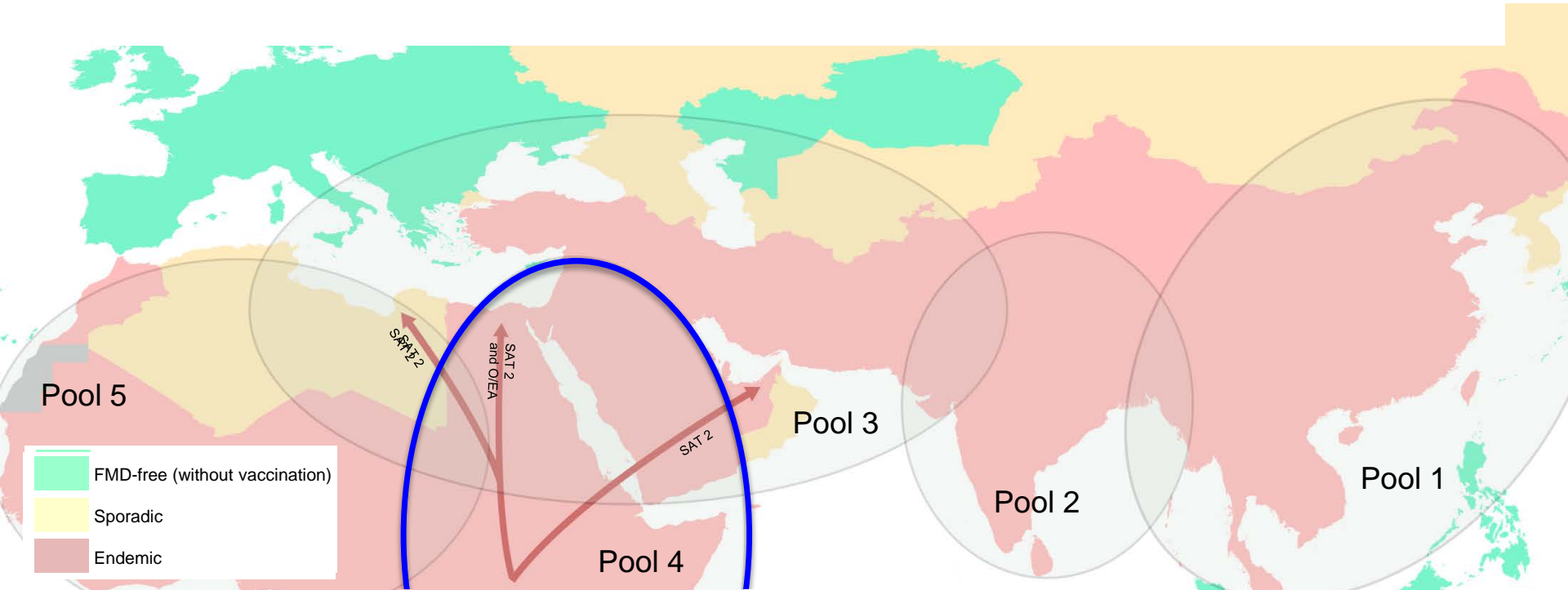
- Long distance movements
 - Important role of the Indian sub-continent as a source
 - Do we understand these connections?
- **O/ME-SA/Ind-2001d lineage**
 - Lineage moving very rapidly
 - Good evidence from *in vivo* studies and field studies that vaccines provide appropriate heterologous responses
- **A/ASIA/G-VII lineage**
 - Now a threat for SEA? – similar to O/ME-SA/Ind-2001d
 - Impact of existing natural and vaccine immunity to A/ASIA/Sea-97?
 - Current gap and vulnerability for emergency vaccination in FMD-free countries (until 2017?)

Long-distance “trans-pool” movements

- SAT 2 (topotype VII)
 - 2015 – outbreaks in Oman
 - Continued cases in Egypt

Other recent samples (2015/16) in Egypt...

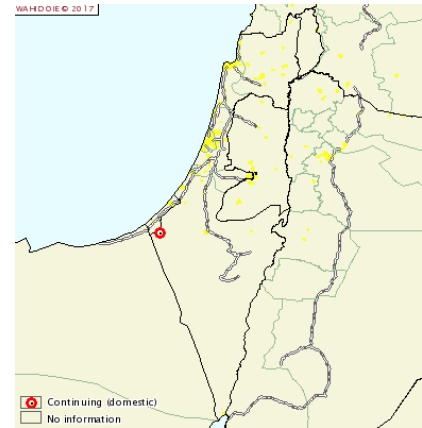
- **A/AFRICA/G-IV** (most related to FMD virus from Ethiopia in 2015)
- **O/EA-3** (most closely related to FMD virus from Sudan in 2013)



O/EA-3 moving in to the Middle East

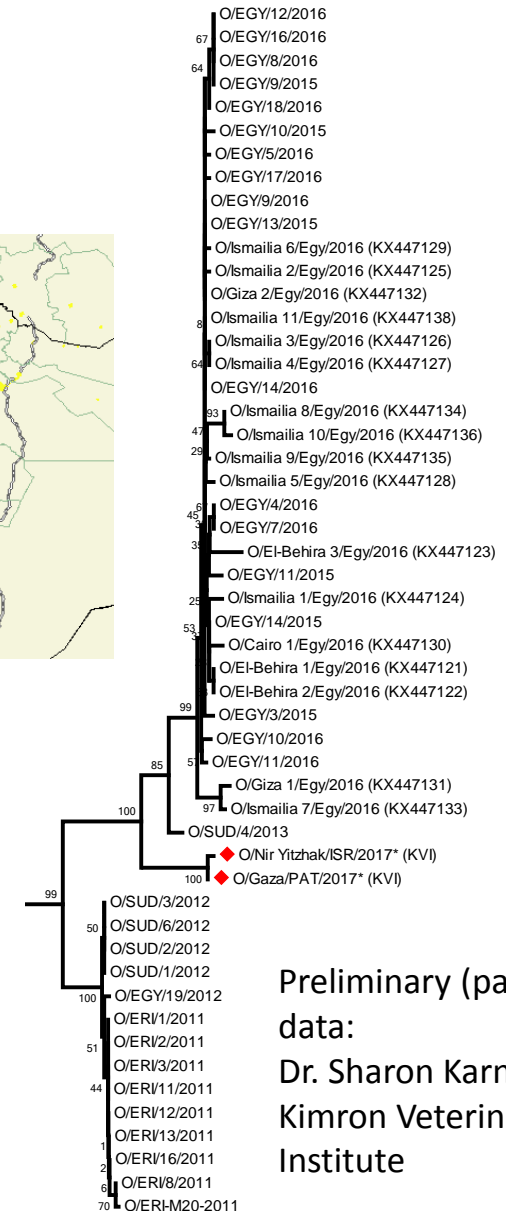
Israel/PAT

- FMD cases in cattle in during February 2017
- Outbreaks in cattle in/close to the Gaza Strip
- Samples currently being tested by WRLFMD



Sample	O-3039	O-Manisa	O/TUR/5/09
ETH/22/2013	0.40	0.18	0.81
ETH/3/2015	0.85	0.25	1.00
EGY/7/2016	0.27	0.35	0.11
NIG/4/2016	0.26	0.23	0.29
NIG/12/2016	0.66	0.60	0.51
NIG/19/2016	0.52	0.79	0.68
SUD/6/2012	0.38	0.22	0.35
SUD/4/2013	0.15	0.21	0.60

*Representative O/EA-3 data from different countries



Preliminary (partial) data:
Dr. Sharon Karniely,
Kimron Veterinary
Institute

Vaccine Bank Recommendations (March 2017)

High Priority

A/ASIA/G-VII(G-18)*

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

A Eritrea

SAT 2 Zimbabwe

SAT 1 South Africa

A Malaysia 97 (or Thai equivalent such as A/Sakolnakorn/97)

A Argentina 2001

O Taiwan 97 (pig-adapted strain or Philippine equivalent)

Low Priority

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

*Recent in-vitro data from WRLFMD for serotype A viruses from Saudi Arabia and Iran highlights an apparent gap in vaccine coverage. Work is urgently required to evaluate whether there is adequate in-vitro match with Indian vaccine strains (A/IND/40/2000) or whether in-vivo protection may be provided by high potency international vaccines.

Brief update on other activities

- PTS (2016/17) – Data being analysed to be reported at EU-RL Workshop in May
- PTS (2017/18) – Proposal submitted to steering committee
- 2016 Training Course in November (Full diagnostic course)
- 2017 Training Courses in March (Vaccine Matching – Korea), May (Full Diagnostic Course) and November (Serology)
- FMDV-Tools:
 - <http://www.foot-and-mouth.org/science/online-tools>
- e-Learning modules



Trainee

GENERAL INFORMATION ABOUT FMD (INTRODUCTION)

QUIZ

Clinical Diagnosis

QUIZ

Lesion Ages

QUIZ

Pathogenesis

QUIZ

FMD Diagnostic Tests (INTRODUCTION)

QUIZ

Biosafety

QUIZ

QA

QUIZ

Sample despatch

QUIZ

Virology

QUIZ

Sequencing

QUIZ

Serology

QUIZ

Vaccine-matching

QUIZ

Practical
—
module

Practical
—
module

Practical
—
module

Practical
—
module

Post Vaccine monitoring
(future module)

Acknowledgements - feedback

OIE Twinning Project with NAHDIC, Ethiopia



- FMD Investigation Training Course
- October 2016
- Farm visits, biosecurity, clinical observations, lesion aging, sampling, field diagnostics
- Link to FAO
- EALN-FMD Network meeting and workshop scheduled for later in 2017



Acknowledgements

- Support for the WRLFMD and research projects
- Collaborating FMD Reference Laboratories and field teams
- Partners within the OIE/FAO FMD Lab Network



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Component 1.1. Training for Member States

Maria de la Puente
Mark Hovari

ExCom 93



Component 1.1: Objectives

1.1.1: To enable every member state to cascade appropriate training and learning on FMD control to their public and private animal health services supported by **infrastructure for learning and knowledge transfer** in place, including e-learning, training resources and staff support.

1.1.2: To improve capacity in each of the MS to recognize, respond to and manage FMD through provision of a demand driven **training programme** supplied in response to MS priorities for training in areas of prevention, detection, and contingency planning for control operations and recovery.



Component 1.1: Success stories

- Four **workshops** on Crisis Management, Modelling, Simulation Exercises and Putting vaccination into practice delivered.
- **Two Real Time Training** Courses in Kenya.
- Three online FMD Emergency Preparation Courses (**FEPC**). To date more than 1500 participants from Member States have taken our online courses, in English, Spanish, French, Estonian and Serbian.
- **Knowledge Bank** available in the e-learning platform, providing a searchable and categorized library of training resources, references, tools and job aids related to FMD.
- **Open access e-learning course** “Introduction to foot-and-mouth disease” available to veterinarians from all MS.

Component 1.1: Workshops

Crisis Management Workshop

Provided a better understanding about emergency preparedness and how to manage a crisis also increase knowledge on crisis communication



Demands or solutions identified:

- More regional tailored variations would be possible
- In the future, webinar series on Emergency Preparedness
- Toolkit / Job aids for crisis managers
- More guidance on stakeholder communication and crisis communication

Component 1.1: Workshops

Modelling Workshop



Provided a better understanding both about models and how models can be used as a decision support tool, in this case to decide to vaccinate or not to vaccinate

Demands or solutions identified:

- There seems to be a need for a Pan European Disease Spread Model, potential to adapt AADIS?
- There is still demand for training on how to use models
- The level of modelling available varies greatly between Member States -> p. solution regional initiatives (CroBoDiMo)
- Importance of generating “rules of thumb” with models, so one country could use the results of another country



Component 1.1: Workshops

Simulation Exercise Workshop

Provided a better understanding on the type of simulation exercises and also how to plan, design, conduct and evaluate them.

Was attended by some Member States + Balkans + Thrace countries.

Demands or solutions identified:

- A milestone to support 1.3 and 1.4 SimExs in the future
- The novelty and importance of the topic was appreciated
- Possible mentoring of core SimEx builders in Europe?
- GET prepared guide



Component 1.2. GET Prepared

Progressive exercise and training guide for emergency preparedness planners

- Based on the work done under the SimEx Handbook
- Having a progressive approach to emergency preparedness (small exercises accumulating into bigger ones)
- Aims to provide a common understanding of SimEx types in Europe for veterinarians.
- Provide (without repetition) know-how to do FMD SimExs
- Also guidance on how to assess the costs of exercises
- Templates for this guide have been developed during the SimEx Workshop

Component 1.1: Workshops

Vaccination Workshop



Provided a better understanding on what elements are needed to plan and to carry out an emergency vaccination for FMD.

Demands or solutions identified:

- Participants understood the complexity of emergency vaccination in a crisis situation
- Current legislation is complex and a guide is requested
- Major bottlenecks to carry out vaccination were identified
- Also a guide would be welcomed on how to do an Emergency Vaccination Plan



Component 1.1: Knowledge Bank

A searchable database of learning resources associated with FMD.

Range of audiences who may use the e-learning site:

- Government veterinarians
- Member State
- Global

But also...

- private practitioners
- animal health workers
- University teachers
- students.

Continually expanding bank of resources that can be added to and updated overtime.

All about foot-and-mouth disease



Showing 1 to 10 of 29 results.

[Next 10 results](#)



Sitio web sobre fiebre aftosa



En esta página web se encuentra información general sobre la fiebre aftosa como la situación epidemiológica, el plan de contingencia frente a la enfermedad en España y un protocolo de vacunación de emergencia. También se encuentran guías prácticas de campo y para identificar lesiones, con múltiples fotos.

Author: Ministerio de Agricultura, Pesca, Alimentación y Medio Ambiente de España
Date: 2017



World Organisation for Animal Health (OIE) Terrestrial Animal Health Code, Chapter 8.8 Infection with Foot-and-Mouth Disease Virus



The Code provides an overview and definition of FMD infection. It also gives OIE definitions of a FMD free country or zone, with or without vaccination. It specifies how to establish a containment zone within a FMD free country and how the recovery of free status can be achieved. The code also gives recommendations for importation from both FMD free and not officially FMD free countries. The code also lists methods of inactivating the FMD virus in different mediums e.g. animal hair.

Author: World Organisation of Animal Health (OIE)
Date: 2016



Plan lié à un risque spécifique - Fièvre aphteuse (Canada)



This plan outlines the response for the Canadian Food Inspection Agency (CFIA) in the event of an FMD outbreak in Canada (FMD free). It gives an overview of FMD aetiology, pathogenesis, epidemiology and diagnosis. It also details FMD response options and control



Component 1.1: Major issues

- Out of 370 training credits: 275 have been spent, 39 are allocated in different training courses to be spent during the **rest of the training period and 56 have not been allocated**. Even if these are positive figures, there is still a lack of response by some MS to allocate or spend their training credits. -> **Allocation of 1-2 credits to all MS next phase?**
- Even if the **completion rates** of the FMD Emergency Preparation Courses are generally good, there is a significant variability between the Member States taking these courses.
- There is a need for continued increase in human resource support for the expanded **e-learning - due to MS demand**. In this sense an e-learning technologist is being recruited.



Component 1.1: Next six months

- At least three Online FMD Emergency Preparation Courses (only counting Component 1.1.) to be run before the end of the training period, including one in Spanish and one in French.
- Online Risk Based Surveillance course to be organized in May/June 2017.
- Shall a needs assessment be carried out during the GS42?
- Possible consultation with SANTE (FVO) on common gaps found during audits.



Component 1.1: Next 2 years

Lessons learnt

- Private sector and some MS show interest to buy training places. Some MS might be interested to have access to more training credits that they have, but cannot afford to buy them.
- The size of the countries can impact the needs of places for the courses (example. 120 participants for a tailored FEPC for a big country vs a small one).
- The language could be a barrier for some countries as most of the training courses are held in English.



Component 1.1: Next 2 years

Changes suggested for the next 24 months (I)

- Types of training: In-house training/missions
- Introduce more incentives for regional WS/ e-learning:
Geographic group TCs

Some (2-3) training credits could be allocated only for this purpose and the **regional representatives** could take charge in this initiate (more value for money)

- Introduce option to support training focal points with
“a **Training Management Information system**”.

Is there a need in the EU and/or neighborhood?



Component 1.1: Next 2 years

Changes suggested for the next 24 months (II)

- Offer **more diversity or number of courses** on full cost recovery basis (Open up options for private sector and MS to pay for trainees)
- Better integration with **BTSF**
- Promote effort to develop “**pan-European public service competency framework**” with VetCEE/FVE
- Procedure across the Pillars to budget training courses for countries that want to pay for a complete course.
- Possibly strategic connections with **1.2 webinars (series)** and workshops in order to ensure more “depth”.



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Component 1.3 THRACE



Component 1.3: Objective

Improved surveillance and management of FMD and other exotic diseases in the Thrace region of Greece, Bulgaria and Turkey

Targets:

1.3.1: Maintenance of FMD freedom in Thrace region, and confidence at all times in this status

1.3.2: Maintain and improve a system for real-time data entry to support management of national surveillance activities

1.3.3: Achieving four years of risk-based surveillance results through activities implemented in each country for FMD

1.3.4: Improved capacity to respond to exotic disease incursions into the common border region, through participation in joint exercises and harmonised levels of contingency planning.



Component 1.3: Meetings

Surveillance activities have been on-going.

THRACE Management Meeting

The relevant issue regarding the program have been discussed (regular activities, consultants and procurement)

Tripartite Meeting

OIE/FAO-EuFMD/EC, BG/GR/TR

Recommendations:

- PPR related actions: surveillance plan, DCF, CP
- Improving passive surveillance -> sensitivity study
- Need for better understanding SGP circulation
- Greece request for a 3rd full time consultant



Component 1.3: Major issues

- Request for a jointly agreed document on objectives and operational plan between the Thrace countries (**Statement of Intentions** format);
- The importance of constantly on-going surveillance activities for the assessment of the confidence in FMD freedom was highlighted by the sensitivity of the model to some delays in the data collection during the last quarter of 2016;
- There is a **shortage of funds to continue payment of the consultants** to maintain the on-going surveillance activities until September 2017. Additional funding (approximately 45,000 Euro) should be made available. However, funds are currently available under other budget lines within Component 1.3.



Component 1.3: Next six months

- Improve data management and spatial visualizations of the online database and the Operational Manual if needed (by Sep 2017);
- Implement a new system for the direct procurement of field/laboratory consumables from the Thrace countries (by June 2017);
- Implement training on participatory epidemiology (PE) for the assessment of current passive surveillance sensitivity in the Thrace region (by Sept 2017) (**endorsement**);
- Implement training to improve knowledge/skills on FMD (and PPR) outbreak investigation (OI) and outbreak management (OM) in the Thrace region (by Sept 2017) (**endorsement**);
- If funds available, hold a joint simulation exercise BG/GR/TR. Overlap of activity for GR/BG under THRACE and Balkans (**endorsement**);



Component 1.3: Next 2 years

Lessons learnt

- Thrace countries showed interest for training on FMD outbreak investigation/management as well as for other exotic TADs (particularly PPR);
- A “contingency plan” for national consultants replacement is required to face unexpected loss of consultants which could affect the required on-going surveillance activities;



Component 1.3: Next 2 years

Changes suggested for the next 24 months

- Introduce a formal assessment tool of the passive surveillance in Thrace, and implement interventions for increasing the sensitivity of the current passive surveillance;
- Promote participation in joint trainings including the implementation of cross-border exercises;
- Promote the extension of current THRACE surveillance plan to be in operation in a wider area for improving the early warning system (*further harmonize actions ongoing in the new control zone established in Western Anatolia*)



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III
3 PILLARS of
the EuFMD



Component 1.4 BALKANS

Mark Hovari
Natasha Antovska

ExCom 93



Component 1.4: Objective

To improve emergency management capacity for FMD in the Balkan region.

Targets:

- 1.4.1. Coordination within the region and improvement of national emergency preparedness and FMD laboratory capacity
- 1.4.2. Improving contingency plans through simulation exercises
- 1.4.3. Integration of FMD laboratories into the emergency preparedness activates and providing regional diagnostic support for an FMD crisis.



Component 1.4: Success Stories

Balkan Management Meeting

Most of the countries attended.

The relevant issues regarding the components were discussed.

Also possible emphasis and de-emphasis for the components were touched upon.

Simulation Exercise Workshop

Eight out of ten Balkan countries attended (+ Ukraine)

Teaching participants on how to do simulation exercises.

After the workshop they are further mentored.



Component 1.4: Major issues

- It could be considered to add Ukraine as a beneficiary to this component, in order to help increasing their emergency preparedness for FMD.



Component 1.4: Next six months

- Conduct Balkan “road trip” in some of the countries to develop a better understanding of their overall emergency preparedness and to identify priority areas where EuFMD can provide support
- Plan, conduct and design national simulation exercises in May – June 2017 based on the knowledge gained during the SimEx workshop.
- A follow up workshop should also be held where the challenges and outcomes of the exercises can be shared



Component 1.4: Next 2 years

Lessons learnt

- There is an internal demand for CVO and a management level cooperation on emergency preparedness in this area.
- A desirable level of ownership of this component by the countries involved was not achieved up to this point, but this might improve in the future.
- The level of engagement of the countries varies



Component 1.4: Next 2 years

Changes suggested for the next 24 months

- Supporting regular (half a year) management meetings with countries involved to develop deeper ownership and improve outputs
- Support regular (once a year) high level (CVO / Tripartite) meetings on the progress of the component and to provide a platform to discuss regional emergency preparedness for FMD and other transboundary animal diseases.
- On the spot needs assessments (like the road trip initiative)



Component 1.4: Next 2 years

Changes suggested for the next 24 months

- Reaching out and training local experts in various topics (epidemiology, emergency preparedness, risk assessment or other) who can provide regional answers to regional problems.
- In connection to the above, STP positions should have a balance between Rome – home country with the focus of producing ready to use materials by the end of the placement.

There would be a connections of CVOs seeing the benefit of 1.4 and making sure that STPs are sent, trained and provide a benefit to the region.

Update from GF-TADs

Juan Lubroth (FAO) and Laure Weber-Vintzel (OIE)

March 2017



Food and Agriculture
Organization of the
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GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

Contents



- FAO support to Members States and Regional Efforts
- Global FMD Control Strategy – where we are!
- Third roadmap meeting for SAARC countries
- FMD WG: priorities and plan for 2017-2018
- OIE activities relevant to FMD at the Global level
- Areas of collaboration with EuFMD

Global Strategy Components 2 and 3

TCP	TCP/PAK/3503 (NTE: 2017-03-31) - Development of National Control Program for Foot and Mouth Disease in Pakistan	\$ 448,000
	TCP/SSD/3602 (NTE: 2017-12-31) - Support to implementation of the Foot and Mouth Disease (FMD) Progressive Control Pathway (PCP) in South Sudan	\$ 451,000
	TCP/RLA/3506 (NTE: 2017-08-31) - Erradicación de la Fiebre Aftosa en los países de la Subregión Andina	\$ 200,000
	TCP/KYR/3504 (NTE: 2017-10-31) - Establishment of the Kyrgyz Veterinary Association	\$ 360,000
	TCP/INT/3503 (NTE: 2016-12-31) - Technical assistance for the formulation of strategies for the control of peste des petits ruminants (PPR) at global and regional levels	\$ 500,000
	TCP/RER/3602/C1 (NTE: 2017-07-31) - TCPF: Improving the understanding, awareness, prevention and control of lumpy skin disease in the Balkans	\$ 99,000
	TCP/ERI/3604/C3 (NTE: 2017-11-30) - TCPF: Assessment of Peste des Petits Ruminants (PPR) situation and status of prevention and control measures in Eritrea	\$ 45,031
	TCP/ERI/3607 (NTE: 2019-01-31) - Strengthening capacities for the prevention of Peste des Petits Ruminants (PPR) in Eritrea.	\$ 302,000
	TCP/LIR/3504 (NTE: 2016-09-30 00:00:00, LTU: AGAH) - Emergency assistance for the control of Peste des Petits Ruminants (PPR)	\$ 363,000
	TCP/SUD/3504 (NTE: 2017-06-30 00:00:00, LTU: AGAH) - Surveillance, Diagnosis and Control of Peste des Petits Ruminants (PPR) in Sudan	\$ 500,000
TF/UTF	UTF /PAK/139/PAK (NTE: 2017-06-30) - Control of Transboundary Livestock Diseases (Foot and Mouth Disease and Peste des Petits Ruminants)	\$ 8,891,367

Global Strategy Components 2 and 3

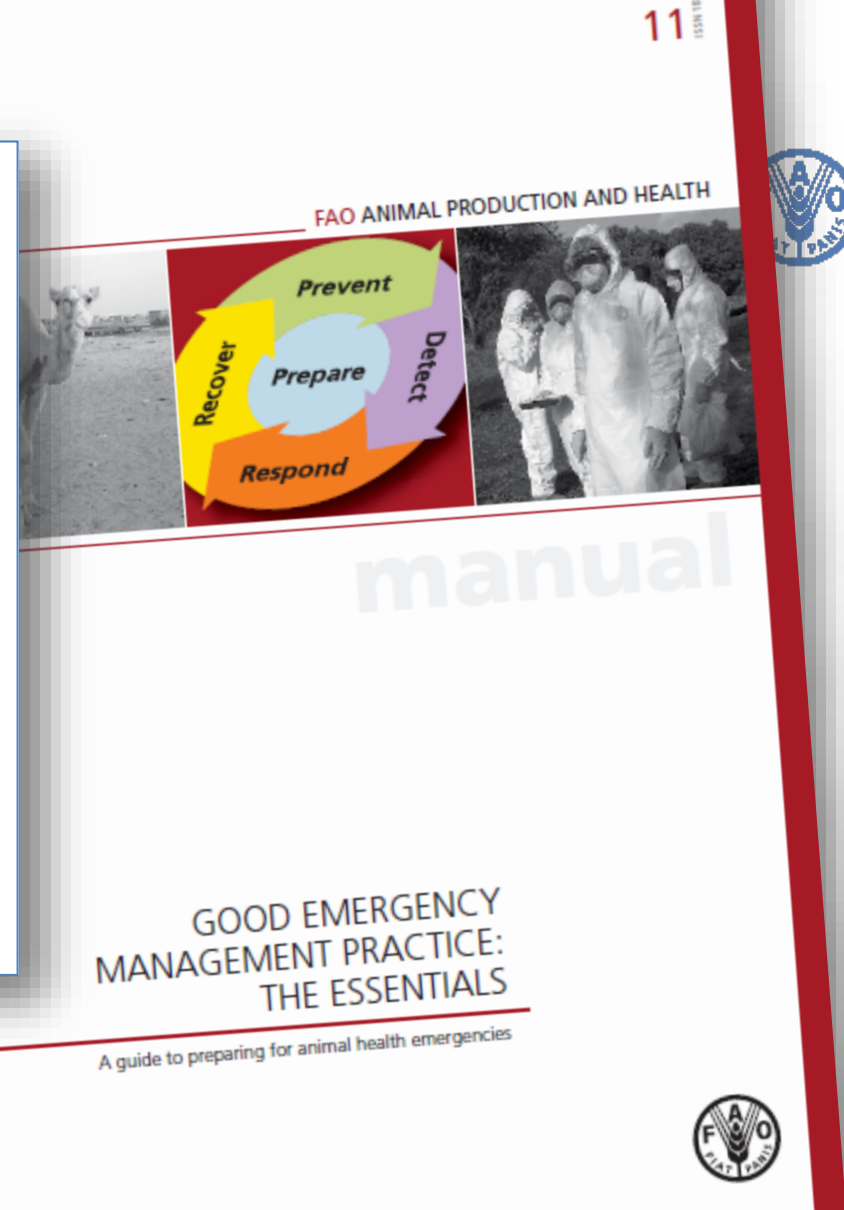
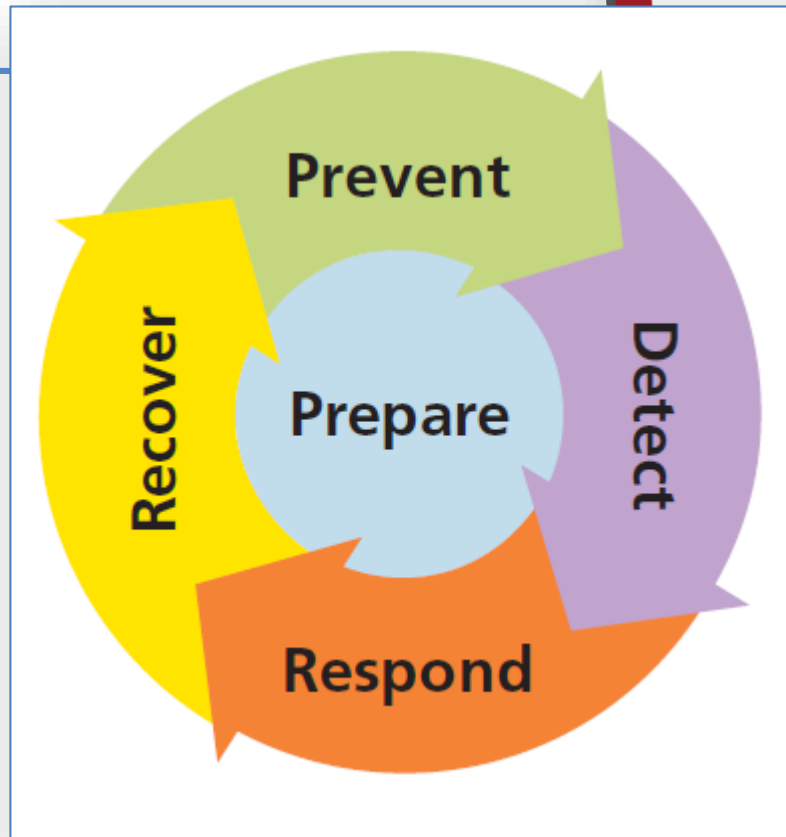
TF	MTF /INT/003/EEC (NTE: 2019-09-30) - EU Funded Activities (Phase IV: 2015 - 2019) carried out by the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD) - (Follow up Phase MTF /INT/003/EEC)	\$ 8,948,545
	MTF /INT/011/MUL (NTE: 2017-12-31) - European Commission for Control of Foot-And-Mouth Disease	\$ 12,447,255
	OSRO/AFG/402/JPN (NTE: 2017-11-18) - Building resilience and self-reliance of livestock keepers by improving control of Foot-and-Mouth Disease (FMD) and other Transboundary Animal Diseases (TADs) – Afghanistan	\$ 16,754,787
	MTF /INT/004/MUL (NTE: 2017-12-31) - Foot and Mouth Disease - Emergency Aid Programme	\$ 3,000,000
	OSRO/GLO/102/AUL (NTE: 2017-12-31) - Partnership on global animal health and biosecurity initiatives	\$ 2,054,207
	OSRO/GLO/102/AUL BABY01 (NTE: 2017-12-31) - Crisis Management Centre - Animal Health (CMC-AH) - Component 1	\$ 528,459
	OSRO/GLO/102/AUL BABY06 (NTE: 2017-12-31) - Partnership on global animal health	\$ 167,014
	OSRO/INT/901/NET (NTE: 2017-10-31) - Support to the FAO Animal Health Service in infectious and vector borne disease control and to FAO Indonesia in the prevention and control of HPAI	\$ 1,215,002
	OSRO/EGY/501/USA (NTE: 2017-09-30) - Strengthening national capacity for preparedness early detection and response to emerging pandemic threats (EPT-2)	\$ 3,672,000

Global Strategy Components 2 and 3

TF/GCP	GCP /ETH/083/EC (NTE: 2017-11-25) - Pursuing Pastoral Resilience (PPR) through improved animal health service delivery in pastoral areas of Ethiopia	\$ 11,787,729
	OSRO/INS/501/USA (NTE: 2019-04-30) - Strengthening National Capacity to Prevent and Control Emerging and Re-Emerging Pandemic Threats Including Influenza A in Indonesia (EPT-2)	\$ 4,000,000
	GCP /GLO/496/USA (NTE: 2017-03-31) - Support of Cooperation on Global Rinderpest Post-Eradication, Disease Surveillance and Associated Animal Health Capacity Building	\$ 2,003,039
	GCP /GLO/340/ITA (NTE: 2017-05-31) - Global Framework for the Progressive Control of Transboundary Animal Diseases	\$ 887,519
	GCP /GLO/581/USA (NTE: 2017-03-31) - Improving disease intelligence and early warning globally (GLEWS)	\$ 942,387
	GCP /RAS/294/ASB (NTE: 2017-07-31) - Regional Capacity Development for Regional Cooperation on Food Security through Control of TADs in South Asia	\$ 1,921,315
	GCP /PAK/127/USA (NTE: 2017-03-31 00:00:00, LTU: AGAH) - Progressive Control of Peste Des Petits Ruminants (PPR) in Pakistan	\$ 1,655,000
TF	OSRO/GLO/502/JPN (NTE: 2020-11-30) - Strengthening International Responses to Transboundary Animal Diseases	\$ 2,491,960
	OSRO/GLO/407/USA (NTE: 2017-09-30) - Global Health Security in Africa and Asia	\$ 2,750,000
	OSRO/RAF/407/USA (NTE: 2017-03-31) - Collaborative International Engagement to Prevent and Mitigate Threats from Especially Dangerous Pathogens in Targeted East African Countries	\$ 558,732
	OSRO/RER/601/HUN (NTE: 2017-08-31) - Expert assistance for lumpy skin disease (LSD) prevention and control in the Balkans region	\$ 43,000
	OSRO/GLO/604/IRE (NTE: 2017-12-31) - Support to FAOs One Health initiative: Rift Valley Fever Preparedness in West Africa	\$ 79,618

Also ... FAO support provided: 2016-present

- **Afghanistan:** RBSP to advance to PCP stage 2
- **Kyrgyzstan:** resources for develop RBSP
- **Jordan:** FMD surveillance
- **Vaccine tenders:** Pakistan (10 M doses) and Zimbabwe
- **Feasibility study for local production of FMD vaccine :**
Namibia, Sri Lanka, Bangladesh ...
- **CMC-AH:** Benin (Anthrax), Cameroon (HPAI), Georgia (PPR), Mali (RVF), Mongolia (PPR), Niger (RVF), Mongolia (PPR in saiga)



■ Good Emergency Management Practices:

- Dominican Republic, Mongolia, Turkey, Morocco & Tanzania



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ISBN 1835-1119

FAO ANIMAL PRODUCTION AND HEALTH



manu

RISK-BASED DISEASE SURVEILLANCE

A manual for veterinarians on
the design and analysis of surveillance for
demonstration of freedom from disease

4

ISBN 1835-1119

FAO ANIMAL PRODUCTION AND HEALTH



guidelines

A VALUE CHAIN APPROACH TO ANIMAL DISEASES RISK MANAGEMENT

Technical foundations and
practical framework for field application



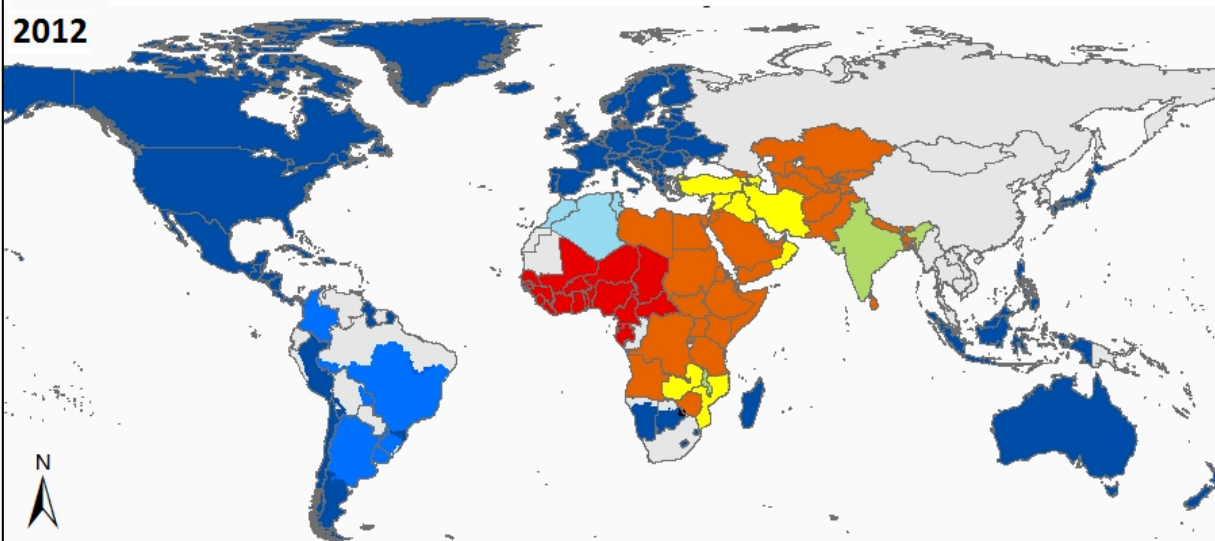
GLOBAL FMD CONTROL STRATEGY

FMD Global Map 2012 & 2017

Evolution of FMD global situation between May 2012 and January 2017

OIE official FMD-free status,
national official control programme for FMD endorsed by the OIE
and FMD-PCP stages

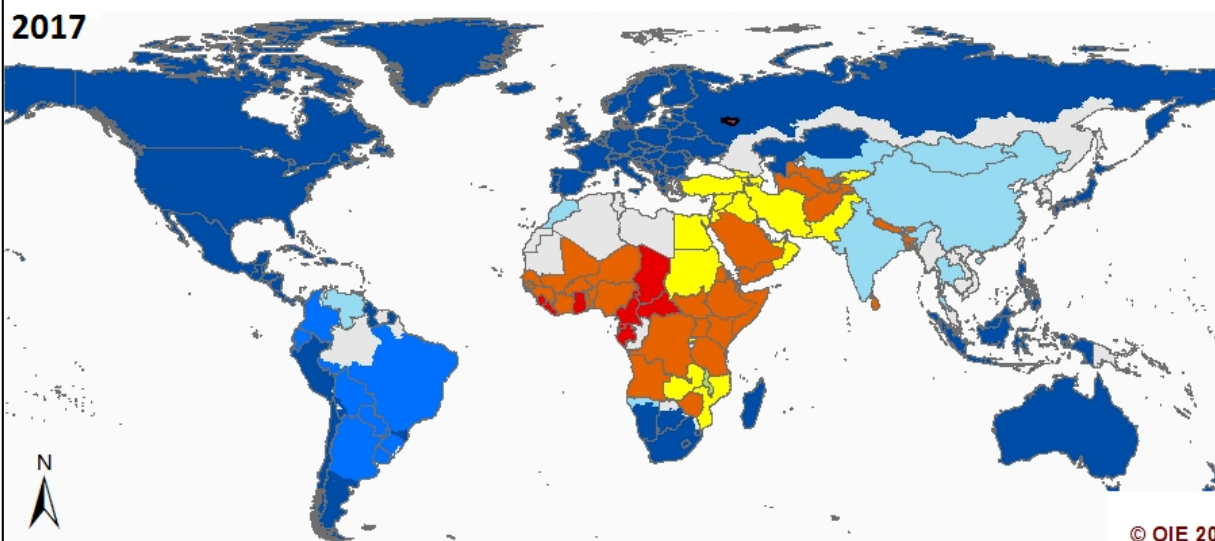
2012



OIE official status and endorsed programmes

- Member Countries and zones recognised as free from FMD without vaccination
- Member Countries and zones recognised as free from FMD with vaccination
- Official control programme endorsed by the OIE
- Containment zone within a FMD free zone without vaccination

2017

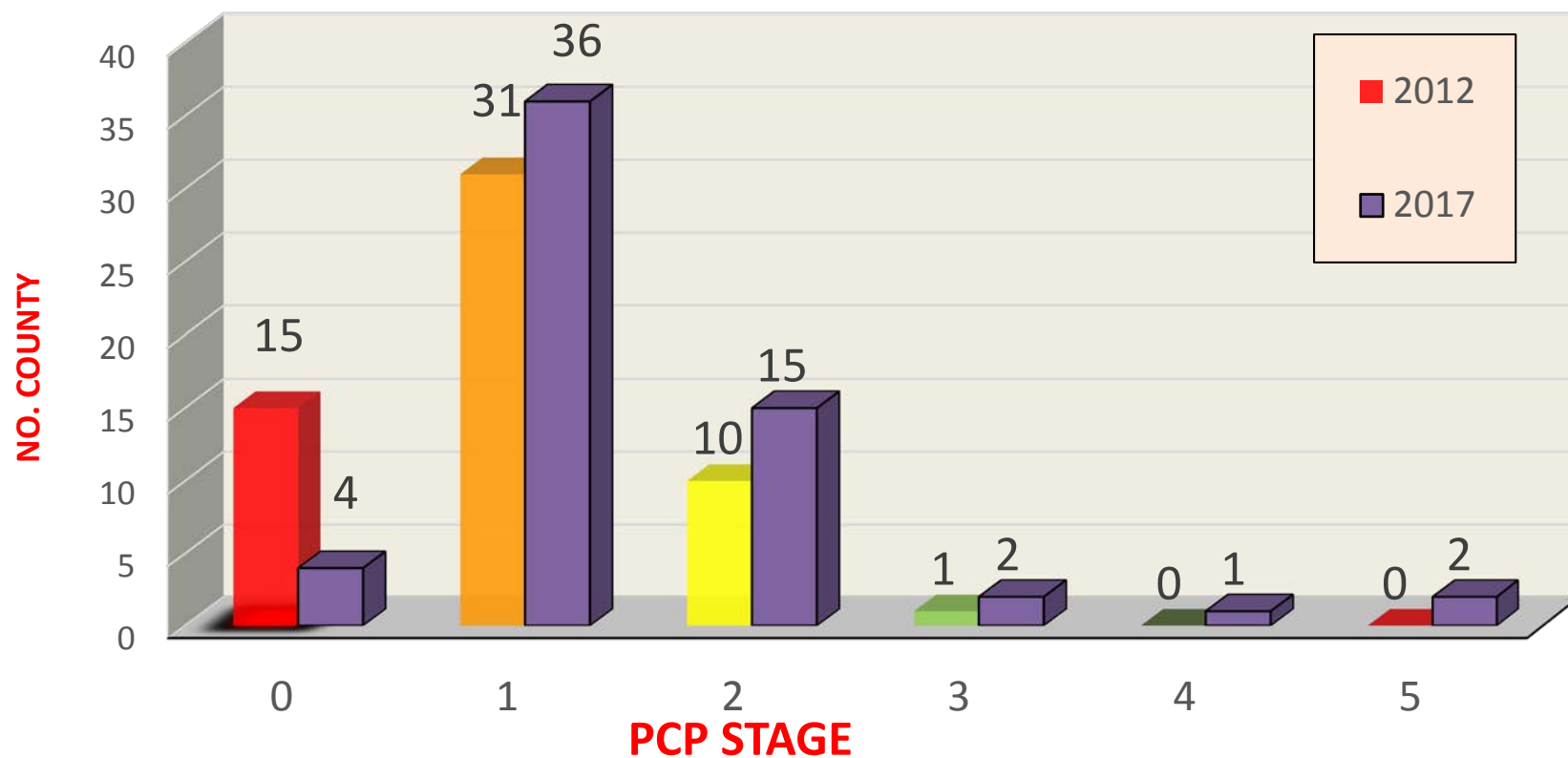


PCP stages

- 0
- 1
- 2
- 3
- 4
- 5

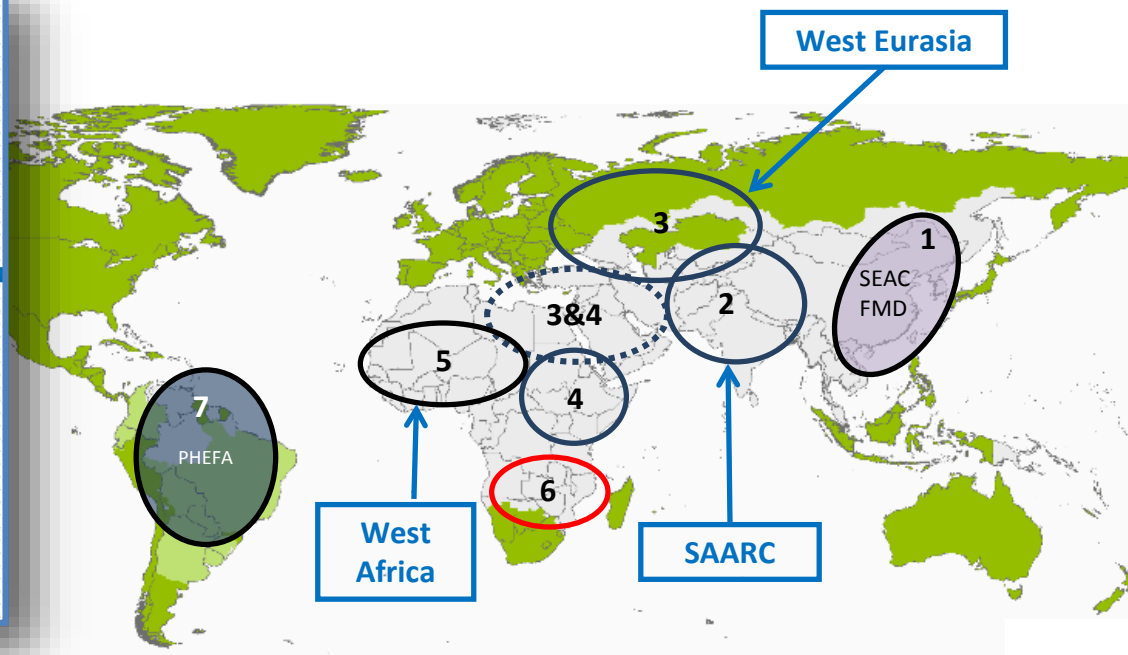
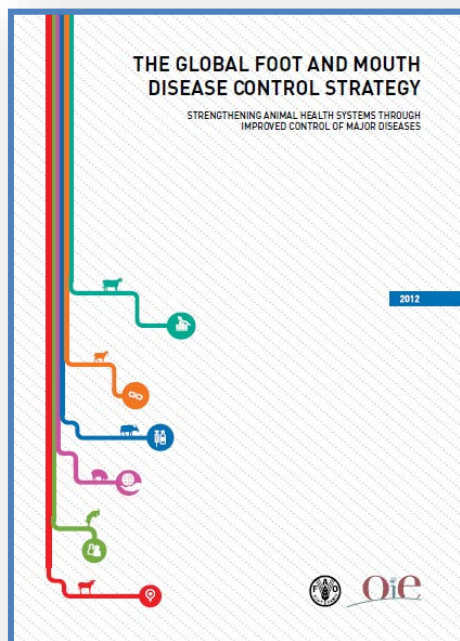


PCP-FMD Country Status (Total= 57)





FMD Regional Roadmaps Conducted in 2016



- Member Countries and zones recognised as free from FMD without vaccination
- Member Countries and zones recognised as free from FMD with vaccination
- Countries and zones without an OIE official status for FMD

Global FMD Control Strategy

Activities in 2016

- **Roadmap meetings:**
 - 1st West Africa
 - 7th West Eurasia
 - 3rd SAARC
- **Control plans approved:**
 - Azerbaijan
 - Armenia
- **Control plans submitted:**
 - Bhutan
 - Afghanistan
 - Kyrgyzstan
- **Guiding documents:**
 - Vaccination and post-vaccination monitoring
 - Dedicated session in SAARC roadmap meeting
 - Updated RBSP (V2)
- **In the pipeline:**
 - 2nd edition of PCP guidelines
 - Risk assessment plan

EuFMD Pillar 3

Support provided by EuFMD to GF-TADs WG in 2016

- A webinar prior to SAARC and West Africa roadmap meetings
- One technical expert participated in 3 roadmap meetings
- Provided edits to the 2nd edition of the PCP guidelines
- Provided review in the new version of the risk-based strategic plan
- Drafted the risk assessment plan template

100

SAARC Roadmap

Key discussion – key outcomes

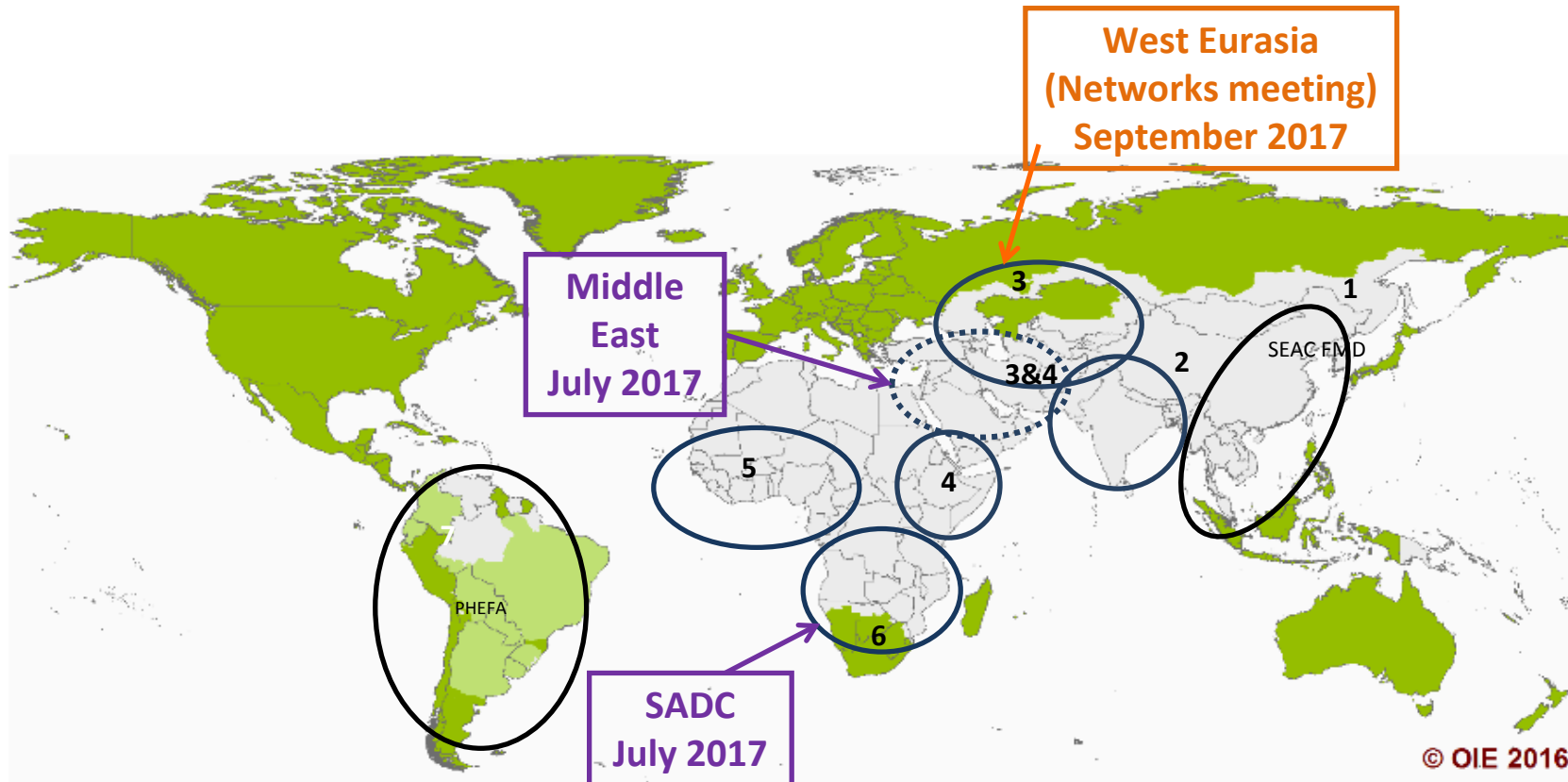
- Election of a RAG:
 - Bangladesh, Nepal and Sri Lanka
 - Afghanistan (Regional Epidemiology Network)
 - India (Regional Laboratory Network)
- Good discussion on Component 3.
Combined vaccination FMD-HS (in 2 sites), e.g. Sri Lanka
- Collaboration with South East Asia
to be further developed
Risk assessment study for incursion of FMD exotic strains in SEA.
- Main gaps
 - timely reporting,
 - trans-border movements,
 - proficiency testing,
 - vaccine quality

Regional Priorities

3rd FMD Roadmap for SAARC

- Share control plan with the rest of SAARC countries;
- Sharing of information on FMD outbreaks and the incursion of new virus lineage using: WAHIS, EMPRES-i, SAARC database and/or HubNet;
- Identify synergies in combining FMD control with other livestock diseases of priority;
- FAO, OIE, EuFMD to support building capacity and embrace technical skills;
- Conduct workshops and brainstorming sessions engaging multi-stakeholders to reduce FMD spread through cross-border animal movement; (Planned by RSU end of March)
- PD-FMD to organise an annual proficiency test scheme and training on QA for the region;
- Regional support unit, in coordination with the SAARC Secretariat, to work out the modalities for a regional cooperative vaccine procurement mechanism;
- Countries to consider requesting an OIE PVS initial evaluation or follow-up;
- Countries should establish their own local systems to calibrate their tests for wider post vaccination immunity studies.

FMD Regional Roadmaps planned in 2017



- Member Countries and zones recognised as free from FMD without vaccination
- Member Countries and zones recognised as free from FMD with vaccination
- Countries and zones without an OIE official status for FMD



GF-TADs

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



West Eurasia Networks Meeting



- Georgia, September 2017
- Prepared by WG and EuFMD
- RAG involved in the development of the agenda
- Agenda with merged sessions of common interest, and parallel sessions for the epidemiology network and the laboratory network
- Key topics to be covered
 - Countries' report and main achievements
 - Share of experience
 - Training in groups
 - Cross-border movements
 - Work plan of the networks

Work in progress with EuFMD

- Revision of the RBSP (done – to be implemented)
- Revision of the PCP tool, including Components 2 and 3 of the Strategy (final stage)
- Development of a template for the Assessment Plan (first draft commented)
- + Revision of the check-lists (to be initiated)

Working Group workplan 2017-2018



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GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES



Strateg	Activity	2017		2018		Priori	Institutio	Champio	Comments
		1st Semester	2nd semestre	1st Semester	2nd semestre				
	Collection of Points of Contact (POC) (epi, lab)					1 WG		SR	
	Conduct POC E learning webinar (before each PHS)					1 EuFMD		RM Champions	
	POC train-the-trainer (FAO/CIIE officer)					1 All			
1.2	Workshop on socioeconomic					1 EuFMD/In-dest			3 months follow-up meeting
1.2	Guidelines on socioeconomic					2 consultation			
1.3 & 2.1	Expert missions to support development and implementation of RMP (countries to be selected)					1 EuFMD		RM Champions	on countries' request - EuFMD or GEG (but budget needed)
2.1 & 2.2	Expert mission to support development and implementation of RBSP (countries to be selected eg Portugal)					2 EuFMD		RM Champions	on countries' request - EuFMD or GEG (but budget needed)
1.4	Creation Regional secretariats in each RM regions (TAFI)					2 WG		RM Champions	Priority may depend on the region
1.5.2	Creation of a Global Expert Group					2 WG		SR	
1.6.1	Second edition of POC guidelines					1 All			
1.6.1	Finalise guidelines RMP					1 All			
1.6.1	Drafting NCP template					1 All			
1.6.1	Finalise check list questionnaires					1 All			
1.6.1	Template for Interim Countries report (ppt)					1 WG			including components 2 & 3
1.6.1	Template for Roadmap report					1 WG		SR	
1.1.1	Create lab network in each region-leader nomination					2 WG		RM Champions	Considering the conclusion of the GF-TADs Roadmap-meet
1.1.1	Physical/electronic meeting of the network					2 WG + EuFMD			
1.1.1	Specific lab training (through lab network) (1)					2 WG + EuFMD			depending on regions
1.1.1	Conduct proficiency test (well EuFMD) (2)					2 OIE/FAO Ref Lab			depending on regions
1.2.1	Each virus pool has at least one ref lab					1 Lab-network + WG			
1.2.3	Facilitate the procurement of reagents					2 EuFMD			
1.1.1	Specific epi training (through lab network) (RM-1)					2 EuFMD			
1.2.1	Create epi network in each region-leader nomination					1 WG			
1.2.1	Physical/electronic meeting of the network					2 WG + regions			
1.3.1	Describe interregional animal movement (RM-1)					1 Epi network			depending on regions
1.1.1	Facilitate sample submission to ref lab (characterisation and matching)					1 EuFMD			
1.1.3	Facilitate vaccine selection discussion (RM)					2 All			
1.2.1	Elaborate of high-quality vaccine					1 All			
1.1.1	Provide PVS during the RM and network meetings					1 WG			
1.2.1	Identify countries that need PVS mission					2 OIE			
1.1.2	Dissemination of Component 3 during RM					1 WG			
1.1.3	Document (peer review paper) success stories of integration of TAD control -Component 3					1 All			
1.1.1	Finalisation of the global report					1 All			
1.1.2	Identify and document champion in each region					2 WG			
1.1.3	Third global conference					2 WG			
1.2.1	Identify and doc knowledge gaps (peer-review)					1 All			Not sure I understand what you mean
1.1.1	Map potential donors					2 WG			Discuss with Hararirho at some stage
1.1.2	Identify and document a success story of private-public partnership					1 All			
	Enrich the GF-TADs Website					1 WG			

DRAFT

WG priorities for 2017/2018



- Finalise the 2-year work plan, identifying priorities
- Develop a socio-economic guidelines
- Strengthen regional epi and lab network
- Describe intra-regional animal movements
- Advocate for Component 3
- Support to countries in PCP Stages 0 & 1



Proposed Areas of collaboration with next biennium

- E-learning / webinar*:
 - before roadmaps and in-between roadmaps
 - on PCP and socio-economic (once the guidelines is developed)
 - on outbreak investigation (regional or national level)
 - on vaccination strategies
 - for the epi and the lab networks
 - for FAO/OIE regional officers and FMD experts
- *Most developing countries are not yet equipped to participate in webinars!!
- Expert missions to support the development and implementation of national plans: RAP and RBSP (2-3/year)

Proposed areas of collaboration with EuFMD (2)

- Support to **GF-TADs FMD WG** members:
 - One dedicated staff to support the day to day activities: WG and regional meetings, guiding documents, reports and follow-up on regional recommendations
 - Liaise with the EuFMD secretariat
- Support and participate in **Roadmap meetings** & **network** meetings
- Support the development of **specific guidelines** (socio-economic guidelines, template for the National Control Plan)
- Support procurement of diagnostic reagents and sample submission
- Funding of **proficiency panels**

OIE ACTIVITIES OF INTEREST FOR EUFMD

Official recognition of FMD free status

- Paraguay as a country free from FMD with vaccination
- Botswana: Zone 3b free without vaccination
- Chinese Taipei: zone free with vaccination (with the exclusion of Kinmen)
- Kazakhstan: 5 zones provisionally free with vaccination → mission in May 2017.

- FMD chapter of the *Terrestrial Code*
 - Surveillance methods for shorter recovery period (*ad hoc* Group in June 2017)

- SEACFMD March 2017
 - Use of PCP tool
 - Acceptance process slightly different

Cambodia	1
Lao PDR	1
Malaysia (Peninsula)	3
Myanmar	1
Vietnam	3

OIE activities for Component 2

- PVS activities
 - Consideration of recommendations for PCP to prioritise PVS missions
 - PVS Think Tank
 - PVS mission with specific focus

EuFMD support for OIE regional officers training

- PCP training for OIE Regional and Sub-Regional Representatives
 - Global Strategy & PCP
 - Link with PVS
 - Link with official status recognition and programme endorsement
 - Support to WG and to countries
 - Risk-based approach

Thank you for your attention



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ACHIEVEMENT on FMD CONTROL POLICY IN TURKEY

**EuFMD 93rd Executive Committee Meeting
21-22th March2017, Mödling, Austria**

Assc.Prof. Veli Gulyaz

Deputy General Director, GDFC

A.Naci BULUT

Şap Institute, Ankara,Turkey

On behalf of

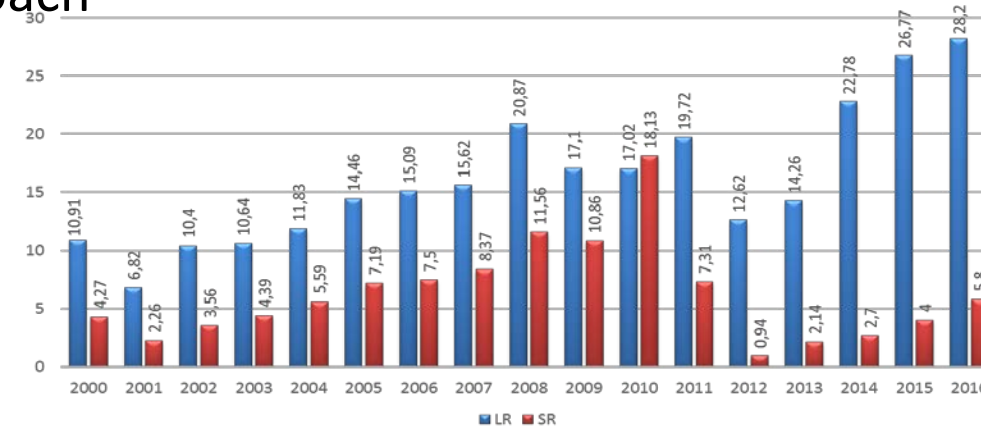
Dr. Nihat Pakdil

CVO; Deputy Secretary of Ministry

The Ministry of Food, Agriculture and Livestock (MoFAL)

BACKGROUND

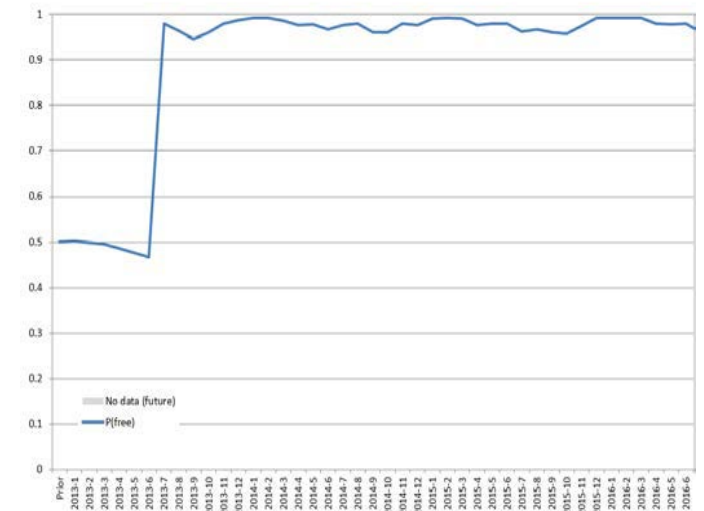
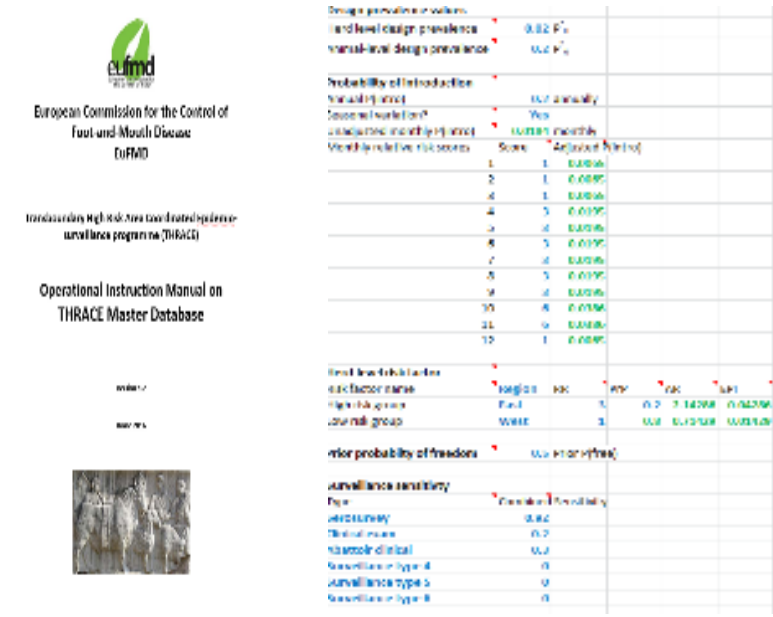
- Risk-based Strategic Plan was adopted in 2013
- RBSP was approved by the Government and initiated implement in 2014
- Initial accomplishment by implementation of RBSP:
 - Vaccination policy was updated by risk assessment approach
 - Potency of vaccine produced was improved with >6PD50
 - Capacity of vaccine production was increased
 - Vaccination coverage was increased
 - Epidemiology and Monitoring Unit () was established
 - Technical capacity for CEMU improved
- Activities supporting by EuFMD:
 - EuFMD supplied technical assistance for preparation of RBSB
 - Thrace RB Surveillance Program was initiated to keep confidence of the disease freedom
 - **Real-time training course** held in Erzurum, Turkey, in Russian and Turkish
 - Webinar Series were initiated
 - Epidemiology training held for CEMU



Accomplishment

Component 1.3 *THRACE*

- Continued Thrace RBSP to keep confidence
 - Clinical surveillance for FMD in high (Istanbul)/low (Çanakkale, Edirne, Kırklareli and Tekirdağ) risk area in each cycle- 4 cycle annually/8 cycles for two years
 - Serological surveillance for FMD in high risk area in each cycle - 4 cycle annually/8 cycles for two years
 - Clinical surveillance for S&GP and PPR in both areas- 4 cycle annually/8 cycles for two years
 - LSD clinical surveillance program has been integrated in Thrace RBSP in 2016
 - The New Database developed for early warning surveillance data –Google Fusion Table works as planned
 - Cycle and annual reports have been produced for 2015 and 2016
 - Confidence in disease freedom: above 96 %



Accomplishment

Pillar.2.1. Improve expertise through provision of training programs

Practical Epidemiology Training

- Bespoke training has been provided following a needs assessment (In response to Turkey's training credit in 1.1)
 - 4 modules applied/one week per
 - epidemiology units' vets at regional VI, CVRI and Şap Institute
 - 1st: Basic Epidemiology& Epidemiological Statistics
 - 2nd:Risk Analysis as a Tool for Control of Animal Diseases
 - 3rd: Epidemiological surveys: planning, implementation and analysis
 - 4th: Outbreak Investigation&Biosecurity

Epidemiology Training for CEMU was also realized based in house training duration with 2months



Accomplishment for RBSB

National RBSP has been updated by new regionalization approach

GOAL OF THE STRATEGY

- To contribute to the development of the livestock sector by achieving OIE status of FMD free with vaccination by 2025
 - By regional progressive disease control approach, the strategy is consist of >30 component objectives

ACTIVITIES AND TACTICS

- To reduce/eliminate risk and gaps for each identified risk and gaps:
 - Initiated implementing of control activities



TURKEY -
RISK-BASED STRATEGIC PLAN
FOR
CONTROL OF FOOT-AND-MOUTH DISEASE

0001/1401/2014-2017



RISK BASED CONTROL PROGRAM FOR WEST ANATOLIA

❑ **GOAL:** Reach PCP Stage 4 in 2019; and OIE FMD Free Status with vaccination in 2021

❑ ***MAIN COMPONENTS OF CONTROL PROGRAM:***

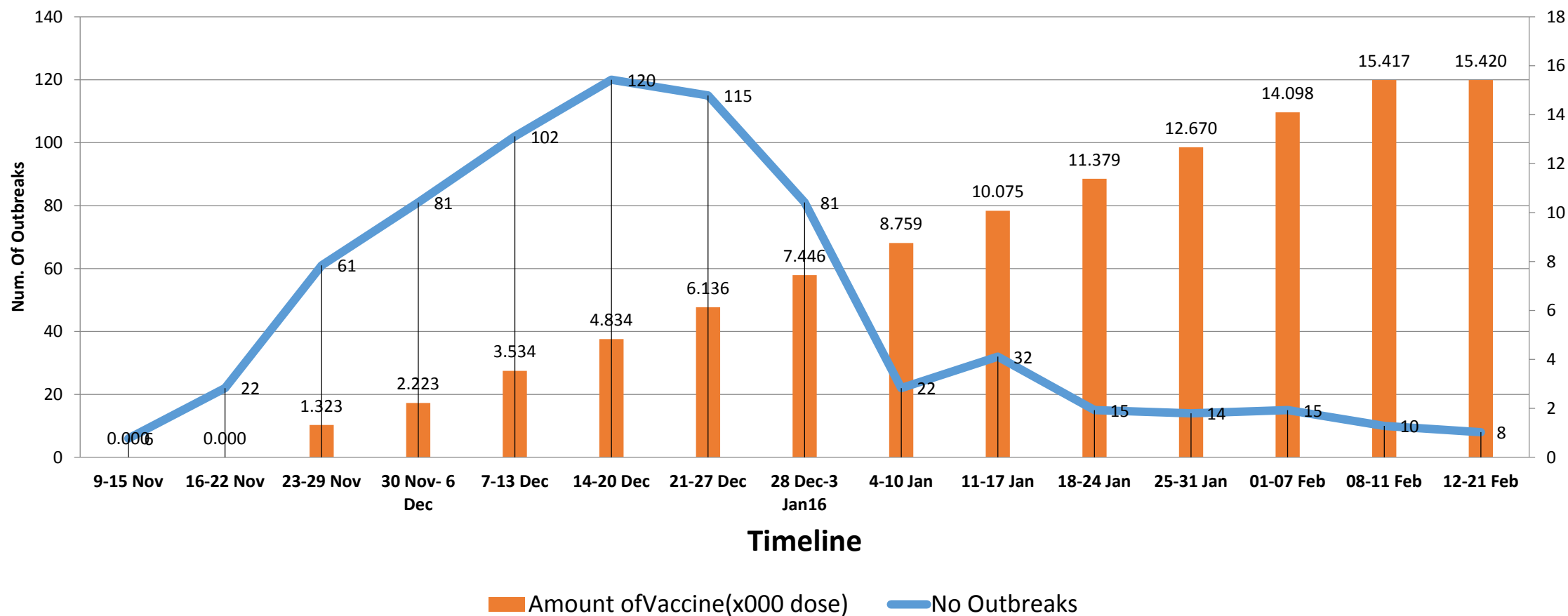
- ❑ Continuing vaccination by risk assessment approach
 - ❑ Including booster vaccination for primo vaccinators
- ❑ Risk based surveillance program/Clinical surveillance
- ❑ Monitoring movement: vaccination requirement (2X/6 m)/Check point
- ❑ Regulation of animal movement from the other regions compliance with OIE Terrestrial Code: Quar./NSP testing ect.
- ❑ Effective outbreak management/Biosecurity
- ❑ **Stamping out for DC**
- ❑ Enhance awareness for stakeholders
- ❑ Increasing technical capacity
- ❑ Effective monitoring and improvement of infrastructure

Accomplishment on RBSP

- *Central Epidemiology and Monitoring Unit (CEMU) actively started activities*
- Vaccination coverage improved; ranged with 93-99%
- Vaccination implemented based on risk assessment:
 - Preventive campaign vaccination :In Anatolia; twice a year for LR;_In Thrace: : Twice a year for LR/once for SR
 - Early Spring: population assured protection before releasing grazing time
 - Late Summer: population assured protection before Kurban festival
 - Ring Vaccination to response outbreak in Surveillance zone of outbreak
 - Targeting vaccination for identified “Hotspot»
 - Small ruminant vaccination where risk identified
 - Booster vaccination introduced in country wide
- Declining number of outbreaks with low incidence rate in per outbreak unit
- **Reconstructed TURKVET** with more functional and features
 - Animal Registration System
 - LR/SR registered into the system with ear-tag; initiated replacement of electronic ear-tag
 - Animal movement managed and monitored by the system
 - Regular movement report by province
 - Veterinary Information System (VIS)
 - Outbreak Management
 - Entering outbreak data all notifiable disease
 - Vaccination data
 - Sample Management System
- Improved outbreak management and biosecurity

Supplied Vaccine vs No of Outbreak during new outbreak wave

-Remarkable example for new approach-



Accomplishment on RBSP

- 6 Regional Meetings held in 2016: Introducing new strategy&enhance awareness
 - 4 in West of Anatolia and 2 in East
 - Participation of local authorities, provincial directorates and all stakeholders
- Infrastructure improved for control of animal movement and check points
- Dealer regulation adopted
- Veterinary Strategy document adopted
- Cost-benefit analysis and socio-economic analysis prepared



Accomplishment on RBSP

- Technical assistance provided to Pakistan
 - QA methods for FMD vaccine
 - Sero-monitoring methodology for post-vaccination monitoring
 - Engineering assistance for vaccine plant and production methods
- Training activities conducted for:
 - Azerbaijan: Diagnosis-molecular epidemiology
 - Pakistan : Vaccine production- disease control strategy
 - Kazakhstan: Diagnosis-molecular epidemiology
- Vaccine donated to Azerbaijan
- Attempt has been continued for establishment early detection system

Accomplishment on RBSP

Workshop on FMD risk reduction in the West Anatolia Region of Turkey

- Outcomes:
 - Enhance awareness on new approach of the national strategy
 - Build up technical capacity on disease management, OI and clinical surveillance
 - Develop protocol for OI and clinical surveillance to be implement in Turkey
- Duration: one week
- Beneficiary: Provincial representatives of CEMU and epi-units at VI: 112 participants
- WS conducted in Çeşme/Izmir by GDFC logistic and EuFMD/Şap Institute technical support

Accomplishment on RBSP

Epidemiology Training Series on OI and Outbreak Management

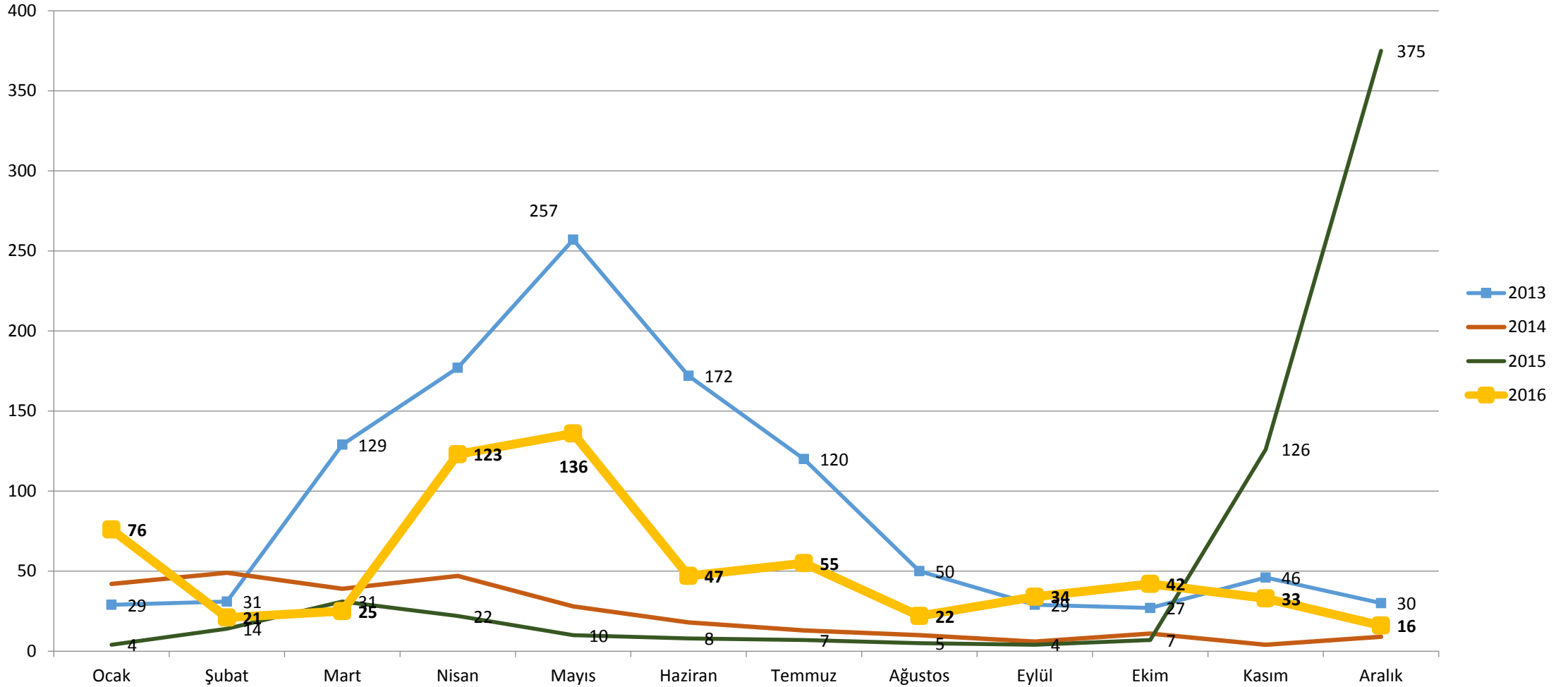
- Request by GDFC, an epidemiology training has been conducted
- The training series is consist of 4 modules with 4^{1/2} days duration;
 - 3 of them already achieved so far: 2 on February; 1, on 14-17th March; and remained to be on 28-31th March 2017
- Scope:
 - Theoretical lecture, interactive group and simulation exercise and practical in field
 - Theory: Introducing new strategy, lesion age and OI
 - Interactive group work/ Simulation exercise: risk hotspot and gap analysis/disease timeline/traceback-forward/disease measurements
 - Field work: Outbreak investigation, disease management and biosecurity
- Beneficiary: Provincial representatives of CEMU; 102 trainee-dividing 4 groups-



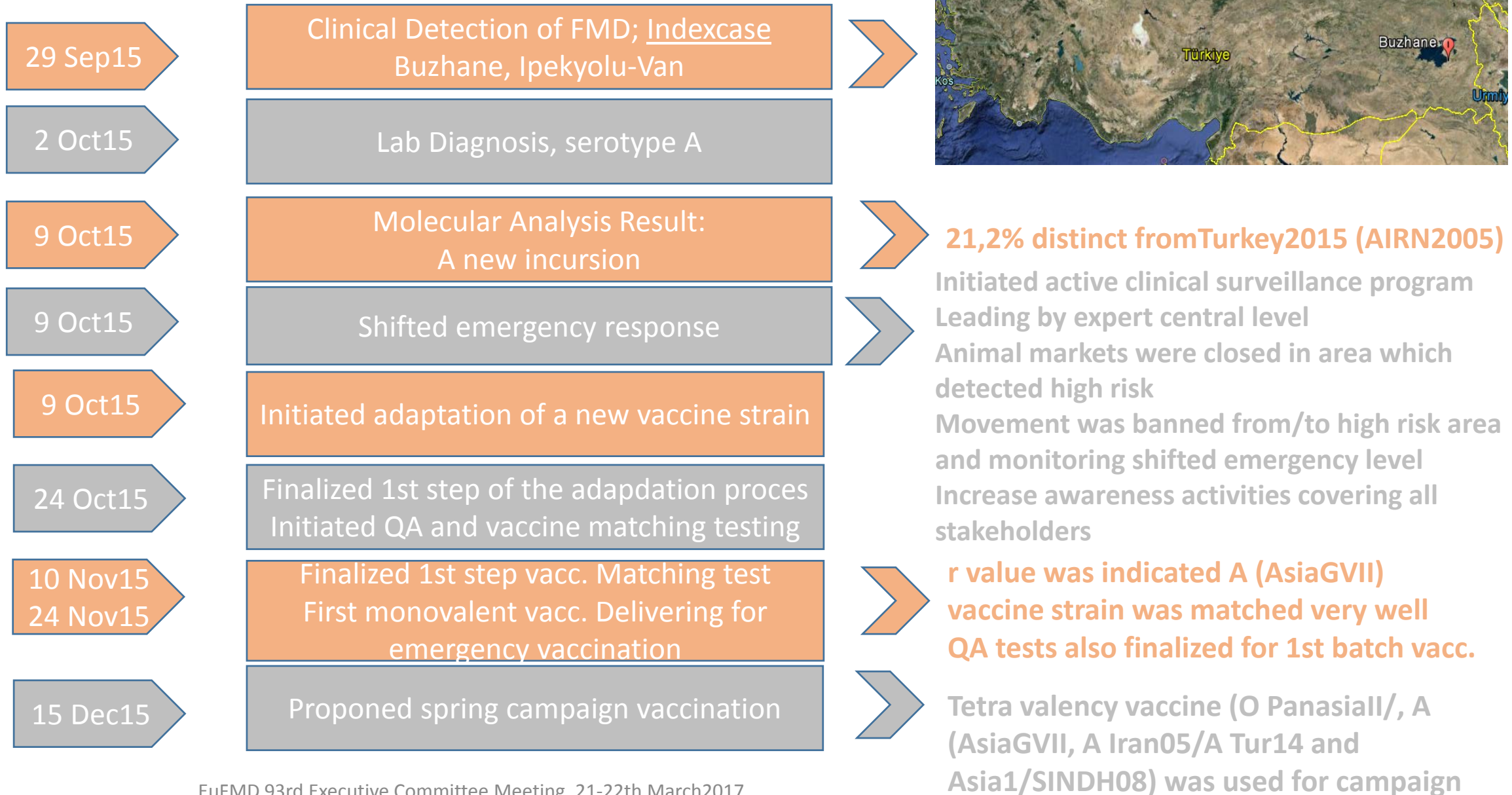
CIRCULATING STRAIN

- FMD is endemic in Anatolia region in Turkey
- Current Circulating virus strains:
 - Serotype O (O PanAsiaII/Qom),
 - A (Asia/GVII)* and A (Asia/GVII)/Sam2016
 - (Asia1 has been not recorded since July 2015)
 - Latest circulated one was Asia-1 (Asia1/SINDH08)
- Thrace region has been free of FMD with vaccination since May 2010.

Outbreaks for Last Four Years



Chronology of New Incursion



Thank you very much for your attention!

Acknowledges

- General Directorate for Food and Control (GDFC)
- EuFMD
- The Şap Institute





Item 12: Standing Technical Committee Report

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Eoin Ryan
Chair, STC

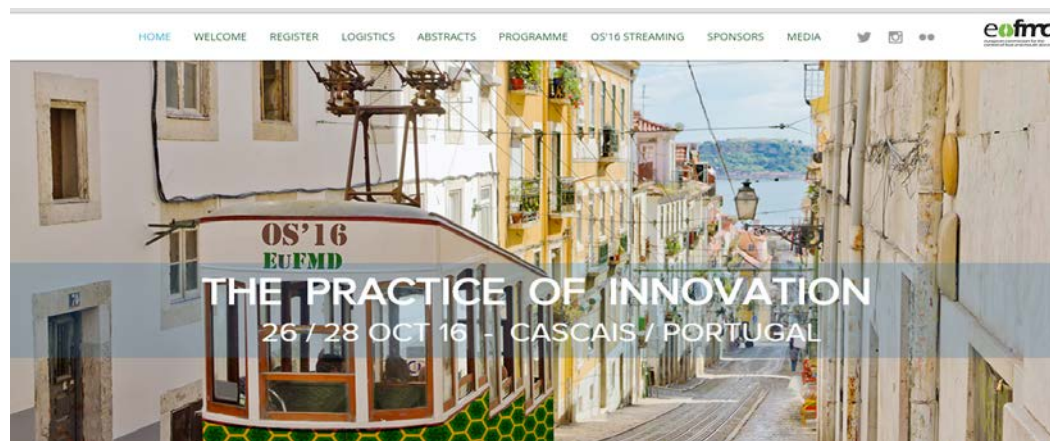
Outline

- Closed session of SCRPD and STC in Cascais
- Open Session in Cascais
- Fund for Applied Research
- Vaccination to live update
- BioRisk Management Network





Closed Session, Cascais, October 2016



- Closed session meeting of the Special Committee on Research and Programme Development and Standing Technical Committee
- Discussion themes:
 - Review of FMD research priorities
 - Development of EuFMD work programme



Closed session conclusions on FMD research

- Lack of coordination on FMD research funding (compared to e.g. ASF) is a problem
- Increased clarity on who research is targeted at and who benefits could help increase stakeholder funding & participation
- Epidemiology research is comparatively lower cost than research conducted in high containment facilities; this may drive more epi work and less virological/experimental work
- Pilot partnerships between private and public sector interests may be useful (e.g. recently funded collaboration between Nigerian Vom FMD lab, CODA CERVA Belgium and MSD)



Closed session conclusions on the work programme

- The value of network-based training was praised, and its ability to produce positive externalities for other diseases and areas (e.g. LSD) was recognised
- The risk posed to Europe by the A/GVII lineage in Anatolia was flagged
- The need for an impact assessment on contingency planning activities was raised
- The utility of the proposed meat price tool for informing targeted BIP inspections was recognised, if available in real time or near-real time
- The importance of involving state veterinary officials in decision making in endemic countries was emphasised, and the usefulness of the PCP framework for this was praised
- The problem of lack of transparency for PCP country assessments was raised; if relevant information is not disclosed, risks are made hard to identify and the risk based strategic plans are undermined
- The constraint of only issuing PCP stage assessments at regional roadmap meetings was discussed



The Open Session

- 269 registrations
- 139 abstracts
- Online conference: 320 participants registered (in addition to 269 above); presentations made available, discussion forums on each session
- GFRA parallel session
- Innovation clusters on day 3: networking/discussion sessions, each with a practical theme and a focus on interactivity





Presentation recordings available on e-learning site: used as a reference resource for many other EuFMD online courses

▼ Current course

▼ Open Session Online 2016

- › Participants
- › General
- › Wednesday Plenary Session
- › Wednesday Parallel Session
- › Thursday Plenary Session
- › Thursday Parallel Session
- › Friday Session
- › Friday Parallel 2 Session
- › Friday Parallel 4 Session
- › My courses

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▼ Wednesday Plenary Session

Innovative Ideas and Options for FMD Management

Session I: Opening

EuFMD: Opening

A. Dekker: Frenkel Lecture

D. King: Update on Current Global Situation for FMD: New Outbreak and Threats

Session II: The Livestock Sector and Disease Emergencies: Innovation and Ideas

V. Shütz: Change in the Management of FMD Disease Control to a Private-Public-Partnership Approach

R. Horwitz: A 'Readiness Rating' for Balancing Biosecurity Priorities in FMD Preparedness and Response

Y. Templeman: Organisation of Raw Milk Collection during a FMD Outbreak

S. Mortensen: Economic Costs and Effects of Activities to Prevent FMD in Denmark

R. H.M. Bergevoet: Cost and Responsibility Sharing Arrangements in the EU to Prevent and Control Notifiable Veterinary Risks

Session III: Higher Health Compartments: The Way Ahead?



OS: some key messages

- Role which private sector can play in emergency preparedness and business continuity planning
- Allocations of costs and responsibilities for disease prevention & control
- Constraints to vaccination implementation: logistics, decision support for antigen selection, diagnostic support capacity, key decision points
- Advances in understanding of endemic virus circulation through WGS
- Risk based approaches to early disease detection
- Stakeholder attitudes to adopting disease control measures in endemic areas
- Strategies for vaccination and post-vaccination monitoring in endemic settings
- Innovations in diagnostics and vaccine development
- Knowledge exchange and training strategies for aiding global FMD control

Fund for Applied Research

- Call themes based on STC discussions and outcomes of Open Session innovation cluster discussions
- Six themes across the three pillars
- Call issued on 18th February
- 12 applications received; deadline March 17th
- Intention is to have decision on funding made by April 17th





FAR 2017 call: Pillar 1 themes

Theme 1: Tools to assist modelling: focus on estimating confidence in disease freedom using post-outbreak surveillance in vaccinated populations

Intended application: To help countries estimate confidence in disease freedom following the occurrence of an FMD outbreak in a previously free country where vaccination-to-live as been used as a control tool.

Theme 2: Impact calculators: extending these to estimate impacts of vaccination-to-live scenarios and business continuity planning

Intended application: To be used to explore the potential scale and impact of different FMD outbreaks in FMD-free European countries, and the influence of vaccination-to-live as a control strategy and other mitigation measures relating to business continuity on overall disease impact.



FAR 2017 call: Pillar 2 theme

Theme 3: Tools to manage FMD in wildlife: issues highlighted by the requirement to prove freedom from disease of wildlife

Intended application: To carry out non-invasive sampling of wildlife for surveillance for FMD infection and to provide evidence for disease freedom



FAR 2017 call: Pillar 3 themes

Theme 4: Methodologies for rapid evaluation of vaccine stability.

Intended application: To develop or utilise methodologies which can evaluate proportion of intact capsid in a vaccine , for use by vaccine producers or vaccine users as part of monitoring the impact of cold-chain storage upon vaccine integrity and likely potency.

Theme 5: Optimising the use of bulk tank milk for FMD surveillance

Intended applications: To develop tools for the design and implementation of surveillance for FMD using testing of bulk tank milk (BTM) samples, and to demonstrate proof of concept in an endemic setting.

Theme 6: Testing of biosafe transport methods for transport of FMDV RNA to international reference centres

Intended applications: the transport of FMDV RNA from the field (endemic or affected countries) to a reference centre for confirmation of infection, that is simple and efficient to operate and preserves the necessary information value in the sample. The aim is further utilise the devices to develop biosafe transport, through application to the transport of samples from endemic countries in Africa, mid-east or Asia.

Vaccination to live update



- Workshop on implementation of vaccination to live held in FVO, Trim, Ireland, 13-16 March
- Attended by delegates from several EuFMD MS and Merial
- Several issues identified for further work





BioRisk Management Network





BioRisk Management Network

- Launched at the Open Session as part of the dedicated BRM innovation cluster session
- First webinar held on 24th January; very impressive level of participation from those involved in BRM in labs across Europe
- Many issues identified for follow up discussions, high level of interest
- Intention is to hold regular webinars, supported by discussion forum and specific training where needs are identified

The screenshot shows the 'e-Learning' interface for the BioRisk Management Network. The top navigation bar includes 'Dashboard', 'Resources', 'Networks', 'Contact', and 'My Courses'. The main content area is titled 'BioRisk Management Network' and features a welcome message, objectives, and a list of aims. A video player on the right shows a presentation titled 'EU FMDV - Biorisk Management Committee' dated 28th October 2016. Below the video, a caption reads: 'Kathrin Summermatter introduces the Biorisk Management network at the EuFMD Open Session'. The network co-ordinators are listed as Kathrin Summermatter and Eoin Ryan.

e-Learning

BioRisk Management Network

Welcome to the EuFMD Biorisk Management Network

The objectives of this network are to help those working on FMDV Biorisk Management in laboratories or in field situations by providing a space for discussion, support and training. The network aims to:

- Enable a harmonised approach to the challenges of applying FMDV BRM principles to the actual real-life;
- Identify training needs and addressing those gaps through webinars and training courses;
- Create closer connections between those facing similar challenges in different countries and environments.

Who is the network for?

The network is aimed at those involved in biorisk management of foot-and-mouth disease, particularly those in high containment laboratories but also those involved in field situations or contingency planning.

Network co-ordinator

Kathrin Summermatter

Eoin Ryan

Biorisk Management Committee

EU FMDV - Biorisk Management Committee

28th October 2016

Kathrin Summermatter introduces the Biorisk Management network at the EuFMD Open Session

Thank you – any questions?

The Standing Technical Committee:

Stephan Zientara

Yanko Ivanov

Karin Schwabenbauer

Eoin Ryan

Thanks to Keith, Nadia, Mark and the team





Item 13: Proposal to Establish a Special Committee on BioRisk Management

Eoin Ryan
Chair STC



Context

- Clear need to provide support to those engaged in biorisk management, particularly in high containment laboratories
- FVO inspections of tier D labs require a pool of experts to accompany audit missions
- Provision of training and advice to tier C and D labs can reduce the likelihood of a problem, mitigate any risks and improve audit outcomes
- BRM committee is ideally placed to provide such training and support – but lacks the organisational structure necessary

Issues relating to BRM

- Need to maintain and revise the minimum standards
- Need for expert advice in this highly technical area to be available to the member states and ExCom
- Need for experts to be available for inspections and audits
- Need to ensure a modality to support laboratory networking in this area after Brexit





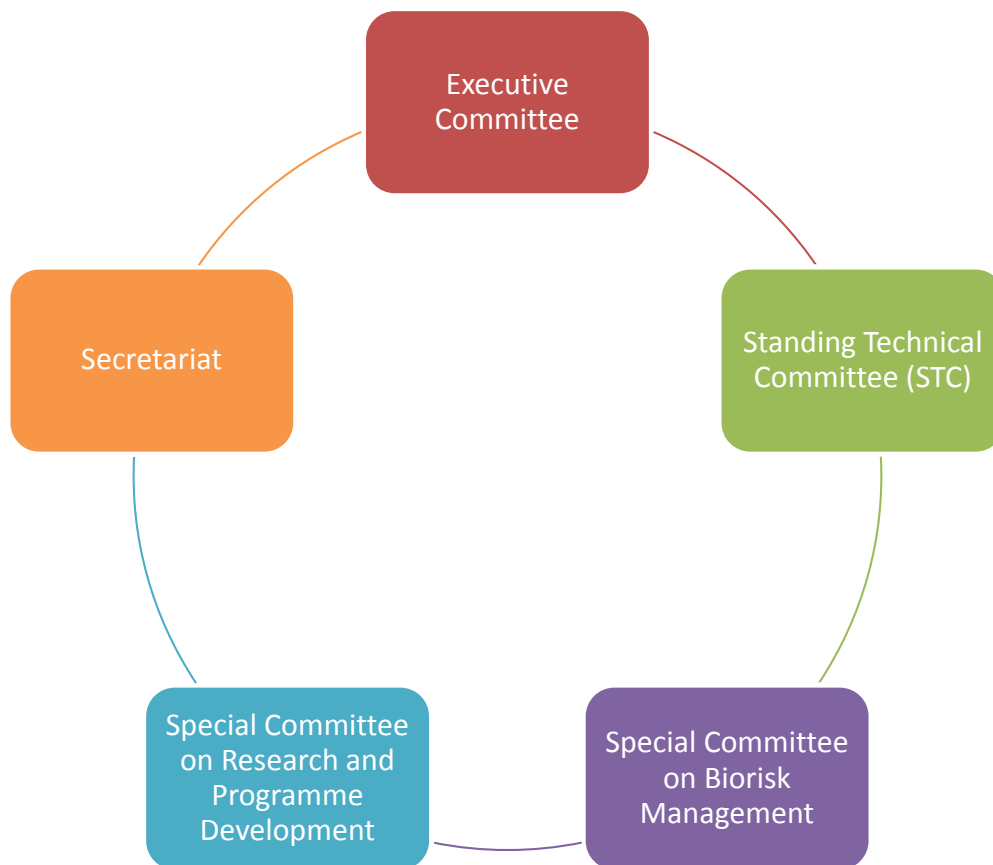
Proposal

- Establish at the General Session a ***Special Committee for BioRisk Management***

ToRs:

1. To provide guidance to the Executive Committee and Commission on the revision and further development of guidance documents, including the Minimum Standards, for laboratory biocontainment of foot-and-mouth disease virus
2. To develop guidance, on request of member states, the Executive or Standing Technical Committee, on technical issues relating to the application of the guidance documents, including the Minimum Standards
3. To provide guidance on training and support needs of the FMD Biorisk management community and provide assistance to training initiatives of the Commission in this field.
4. Maintain an overview of development in biocontainment and improve the communication of relevant developments to the experts in the member states who have FMDV Biorisk management responsibilities.

Reporting arrangements





Possible membership - based on expertise

Kathrin Summermatter, Switzerland (current Leader of the EuFMD BRM group)

Kirsten Tjornehoj, Denmark

Douwe Kuperus, Netherlands

Ulrika Allard, Sweden

David Solanes and Gonzalo Pascual, Spain

Sharon Webster, UK

Jens Teifke, Germany

Cesare Berneri, Italy

Laboratory networking issue post-Brexit

Options:

- Role for BRM special committee
- Revision to role of special committee on research and program development
- Set up a temporary committee



Thank you – questions?



Biorisk Management in Action!

