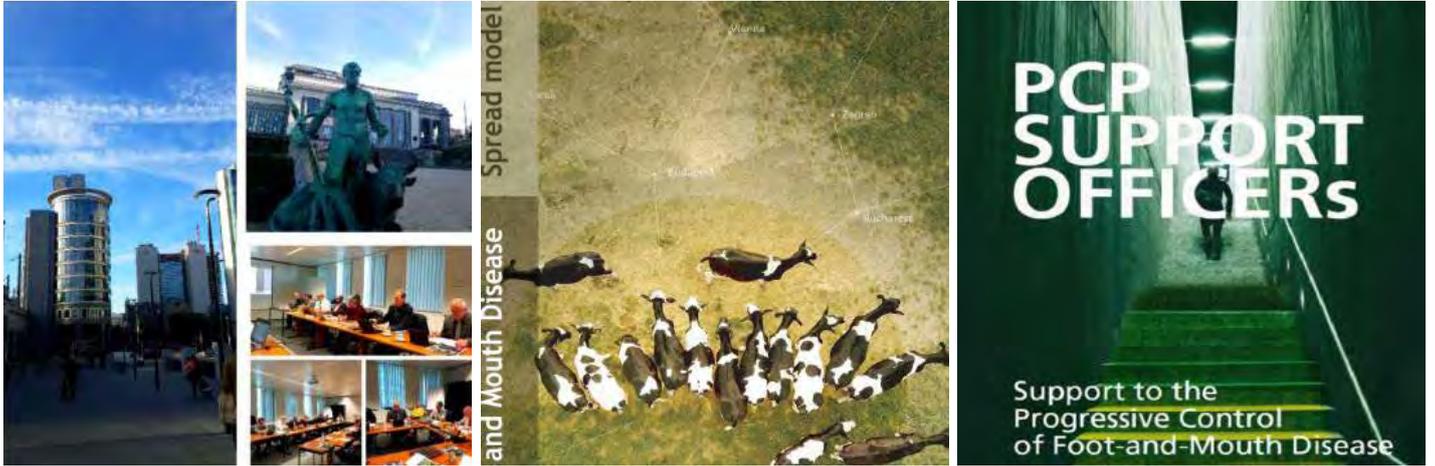




Food and Agriculture
Organization of the
United Nations



BRUSSELS 26-27 SEPTEMBER 2018



Report Appendices

96TH SESSION
OF THE EXECUTIVE COMMITTEE
OF THE EUFMD COMMISSION

Report Appendices

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OF THE EXECUTIVE COMMITTEE
OF THE EUFMD COMMISSION

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Please note the Report is available online and as a separate document on the EuFMD website.

Appendix 1

Agenda

96th Executive Committee meeting

Brussels 26-27 September 2018

Agenda

Wednesday 26th September 2018			
13.00	1	Welcome & Adoption of the Agenda	M. Blake (on behalf of J-L Angot)
	2	Follow-up to the 95th Session i. Summary of actions since March 2018	K.Sumption
	3	FMD situation and progress of FMD laboratory surveillance contracts a) Report of the WRL b) Report of ANSES/Sciensano c) Report from Turkey/the SAP Institute	D. King, WRL S.Zientara N Bulut
	4	Progress reports of relevance to discussion on future EuFMD directions a- The progress and potential of EuFMDis (animal disease spread model) to assist emergency preparedness b- Private sector engagement in emergency preparedness c- The EuFMD training programmes: progress and outlook d- Real-Time Training Courses: new options e- Progress and potential of the PCP-support officer system to underpin progress of the GF-TADS WG on FMD (Global Strategy (GF-TADS))	K. Mintiens K. Mintiens K.Sumption N. Lyons N. Lyons
	5	Standing Technical Committee (STC) Report of the STC including progress of the FAR Fund projects Open Session 2018	E.Ryan (presented by S. Zientara) N. Rumich/K. Sumption
Thursday 27th September 2018			
8.30	6	Opening Summary of Day 1 discussions	JL. Angot;M.Blake
	7	FMD risk reduction in the neighbourhood <ul style="list-style-type: none"> • Short report on Pillar 2 actions and perspective on co-ordinated Surveillance Programmes in the European neighbourhood (THRACE, Trans-Caucasus and North Africa) • Perspectives of partners on priorities <ul style="list-style-type: none"> ○ Italy (IZSLER, IZSLT, Mds) ○ Georgia ○ Turkey 	F. Rosso/Keith Sumption S. Borello (online) L. Avaliani N.Bulut
	8	Future directions: developing the strategy for the period 2019-2023 <ul style="list-style-type: none"> • The 3 Pillars and beyond: considerations • Strategy development : how to proceed ahead of the General Session 2019 • EC Contract Phase V: Timetable for development 	K. Sumption
	9	Progress of the GF-TADS Global Strategy <ul style="list-style-type: none"> • Support provided by EuFMD under Pillar III • GF-TADS WG Report 	N.Lyons (EuFMD) J Lubroth, FAO; N. Mapiitse, OIE
	10	Financial and Administrative Reports Administrative and future budget/Emergency and Training Fund/EC Fund	K.Sumption
Finish / Lunch			

Appendix 2

Report on activities

Item 2

Report on Activities of the Secretariat: April– September 2018

SUMMARY

It has been an intense six months since the Budapest(95th) Session of the Executive Committee, held in March 2018, and also a period of major change.

The most significant developments have been in the Central European cross-border modelling project led by Graeme Garner. The handover to seven countries of a functioning model using their national datasets, and likelihood of international spread based on TRACES data, is a breakthrough of major significance that will be discussed at the 96th Executive Committee Session. This development took a lot of effort and the team was short staffed until Rodrigo Nova arrived (Training), and Daniel Donachie joined in July (for the Balkan component). With Mark Hovari departing back to Hungary full time in July, a new team is now in place for Pillar I, with the emergency preparedness work now led by Koen Mintiens (Belgium) and joined also by Sally Gaynor (Ireland). This experienced team should assist with developing a strategic vision on what is really needed by our member states, for us to provide, as we complete the current EC programme and plan for the future.

Of note in this period is that the THRACE project has again shown value, assisting in early detection of PPR in Bulgaria, but also revealing some issues with passive surveillance in the three countries that need attention.

Fresh incursions of foot-and-mouth disease into Algeria were reported and rapid submission to The Pirbright Institute, assisted with vaccine matching. However, the regularity of cross-Sahara movements of infection is a major concern.

Of note in this regard is the success of the pilot project to engage paravets in West Africa in sample collection, managed by VSF-Suisse; and the first online training in French for West and North Africa conducted using WhatsApp© to enable participation by those with only mobile phone connection. These two examples have shown that it is both possible to train hundreds of animal health workers and collect samples at low cost, which may be the basis for efficiently closing some of the major surveillance gaps.

The first training course co-managed with the OIE went very well, and a second (on Containment Zones) will occur in Serbia in October.

In the past six months, courses have been provided in English, French and Turkish, with webinars also in Russian. After a lot of diplomacy and patience, finally it seems that an All-India e-learning course will be run this autumn with strong Indian institutional support and this has major potential.

The tremendous work by Mark Hovari, Fabrizio Rosso and Nick Lyons as Pillar supervisors has made a big difference to delivery, despite a very challenging set of targets to meet. Inevitably, political events in neighbourhood countries have an impact, and progress to re-establish work in Egypt, or in Libya, is slow. Very good partnership with OIE in every region has certainly assisted.

On the **partnership** side, the neighbourhood work has been greatly assisted by agreements with IZSLT (Italy) and CIRAD (Montpellier), but we continue to lack a strong Russian-language partner for training in Russian-speaking parts of Eastern Europe.

A. Actions taken in follow-up to the Recommendations of the 95th Session

Of note for attention:

- #3, concerning lack of information on virus circulation in parts of the south and east Mediterranean;
- #11, progress with sub regional training courses;
- #14 and 15, need for engagement with larger EU MS on cross-border modelling, and expert group for wildlife modelling.

Recommendation (95 th Session, Budapest)	Follow-up
2. The significance of the previously undetected pool of FMDV circulation in Central Asia needs to be better understood. The efforts of WRL to co-operate with FGI-ARRIAH, with SAP Institute and laboratories in West Eurasia to better characterize the West Eurasian virus pools is encouraged.	The results of various OIE, FAO and WRL staff missions to Central Asia since March need to be better known and discussed.
3. The lack of information on virus circulation in Egypt, North Africa and western Middle-east is a concern.	WRL need to report on progress. The rapid submission from Algeria to WRL is a good sign but lack of information /results from Egypt and other countries remain problematic.
4. While noting the important component of sequence exchange, the lack of submission of samples from the European neighbourhood is a concern, given the complex epidemic situation in 2017 with multiple strains of serotypes A and O. The problem that this causes for vaccine selection needs more attention.	As above
5. The WRL is encouraged to report against the standard template in the WRL agreement, which would ensure the progress to achieve sufficient samples from the neighbourhood is recognised and addressed in the Sessions.	Expected that WRL will report according to contract, before the ExCom.
6. The use of the new tool (PRAGMATIST) for vaccine prioritization for Europe was noted with appreciation. The communication of the approach to risk managers across Europe is encouraged.	A workshop on use of PRAGMATIST is planned at the OS18, on 1 st November. Communication with VBM will be stepped up to encourage participation
7. The communication of gaps in coverage (vulnerabilities) is also important and should be given more attention in reports.	Expected in WRL report to ExCom.
8. The Secretariat should continue to invite the new EU-RL as well as the WRL to future Sessions of the Executive Committee since their participation in such Sessions could be a benefit for co-ordination.	Actioned for 96 th and subsequent ExCom.
9. OED would be asked to manage the evaluation, and to work in agreement with DG-SANTE at every stage of the process.	SANTE have indicated they do not see that evaluation is a priority, so will not proceed.
10. DG-SANTE would be asked to identify a focal point, for the liaison with OED.	See above.
11. The expression of interest of some countries for regional courses was noted. The workshops relating to intra-EU disease spread modelling might attract some of the countries currently interested in regional workshops, and should be suggested.	The first regional course will be for Spain and Portugal (joint, desk top sim-ex). Benelux countries might be supported to utilize EuFMDiS but no request currently made (using Luxemburg training credits).
12. Some countries should be prioritized on basis of risk for attention to achieve utilisation of the training credits.	Risk based prioritization will be discussed at ExCom96.
13. A meeting should be proposed with the CVO-Kenya to reach agreement on the continuation of the Real-Time courses, or an alternative location , within a similar flight time, be found.	Undertaken at OIE-GS, and understanding of mutual positions reached. A mission to Uganda in July went well, and agreement on RTT pilot courses was reached.
14. EuFMDiS: Effort should be made to interest additional MS, especially those with the biggest role in intra-EU movements of animals, in the modelling progress and uptake	Invitation made, taken up only by Ireland. Need to engage at least with Benelux, Germany, France and Poland.

of the opportunity. They could be invited for a special session at the July workshop, as observers and at their own cost.	
15. The adaptation of the model to include wildlife was supported. The call for proposals for this adaptation could follow the FAR Fund procedures, and this was referred to the STC.	Poor take up of the call, as European wildlife experts are very heavily involved in ASF control issues. Interest from S Khomenko and V. Gubertibut not formalized into a workplan.
16. While very promising, there is a need to ensure the model is well understood, is robust and the system for future support/maintenance is costed before commitment is given post July 2018 on its maintenance and support. The next ExCom should receive a report of the July workshop and take an active role in steering and guiding future support and development.	Report will be provided (K. Mintiens) with plans for the evaluation and validation process.
17. The extent of the 2017 epidemic in North Africa has been previously underestimated. The willingness of Morocco and Algeria to participate in development of risk based surveillance for FMD is a positive signal from the region.	Rapid submission from Algeria of samples from the 2018 outbreak(s) is noted.
18. Attention and effort is needed to ensure the risk of recurrence of incursions from or through Tunisia and Libya are understood.	More work is needed here, and more urgency to activities under contract with CIRAD.
19. There is a need for the EU member states in REMESA to bring attention and promote cooperative activities to engage Tunisia in the risk based surveillance; the efforts of Italy in this regard are applauded.	As above, the situation of virus circulation in Tunisia is unclear and inadequate surveillance detail is available.
20. Greater effort is merited under the Pillar II programme to engage with Iran, particularly on data sharing, on laboratory co-operation and on the study on livestock price differentials. The interests of Iran in this need to be understood and the Secretariat should propose to the parties a meeting to be held at the OIE in late May.	Held at the OIE-GS, with many assurance from Iran of interest. With renewal of economic issues/sanctions in Iran, probably FMD surveillance and control will be set back, with risks to Turkey and GEO.
21. Regarding FMD management in Central Asia and on the borders with Mongolia and China: the Committee welcomed the developments from FAO with the support of the Russian Federation, and asked to be briefed on progress at subsequent Sessions.	Juan Lubroth to be asked to report.
22. The Committee supports the proposal to provide PCP-support officer (PSO) expertise to provide guidance to national follow-up to GF-TADS Roadmap recommendations.	Progress made, Nick Lyons (Pillar III supervisor) to report.
23. The development of further PSO expertise by training or accreditation is needed, to address the needs of regions such as West Africa. These experts might come from partners already active in the regions, from FAO, OIE and technical institutions.	Proposals for improving PSO recruitment from these regions will be reported; funding needed to improve quality and thoroughness. Need for francophone experts
24. EuFMD should continue to develop a training approach for these experts as well as for staff at national level.	Will be reported.
25. The progress of the projects supported under the 4 th Call is encouraging. The projects under the 5 th and 6 th call should be reported at subsequent Sessions as they have an importance for surveillance and risk to North Africa and Europe.	Reports will be provided.
26. The proposed Themes for the 7 th Call were endorsed.	
27. The title and theme for the Open Session were supported.	OS18 is now at an advanced stage of planning with a very strong program
28. The sound financial position of the Administrative and Emergency Funds was noted. The Committee recognized that in large part this is due to the work of the Programme Co-ordinator, and re-iterated their support to ensure that the position and incumbent of the current programme co-ordinator is retained for at least the duration of the main programme (EC project), to September 2019.	It has not been possible to progress the P2 recruitment; re-recruitment of Ms Carraz as a consultant has taken place.

B. EuFMD Program

1. Global Surveillance Reports

Current risk events of most note for the EuFMD MS:

✓ **North and West Africa: wide spread, multi-country epidemic of type O -EA3**

A widespread FMD epidemic is ongoing in West Africa in September 2018, and FAO has received several requests for emergency assistance (Mauritania, Gambia, Guinea and Sierra Leone). The epidemic in Guinea appears to be caused by a very closely related virus to that from Algeria (June-July 2018), suggesting a common source (region) in West Africa. All serotyped samples from the region in the past 3 months have been type O, and one can speculate that the type O epidemics are all related to the animal movements from central Sahelian countries (the FMD epidemic in Mali in June was well observed by EuFMD team); movements from central Sahel to the coastal region peak in mid-summer and at the time of the "Tabaski" (eid/kurban festival) in August. Reports from Mauritania indicate that the mortality and severity is unusually high with the current epidemic. At this point, it is likely that the main drivers for movement have occurred but the epidemic is likely to spread within currently affected countries do not vaccinate, and application of other measures extremely difficult.

At time of writing FAO/OIE Emergency Management Centre (EMC) was formulating a mission to Mauritania; EuFMD had been asked to provide an epidemiologist.

✓ **The situation in eastern Mediterranean**

Remains of concern since risks in several countries are less controlled with less information than usual: Israel/Palestine have reported several outbreaks in the past months, with type O in Israel confirmed in April; several reported outbreaks in Palestine have not been serotyped. The lack of information from Egypt is a serious concern. This country is at risk from Sudan and Ethiopia (major trade partners) and as a result of EuFMD missions, a number of recent FMDV (of three serotypes) from Sudan were received and typed at Pirbright in July, including A/AFRICA/G-IV, O/EA-3 and SAT2/VII/ALx-12. These result complement earlier results from Ethiopia, confirming a wide range of topotypes which present a risk through trade movements to Egypt/mid-east (O/EA-3, A/AFRICA/G-I, A/AFRICA/G-IV, SAT2/VII/Ghb-12).

✓ **This year (2018) appears to the year of "global" type O epidemics**

In India, it remains the only reported serotype, although neighbours (Bhutan) also report type A; and distinct and widely distributed cases of type O were also reported in China. As the strains from each region are unrelated, this may simply be a random, periodic event where type O predominates in a particular year. Of significant concern was the southwards extension of type O from Tanzania into Central Zambia: establishing itself for the first time in southern Africa (where it is an exotic serotype and vaccination does not normally include it).

2. Major developments/achievements

Pillar I:

- Training: the delivery of courses is on track under training credits scheme, to 39 MS;
- Montenegro has joined the training programme, with their training credits supported by unspent credits from the previous 24 month period;
- First sub regional, multi-country course planned (Spain/Portugal) in November, a joint desk-top sim-ex;
- Graeme Garner finished his contract with EuFMD, after achieving the **EuFMD-iS** (European FMDisease Spread model) project milestone of releasing a working model for seven European countries, at the Budapest workshop in July 2018;
- THRACE surveillance programme: Svilengradworkshop held, assessed passive surveillance issues; THRACE surveillance activities has been instrumental in detecting PPR incursion;
- New team (Dan Donachie, Sally Gaynor, Kiril Krstevski) for Balkans programme in place (July/August) undertaken, active in planning series of national exercise in Autumn 2018;
- Vaccine bank management: the PRAGMATIST tool is being evaluated by US and AUS vaccine bank managers, and a workshop for VBM is planned November 1st, 2018, at the Open Session.

Pillar II:

- Caucasus countries meeting held on the side of the OIE-GS, May ;
- Major workshops held
 - Safe Trade (with OIE): Pillar II countries, held in Istanbul (April 2018);
 - Turkey and Trans Caucasus countries, on surveillance and vaccination monitoring (May 2018);
 - Lebanon and Syria, WS on development of FMD –Risk Based plans;
 - Sub regional vaccination monitoring course (held in Jordan).
- Online training course (FITC) held in Turkish for 165 participants, Turkey/Azerbaijan;
- Use of WhatsApp® to extend the online training (FITC) for francophone participants from North, West Africa to over 300 persons, a successful first enabling high participation;
- Webinar on Safe Trade, for 70 participants (Russian language).

Pillar III:

- PCP –support officer system agreed with FAO and OIE, initial support to 25 countries;
- Finalization of the 2nd Edition of the PCP Guidelines agreed between EuFMD, FAO and OIE;
- Support provided to the East Africa Roadmap (11 countries) in July, and support to first Central Africa RM in Cameroon (planned for end September);
- Surveillance: the pilot studies to train paravets in Mali to collect and submit samples: implemented well, awaiting final report, but looks very promising that it could be extended to other regions;
- Global e-learning courses run: **eight** courses delivered in first 12 months, well on track; with India, plans advanced for first All-India e-learning (autumn 2018).

3. The most significant delivery problems have been

- a. Delivery issues relating to the **Balkan** region component (1.4); as a result of delayed recruitment of a Short Term Placement (STP) in spring 2018, and priorities placed upon the EuFMDis project; a new component management team is in place to catch-up over next six months;
- b. Under Pillar III, extended time needed to reach agreement with India on national level online courses; now proceeding quickly (September 2018);
- c. On networking (contingency planning network, vaccine banks): with priority given by the Pillar I team to the cross-border modelling project, fewer webinars were held than planned. New team (Koen Mintiens, Sally Gaynor) to re-launch the networking in autumn 2018.

4. Operational and administrative issues

The severe problems associated with Consultant re-hire (reported October 2017) have almost fully been managed, and as a result, the operational team is up to strength (September 2018). Additional support will be brought in for the heavier autumn programme, including the Open Session.

5. New developments of note

- a. Special Committee for Biorisk Management – first session was held in Palermo (Italy), March 15-16 2018;
- b. Open Session 29-31 October: all proceeding well, with a full programme of excellent talks planned with breakout workshops on day 3 and follow-on “closed” sessions on Day 4 (1st November). The assistance and support of the *Ministero della Salute*, Italy, with assistance of the regional *Istituto Zooprofilattico*, is greatly appreciated;
- c. The project funded by UK GCRF via TPI, Pirbright, to develop improved e-learning content of the online course “post vaccination monitoring” (100,000 STG), is proceeding well;
- d. USA (APHIS) and Canada have both indicated high interest in funding national application of the online training course (FITc) and arrangements are being concluded to contract EuFMD to provide these. The level of funding is minor but fully covers all costs;
- e. Scientific progress:
 - i. A new project (alternatives to the “r-value” for vaccine matching) has been funded, and made good progress; two papers will be given at the Open Session;
 - ii. Each of the recent FAR funded projects will be reported at the Open Session; final round decisions on FAR projects to be funded in 2018 has been made, and contracts arrangements need to be finalized.

6. Secretariat

The composition of the Secretariat is indicated in **point 7**, and Phase IV team for implementing the EC project activities is given in **Table 1**.

C. EuFMD Program Report: Additional developments (including Non-EC funded pipeline)

- i. The EuFMD operates an Emergencies and Training Fund (MTF/INT/004/MUL), as agreed with the MS in April 2017, the Fund will be continued until December 2019, and extended thereafter if subsequent Sessions are in agreement.
- ii. Under the Australian/New Zealand funding, two Real-Time Training (RTT) Courses were successfully conducted in Nepal in March 2018. A marked upsurge in the number of outbreaks occurring in the Kathmandu valley was noted, and this, combined with improved surveillance activities, meant that previous difficulties in locating suitable sites for field visits were not experienced. As part of the agreement with the Government of Nepal for provision of the training courses EuFMD continues to provide support in the development of risk-based FMD control strategies in Nepal. The relationships developed ensure that regular sample shipments are sent from Nepal to the World Reference Laboratory, providing valuable risk information from the region. A collaboration with scientists from the Pirbright Institute has allowed field research into environmental sampling to take place during the training courses and the first paper was published as a result of this work. Two Real Time Training courses are planned for November and an online courses for Australia will be held in October. Laure Weber-Vintzel from the OIE took part in the course in March, and another OIE representative will take part in the training courses planned for November.
- iii. An agreement with the Department of Agriculture, Food and the Marine (Ireland) to fund a study on the use of mobile phones to improve surveillance has been agreed as a joint signature, with implementation to be completed within 18 months (i.e. by end of 2019). The project aims to examine incentives for farmers in endemic FMD regions to report disease using mobile phones and to undertake a small pilot study based on these findings. Funds have partly supported a short term placement from the University of Rwanda. Advanced discussions are being held with NGOs for delivering the farmer workshops, and with different companies on SMS systems that could be utilized. The project will take place in East Africa with the precise locations to be finalized.
- iv. A request to run a National Level online FMD Emergency Preparation Course (FEPC) has been received from the Canadian Food Inspection Agency (CFIA). The course planned will, follow a bilingual model as previously trialled in the Caribbean region. The cost of the course is circa 19,000€ and costs would be fully covered by the CFIA. Finalisation of contracting arrangements is currently underway, with the course programmed to take place before March 2019.

D. Administrative Report**7. The Secretariat staff** are listed below (as of September 2018)**Technical team:**

Executive Secretary (P5)	Keith Sumption
Communications and Networks Officer (P2)	Nadia Rumich
Chief Operations Officer (Cons)	Cecile Carraz
Pillar I Supervisor/ Contingency Planning Officer:	Not filled after Mark Hovari (30 th July)
Pillar II Supervisor/Deputy Executive secretary	Fabrizio Rosso
Pillar III Supervisor	Nicholas Lyons
Training Programmes Manager	Jenny Maud
Consultants and Short Term Placements (STPs) <i>(italics to indicate contract underway)</i>	Rodrigo Nova Chavez (Chile)(STP) Daniel Donachie (UK)(STP) Corissa Miller (AUS) JeanClaude Udahemuka (Rwanda) (STP) KrilKrstevski (FYR of Macedonia)(STP) Willington OjongBessong (Cameroon)(STP) A.K.M. Mostafa Anower (Bangladesh)(STP) <i>Abdenacer Bakkouri (Morocco)</i> <i>Shahin Ahmed Mohamed Baiomy (Egypt)</i> <i>Rashad Munir Khawaja (Pakistan)</i> <i>Etienne Chevanne (France)</i>
Knowledge Leaders:	Carsten Potzsch, Chris Bartels; Kees van Maanen (Vaccination);Melissa McLaws (Risk Analysis/Pragmatist tool); David Paton
National Focal Point/PSAs:	T. Chaligava (Georgia);S.Kharatyan (Armenia); T. Aliyeva (Azerbaijan); B. Bahadur Adhikari (Nepal); C. Fouki; A. Exakoidis; G. Georgiev; A. Miteva; S.Moldanov
<u>Administrative team:</u>	Erica Tomat, Francesca Renzetti, Silvia Epps, Maurizio Licastro
Operational support team	
E-learning Support Assistant	Chiara Addari
Finance assistant	Filippo Pedullà
Programme Specialist	Francesca Renzetti

Interns:

- Glen GuyverFletcher; Alessandra Alviti; Bryan Ross; Tiziano Federici

8. Linkage of staff positions to budget, under Phase IV

BOLD script indicates positions funded under the EC programme, and italics those funded by EuFMD under MTF/INT/011/MUL. (September 2018).

Table 1. Staff in Phase IV

Component (Output) Number	Pillar Supervisor	Output Manager	Lead - Network and training support
1.1	Vacant	STP 1	P2 (80:20 EC AND MUL/11)
1.2		RMSO	P2 (80:20 EC AND MUL/11)
1.3		STP 2	
1.4		STP 2	
1.5		RMSO	P2 (80:20 EC AND MUL/11)
1.7		Consultant2	
1.8		RMSO	
2.1		F.Rosso (PII)	Consultant-3
2.2	Consultant-2/STP		
2.3	STP		
2.4	TPM		P2 (80:20 EC AND MUL/11)
3.1	N.Lyons (PIII)	Consultant	
3.2		Consultant-4	
3.3		Consultant-2	
3.4		TPM (P2 EQUIV)	P2 (80:20 EC AND MUL/11)
<p>Key: EXSEC P5 Animal Health Office, Executive Secretary; NTSO Network and Training Support Officer P2; CPO Contingency Planning Officer, consultant with experience/terms equivalent to P2; RMSO Risk Management Support Officer; TPM Training Programmes Manager, consultant with experience/terms equivalent to P2.</p>			

Appendix 3
Six-month report
(Full)

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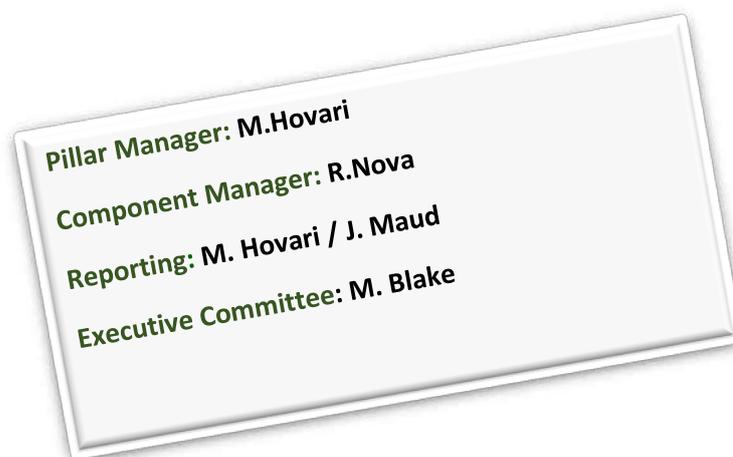
Component	Team
Pillar Manager	M.Hovari
1.1 -Training for Member States	Component Supervisor: M. Hovari-Component Manager: Rodrigo Nova -Reporting: M. Hovari / J. Maud; Executive Committee oversight: M. Blake
1.2 - Improved Contingency Planning	Component supervisor: M. Hovari -Component Manager: G. Garner; Reporting: M. Hovari/ G. Garner; Executive Committee oversight: /
1.3-Thrace	Component Supervisor: M. Hovari; Component Manager: P. Motta/D. Donachie; Reporting: M. Hovari/ G. Garner ; Executive Committee oversight: /
1.4 -Balkans	Component Supervisor: M. Hovari; Component Manager: /D. Donachie Reporting:– M. Hovari; Executive Committee oversight: /
1.5- EuFMD Fund for Applied Research	Component Manager: P. Motta; Reporting: K. Sumption / P. Motta; Focal points, Executive Committee: C. Brusckke; Standing Technical Committee: E. Ryan, Chairman
1.6 -Emergency Technical response	Component Manager: K. Sumption; Reporting: K. Sumption; Executive Committee oversight: L. Bognar
1.7 - Proficiency Testing Scheme	Component Manager: K. van Maanen; Reporting: M. Hovari; Executive Committee oversight: C. Brusckke
1.8 - Risk Analysis and Communication	Component Manager: M. Hovari; Reporting: M. McLaws - M. Hovari M. Scicluna – G. Garner; Executive Committee oversight: L. Bognar
Pillar Manager	F. Rosso
2.1 - South East Europe	Component Manager: C. Potzsch; Reporting: C. Potzsch; Focal point Executive Committee: J. Angot
2.2 - South East Mediterranean	Component Manager: A.Bakkouri/D.Imandayeva; Reporting: F.Rosso; Focal point Executive Committee: J. Angot
2.3 - Support to REMESA	Component Manager: A. Bakkouri; Reporting A. Bakkouri; Focal point Executive Committee: J. Angot
2.4 - Pillar II Training Development and Coordination	Component Supervisor: F. Rosso; Component Manager: J. Maud; Reporting: J.Maud; Focal point Executive Committee: M. Blake
Pillar Manager	N. Lyons
3.1 - Improved system for monitoring and evaluation of progress of regional programmes on FMD control	Component Manager: N. Lyons / N. Rumich; Reporting: N. Lyons; Focal point Executive Committee: /
3.2 - Support to Global Progress Monitoring of FMD Control programmes	Component Manager: C. Bartels; Reporting: C. Bartels; Focal point Executive Committee: /
3.3 - Laboratory support	Component Manager: K van Maanen; Reporting: K van Maanen; Focal point Executive Committee: /
3.4 - Global access to PCP-FMD training resources	Component Manager: N.Lyons Reporting: J. Maud Focal point Executive Committee: M. Blake

EuFMD Phase IV

Report to the EuFMD Executive

April 2018 - September 2018

Component 1.1 - Training for Member States



Pillar Manager: M.Hovari
Component Manager: R.Nova
Reporting: M. Hovari / J. Maud
Executive Committee: M. Blake

1-Objectives of component

The overall objective of this component is Increased European expertise in FMD crisis management and improved quality of national FMD preparedness training programmes.

The activities (expected results) are:

1.1.1: System in place 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, including e-learning, training resources and staff support.

1.1.2: Improved capacity in each of the MS to recognize, respond 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.

Activities	Indicators	Baseline Sep. 2017	Target 2 years	Unit of measure	Current Status
1.1.1	Knowledge Bank created and in use by member states	500	3,000	Number of participants that have accessed at least one open access training course or knowledge bank resource	1,377
1.1.2	Implement >85 % of the demand driven programme	85%	85 %	Training credits allocated by the 39 MS to training activities or regional initiatives have been delivered by EuFMD	55 %

Additional non-EC funded contributions

External funding received for development of training outside the EC funded programme, including the Real Time Training courses held in Nepal and funded by Australia and New Zealand, and the additional training purchased by Member States under the "Training Credits Top-Up Scheme" contribute funding which support the development of new training courses and materials which are then also used as part of training provided to MS under the EC funded programme. Furthermore, these funding sources support recruitment of additional personnel, as listed in the table below:

Description	Contribution	Funding source
Component Supervisor: Training Programme Manager	50% of one FTE role (consultant P2 equivalent)	EuFMD Trust Fund- MS contributions, Australian Real Time Training
Network and Training Support Officer	30% of one FTE role (P2)	80% EuFMD Trust Fund, 20% EC project
Development of training materials	New online training materials, course materials or job aids	Australian Real Time Training and Training Credits Top Up fund

2-Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	Mark Hovari	Contingency Planning Officer
Component Manager	Rodrigo Nova Chavez	Short Term Placement
Training Manager	Jenny Maud	Training Programme Manager
Training and networking support	Nadia Rumich	Training and Networking Officer/Secretariat
Member State partners	Training Focal Point in each EuFMD MS	n/a
ExCom oversight	Martin Blake	ExCom member (Ireland)

3-Countries or partner organizations involved

All EuFMD Member States are direct beneficiaries of component 1.1.

The main partners are:

Training focal point in each MS. A good relationship has been established and maintained with many focal points through the first two years of the training credits scheme.

4-Progress Report

1.1.1 System in place 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.

Activities:

1.1.1.1 Training infrastructure: staffing and technical resources

Staffing

Rodrigo Nova Chavez (UK) joined on a Short Term Placement from July 2018 and will be responsible for the management of component 1.1.

Chiara Addari (Operational, e-learning and training logistics) assists the EuFMD e-learning platform, including online resources, registration and liaison with training participants and co-ordination of webinars. The rapidly rising number of e-learning courses being delivered demands increased staffing.

Amir Shurrab continues as a specialist learning technologist and instructional designer consultant for ad-hoc instructional design of new e-learning courses alongside advanced technical troubleshooting support to the e-learning programme.

Jenny Maud co-ordinates training development across the EuFMD program, and oversees the delivery of the e-learning program under Pillar I.

Mark Hovari (Contingency Planning Manager) supervised component 1.1 to **end July 2018**.

Nadia Rumich manages communications on training, the webinar programme and networks.

Interns recruited across the EUFMD program have assisted in providing support to the e-learning program and the development of new training materials.

Technical resources: EuFMD e-Learning Platform (<https://eufmdlearning.works>)

The EuFMD e-Learning Virtual Learning Environment (VLE) now has over 7300 users, with 1600 new users added in the last six months.

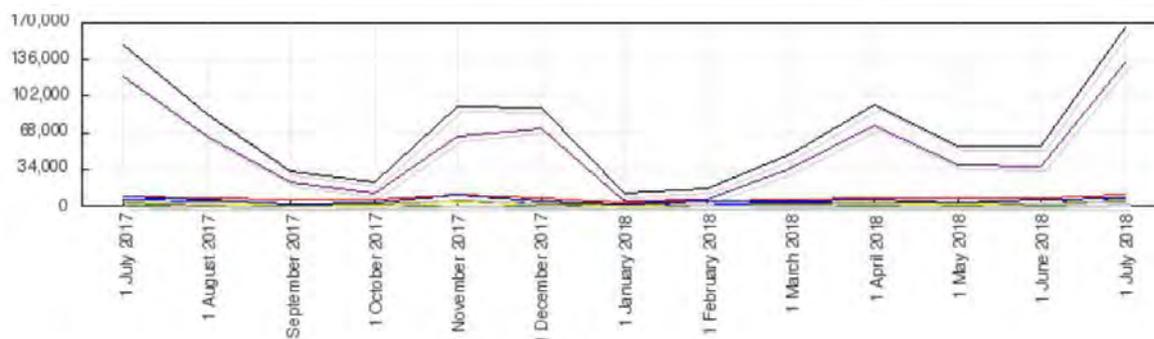


Figure 1: Activity on the EuFMD e-learning site (number of clicks by different participant types) over the last 12 months, illustrating sustained increase in user numbers.

Since 2013, the VLE has been hosted and managed by the Royal Veterinary College, University of London, UK (RVC) through a letter of agreement. As the EuFMD e-learning program has expanded, and consequently e-learning related staffing capacity within EuFMD has increased, the management of the VLE has become autonomous within EuFMD. It has therefore been decided, by mutual agreement with the RVC, to move the EuFMD e-Learning website to a dedicated commercially-managed server solution, rather than to continue to host the platform at the RVC. A competitive tender process was initiated in order to identify a suitable company to provide this hosting service.

While server hosting may move away from the RVC, it is recognized that continued partnership with an academic institution has potential benefits in terms of:

- sharing of training materials and e-learning content;
- sharing of pedagogical and technical expertise in e-learning development;
- academic accreditation or certification of courses.

A call for expression of interest in collaboration in the development and delivery of e-learning has therefore been developed and publicized in order to identify academic institutions with whom such beneficial collaborations may be established in future.

Technical Resources: Webinars

Webinars are organized frequently, on average two per week. The software used has been upgraded to allow up to 500 participants.

1.1.1.2 Training infrastructure: online knowledge bank development (in co-operation with other training components)

The online EuFMD Knowledge Bank is a searchable database of FMD related resources. It was developed as a pilot system by the Royal Veterinary College (<http://kb.eufmdlearning.works/>) and now contains over 450 resources and over 80 webinar recordings. The system will now be migrated to the main EuFMD website on the fao.org platform, which will assist increasing the visibility of this important resource. During this migration improvements will be made in the search functionality, such that prioritization of search results is more logical.

1.1.1.3 Open access areas of EuFMD e-Learning website

An open access “**Contingency Planning Self-Assessment Tool**” has been developed. This tool, which has a game-like interface, will serve dual functions. It will allow contingency planners to assess their own plans and direct them to resources which may be used to improve contingency plans. In addition, as an open access resource, the tool will be available to anybody interested in FMD contingency planning, signposting users to resources available in the Knowledge Bank and contingency planning network.

Under Pillar II activities, the open access course “Introduction to the Progressive Control Pathway” has been updated in line with the updated PCP-FMD guidelines, and a new open access course on the development of Risk Based Strategic Plans for FMD control has been developed.

Developing and implementing a communication strategy to improve awareness and completion of the open access e-learning courses will be an important activity for September to December 2018.

1.1.1.4 Training infrastructure: framework for monitoring and evaluation

Regular monitoring of achievement of learning objectives of online courses occurs through online assessment and participant feedback surveys. Outcomes of face to face training courses are monitored through trainer reports and participant feedback surveys. As the phase IV training program enters its fourth year, the training team recognizes the need to go beyond outcome monitoring to a wider evaluation of the quality and impact of both the face-to-face and e-learning courses provided across EuFMD’s three pillars.

A call for expression of interest for experts to assist as external evaluators has been publicized and these evaluators will be asked to review a dossier of materials and attend meetings in Rome to discuss the program as initial steps in the evaluation process.

The expert advisory group will be asked to evaluate and advise on future improvements to:

- 1) procedures for course development;
- 2) quality of existing face-to-face and e-learning courses produced;
- 3) existing procedures for feedback and monitoring of the outcomes of each training and e-learning course;
- 4) how the impact of the training programme may be assessed;
- 5) the overall training strategy, its partnerships and the value of certification or formal recognition of the quality of courses.

The first expert meeting is expected to take place in September or October.

1.1.1.5 Develop knowledge transfer tools and job aids

The Training menu uptake has not required the implementation of new courses.

1.1.1.6 Support to in-country training courses

EuFMD introduced at the NTC24, June 2016, a written agreement with the Member States’ participants of the Real Time Training Kenya to deliver a national cascade training, based on the knowledge and experience acquired during the course in Kenya, after their return from the RTT. All participants are given one year to develop this national course, with the assistance, if required, from EuFMD Training Team. This new approach should increase the impact of the RTT courses on the preparedness of the countries on foot-and-mouth. EuFMD records any planned and completed cascade national course after the NTC courses since June 2016. In the case of various participants from the same country attending the same RTT, the EuFMD is not asking for more than one cascade training and they are encourage to collaborate for a single cascade training. Therefore, both number

of participants (as individual) and number of countries (in case of more than one participant from the same country in the same RTT) for each of the NTC, are recorded.

NTC Real Time Training	Nb of participants	Nbr of country participant	Nb of cascade planned	Nb of cascade training completed*
NTC24	12	9	6	3
NTC25	12	11	4	3
NTC26	10	10	4	4
NTC27	7	6	1	1
NTC28	11	9	1	1
NTC29	12	11	2	2
TOTAL	64	56	18	14

*The cascade training planned do not include the training already delivered and completed

1.1.2: Improved 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.

Activities

1.1.2.1 Training Credits system and needs assessment

During this six-month period, several training courses were implemented in order to cover the needs received from all 38 Member States. Also as Montenegro joined EuFMD as 39th Member State, the National Training Focal Point was appointed, and allocation sheets for training credits were send out.

Thanks to Montenegro joining, the total number of Training Credits (TC) available to MS has increased to 398 out of which 352 are allocated by MS to training activities, 46 TC are not allocated.

Cyprus and Luxemburg have not allocated any training credits up to this point.

Albania also has eight unallocated TC

If no response is received by end of September, reusing the unspent TC of these MS for various regional initiatives should be considered.

The 56 unused Training Credits (TC) from the first biennium, not included in the total account of Training Credits for this second biennium are being used to support various initiatives.

- a) The 10 TC of Montenegro, as initially new entry Member State TC were not budgeted ;
- b) Support of a Training Course on Containment Zone, in the value of 30 TC;
- c) Regional approach initiatives, in the value of 16 TC, specifically Cross-border simulation exercise between Spain-Portugal planned for November 2018

Also to note, that Switzerland has donated their ten TC, for biorisk training initiatives.

The table below shows an update on the courses delivered since the beginning of the training period to date with the number of credits allocated. This is still the beginning of the biennium which is, predominantly, the planning stage and many of the events are planned for later.

Table 1: Training courses **Delivered** and (Allocated) to date

Course	Training credits	Number of trainees	Training credits delivered (allocated)
1) Real Time Training (now with the requirement that participants carry out cascade training when they return home)	3 credits for 1 participant	32 (44)	96 (138)
2) Online FMD Emergency Preparation Course: English language Online course for multiple Member States in English	1 credit for 20 participants	120 (440)	9 (22)
3) Online FMD Emergency Preparation Course: Tailored National Course Online course in national language, tailored to specific country requirements	6 training credits for 120 participants	(240)	(12)
4) Online FMD Emergency Preparation Course: subsequent national course	4 training credits for 120 participants	480 (480)	15 (15)
5) Workshop: "Managing a crisis" Establishing train of command and managing communication within and outside the veterinary service in a crisis situation	2 training credits for one participant	19 (19)	38 (38)
6) Workshop: "FMD Simulation exercises" Design, implementation and evaluation of simulation exercises	2 training credits for one participant	(17)	(34)
7) Workshop: "Putting vaccination into practice" Desktop simulation based workshop looking at contingency planning on all aspects of FMD vaccination and subsequent proof of freedom	0 training credit for one participant	(12)	(24)
8) Workshop: "FMD Wildlife surveillance" Better understanding of FMD surveillance in wildlife, particularly by using non-invasive methods.	2 training credits for one participant	13 (13)	26 (26)
9) Workshop: "Veterinary Ethics" Exploring ethical conflicts, clarifying professional roles and responsibilities.	2 training credits for one participant	(3)	(6)
10) In-country support on FMD modelling: Assistance to the country in order to progress in the development of national disease spread models.	2 training credits for one mission	15 (50)	4 (11)
11) Laboratory Training Course Two week intensive course on FMD diagnostics run by the Pirbright Institute	4 training credits for one participant	1 (2)	4 (8)
12) Regional event: A possibility for each sub-region to have a tailored course to meet their specific needs to increase FMD preparedness.	2 training credits for each country with the support by additional training credits	(20)	(8)
Biorisk Training in collaboration with TPI			(10)
Total number of training credits Delivered – (Allocated)			192 (352)

A balance of the 398 credits available for training in 2017-19 to date is as follows:

- ❖ 354 TC have been allocated, and **54.5% of the allocated training credits have been delivered by EuFMD**
- ❖ They are still **46** unallocated training credits at this point.

1.1.2.2 Development of new training courses

The training menu covered all the needs by MS and no requests for new courses were made in this period.

1.1.2.3 Delivery of training courses

To date, the following training courses have been delivered during the work programme:

- **Real Time Training** courses in Kenya were held in November and December 2017. One Real Time Training course was held in Nepal in February 2018, originally planned for Kenya. There should be one course in November-December 2018. All the countries that allocated credits to this training option had the opportunity to nominate participants to attend to one of these courses.

The EuFMD has delivered four online courses during this six-months training period.

- **On-line National FMD Emergency Preparation Course for Spain**
- **On-line National FMD Emergency Preparation Course for France**
- **On-line National FMD Emergency Preparation Course for Serbia**
- **On-line Generic FMD Emergency Preparation Course in English**

EuFMD has also delivered two workshops in this time frame:

- **Workshop on Managing a Crisis, in March 2018**
- **Workshop on FMD wildlife surveillance in May 2018**

1.1.2.4 Training focal points informed of training opportunities and feedback

Training focal points have been contacted regularly about upcoming courses, to request their nominations of participants, to give their feedback on different issues, etc.

1.1.2.5 Regional approach

The EuFMD developed a proposal for the Executive Committee on a sub-regional collaboration of the Member States for training purposes. The possible benefits of this approach considered were:

- strengthen the relationships between neighbouring countries;
- improve the cooperation in activities related to FMD preparedness and surveillance;
- Cost- effectiveness of spend training credits.

The proposal was to receive a donation of two TC, from their ten TC pool, from each MS for their region to be spent on a regional activity. Each TC donated was going to be supported by EuFMD with another TC derived from unspent training credits of the first and second biennium.

Two initiatives are being defined:

- 1) A cross border simulation exercise between Spain and Portugal, in November 2018. A proposal was sent to EuFMD from the two MS, and EuFMD has agreed to support this initiative.
- 2) Joint training between Slovenia and Hungary, but preliminary discussion are needed to identify the main topic.

Funds from the regional approach are used to support delivery of a training in Serbia on Containment Zone.

5-Issues for Executive Committee attention arising during implementation

To date, 46 credits have not been allocated. Some countries have never allocated their training credits or not all of them, despite repeated reminders.

The countries with the highest number of unallocated or unspent training credits were Cyprus, and Luxembourg. On one side, the EuFMD is looking for options to improve the engagement and participation from the countries that are not answering to our requests to allocate and use their training credits. On the other, the EuFMD would like to allocate unspent TC to the regional approach, both from the first biennium and during the second biennium in order to recycle these funds and redistribute equally between the MS.

6-Priorities for the next six months

1.1.1: System in place 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.

- The knowledge bank will be upgraded with new features and search functions following review of current use;
- Open access online courses will be publicized to Member States to ensure good uptake;
- Development of additional job aids and training resources for the Knowledge Bank;
- Follow up on additional opportunities to promote national cascade training.

1.1.2: Improved 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.

In the next six months, the focus will be on continue to organize the online courses, workshops and events which have been allocated by the Member States.

- **Online FMD Emergency Preparation Courses (FEPC)** will be delivered during the second biennium. These course have been delivered to more than 1000 veterinarians from Member States on seven courses to date and three more are planned to comply with the Member States request for this period of time (there is a request of at least 380 new participants, from 19 different Member States for this biennium). These courses are run in English and have participants from several Member States.
- **National tailor made FMD Emergency Preparation Courses** were held, in their national languages, The EuFMD has, up to date, national courses tailored for Spain, France, United Kingdom, Estonia and Serbia. Two new national courses for this biennium: Hungary and Poland. This tailored national courses will be delivered in their own language, which will increase the capacity of FMD Emergency Preparation Courses in diverse languages.
- **Workshop on Crisis Management** has been organized for mid-March 2018, in Kaunas (Lithuania). The aim of the workshop was to increase the ability of Veterinary Services in Member States to manage an outbreak of foot-and mouth disease by effective emergency management and excellent internal and external communication.

- **Workshop on Wildlife surveillance** organized in May 2018, in Sofia (Bulgaria). The aim of this workshop is to provide participants with a better understanding of FMD surveillance in wildlife, particularly by using non-invasive methods.
- **Workshop on Simulation exercises** will be organized for November 2018. The aim of the workshop is to teach participants about how to select, design, conduct and evaluate simulation exercises through actually designing and carrying out small simulation exercises during the workshop. Furthermore the workshops aimed to make participants aware of the value of having a strategic approach to simulation exercises and use them within the context of their overall emergency preparedness.
- **In-country support on FMD modelling** was organized for April 2018 to Spain.

7 - Success stories and future emphasis

Future emphasis of the component will be mostly on delivery of the training courses selected by the member states and maintain the support to Member States to facilities their own FMD trainings with the help of open access courses and the materials found on the knowledge bank.

8- Budget (€)

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
522,975	195,236	42,890	46 %	271,517

9-Gantt charts - Planned activities

OUTPUT 1.1 Increased European expertise in FMD crisis management and improved quality of national FMD preparedness training programmes		YEAR 1												YEAR 2											
Target (Expected Result)	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
1.1 Training for MS	1.1.1 Develop the training infrastructure to enable every member state to cascade appropriate training and learning on FMD control to their public and private animal health services	1.1.1.1 Training infrastructure: staffing and technical resources																							
	1.1.1.2 Training infrastructure: online knowledge bank development (in co-operation with other training components)							P																	
	1.1.1.3 Open access areas of the EuFMD e-Learning website																								
	1.1.1.5 Develop knowledge transfer tools and job aids																								
	1.1.1.6 Support to in country training courses																								
	1.1.2 Implement demand driven training in response to MS priorities in areas of prevention, detection, and contingency planning for control operations and recovery	1.1.2.1 Training credits system	P W	P	P									P					P						
	1.1.2.2 Development of new training courses																								
	1.1.2.3 Delivery of training courses		TR		EL	TR EL	W S EL		W S	EL			EL		TR W S			EL	W S		EL	EL			
	1.1.2.4 Training focal points informed of training opportunities and feedback																								
	1.1.2.5. Regional approach		P	P	P	P	P		W S T R			W S T R	W S T R		W S T R			W S T R						W S T R	

EuFMD Phase IV

Report to the EuFMD Executive Period April 2018 - September 2018

Component 1.2 - Improved Contingency Planning



Pillar Manager: M. Hovari
Component Manager: G. Garner
Reporting: G. Garner / M. Hovari
Focal point Executive Ctte:

1-Objectives of component

The overall objective of this component is to improve contingency planning by Members and at European Level.

The activities (expected results) are:

1. System (networks) in place to assist contingency planning in every member state through providing technical support to the contingency planners and FMD modelling expert groups to improve the national capability on modelling, contingency planning, simulation exercises;
2. Improved system established for providing central resources for crisis situations including decision support tools (including disease spread and economic models), provision for diagnostic supplies, emergency access to national or regional vaccine banks, and sharing of critical human resources.

Activities	Indicators	Baseline Sept. 2017	Target years	Unit of measure	Current Status
1.2.1	Annual Participation in online meetings or webinars	300	300	Participation in online meetings or webinars	517
1.2.2	Number of published: Decisions Support Tools, discussion papers and guidelines that have been peer-reviewed	2	5	Published tools and guidance that has been peer-reviewed	4*

* Position paper on FMD vaccination issues; The AESOP (Assured Emergency Supply Options) paper; EuFMDiS v.1.3 and EuFMDiS user guide

2-Project team

Role	Name	Status
Pillar Manager	Mark Hovari	Contingency Planning Officer
Component manager	Graeme Garner	FMD Risk Management Support Officer
Training and networking support	Nadia Rumich	Network and Training Support Officer
Other EuFMD team members	Melissa McLaws	Risk analysis/Pragmatist tool
Advisors	Modelling and CP advisory groups	Volunteer representatives from the modelling and CP networks.
STC oversight:	Eoin Ryan	STC
ExCom oversight		

3-Countries or partner organizations involved

The direct beneficiaries of the work of component 1.2 are all of the EuFMD member states, and in particular modeling groups and contingency planners at academic and government institutions. Beyond EuFMD Member States, component 1.2 has sought to network with partners in other regions of the world actively involved in using modeling to inform contingency planning.

Consultation will occur with the **Food and Veterinary Office of the European Commission (FVO)** in order to ensure that the activities of component 1.2 are complementary to FVO activities on Contingency Planning. The FMD Economic Impact Calculator was developed through a Letter of Agreement with Prof. Jonathan Rushton and colleagues at the **Royal Veterinary College, London, UK**.

4-Progress Report

Output 1.2.1. System (networks) in place to assist contingency planning in every member state through providing technical support to the contingency planners and FMD modelling expert groups to improve the national capability on modelling, contingency planning, simulation exercises.

Activities

1.2.1.1 Contingency planning network

The contingency planning network currently counts 355 members.

Two new webinars were held in this period

- In March J. Arzt and C. Stenfeldt presented “Pigs and Foot and Mouth Disease”, focusing on two specific topics, one on comparing the clinical signs of Seneca Virus and FMD in pigs, and one on the implications of pigs not being carriers of FMD. The webinar has over 100 attendees.
- In April T.Alexandrov and M. Masiulis presented “Foot-and-Mouth Disease in Wildlife”.

All of the previous webinars can be accessed through the EuFMD e-learning website’s Contingency Planning Network page.

1.2.1.2 Modelling network:

The Modelling network is continuing to grow and engage members from Europe, North America, Australasia, and beyond. There are presently 344 members.

The webinar series is a popular platform for modellers working with FMD to present their work to the international community of modellers and contingency planners. In September 2017, Dr Graeme Garner took over the role of network coordinator from Melissa McLaws.

Since the 95th ExCom, three webinars, a main tool for learning and information sharing, were delivered:

- In February R. Mancy, P. Brock and R. Kao presented “Process-driven model construction in disease ecology and animal health: model types and uses”
- In March 2018 K. Moreno-Torres and A. Delgado presented “The impact of incubation-phase transmission of Foot-and-Mouth Disease in pigs: from individual infection dynamics to national preparedness”
- In May 2018 Z.Poljak presented “Network analysis and disease transmission: Porcine epidemic diarrhea outbreak in Canada”.

All records of the webinars are available on the EuFMD e-learning website under the Modelling Network tab.

1.2.1.3 Emergency Vaccination network:

The Vaccination Network currently has 248 members.

There were no new webinar held in this period. All past webinars are available on the EuFMD e-learning website under the Vaccination Network tab.

1.2.1.4 Development of guidelines:

In synergy with the European FMD spread model under Component 1.2, a series of guides have already been written that guide countries step-by-step in which data is needed to be extracted and provided in order to be used in the EuFMD-IS.

To meet the indicator 1.2.2, the following items have been completed or will be completed in this biennium

1. A Position paper on FMD vaccination issues was delivered in June 2016;
2. The AESOP (Assured Emergency Supply Options) paper was delivered in October 2017;
3. Emergency Vaccination Guideline will be finalized in 2018;
4. Crisis Communication Guideline will be finalized in 2018;
5. EuFMDiS v.1.3, a major decision support tool, will be delivered in 2018 along with its user guide.

1.2.1.5 European, multi-country animal disease spread model

Graeme Garner led this project to develop a European multi-country modelling capability, following endorsement of the project proposal to adapt the Australian FMD model (AADIS) for use in central Europe, by EuFMD's Executive Committee in October 2017.

The first workshop was held in Vienna, Austria on 5-7 December 2017, and focused on functionality, expected outputs and data requirements. This involved six pilot countries (Italy, Austria, Croatia, Hungary, Romania and Bulgaria). Slovenia subsequently joined the pilot project bringing the number of countries to seven, exceeding the performance benchmark of at least three countries. A licensing Deed between FAO and the Australian Department of Agriculture and Water Resources was finalized in July 2018 granting a royalty-free license for EuFMD to use and adapt the AADIS Model and create and use derivative works

Since the 95th ExCom meeting, work focused on software development and supporting the participating countries in data collection and analysis. The project has proceeded on schedule and delivered a working prototype of a European Disease Spread Model (EuFMDiS) by the scheduled date of 30 June 2018. A second workshop was held Budapest, Hungary, 10-13 July 2018. The objectives of this workshop were to:

- Install the modelling software and provide training for the seven pilot countries and other interested member states, in running the EuFMDiS model and using the outputs to support FMD planning;
- Hold an open day for interested parties;
- Discuss ongoing support and future development priorities.

There was good interest and engagement in the workshop by participants. EuFMDiS was successfully installed on most of the participants' computers and all countries provided with EuFMDiS User manuals in addition to hands-on training. Following testing and, in response to workshop comments, a number of program modifications will be made. These will be completed under the existing contract. A review of the country data supplied to parameterize the model identified missing data from several countries and several areas where countries considered it would be useful to revisit some of the initial values/data provided. Countries agreed to supply missing and/or updated data by September/autumn 2018.

Output 1.2.2. Improved system established for providing central resources for crisis situations including decision support tools (including disease spread and economic models), provision for diagnostic supplies, emergency access to national or regional vaccine banks, and sharing of critical human resources.

Activities

1.2.2.1 Economic impact calculator:

Under a Letter of Agreement (LoA), a prototype economic impact calculator was developed by a team at the Royal Veterinary College lead by J. Rushton, with a final report submitted at the end of June 2015. This calculator is intended to assist previously free countries to rapidly assess the impact of an FMD outbreak, as well as guide the selection of the most economically favorable strategy to control the outbreak. Wider socioeconomic impacts are also considered qualitatively.

Whilst the prototype calculator has been developed, the tool must still be validated and refined further to comments from users and simulations with data input. Integration with other decision support tools (e.g. disease spread models) should also be considered.

1.2.2.2 Support to development of diagnostic banks:

Interviews are conducted with Balkan Laboratory Network focal points to develop a concept note to establish a diagnostic bank in the region. The interviews are conducted by K. Krstevski (Balkan Laboratory Network Leader).

1.2.2.3 Support to emergency access to vaccine banks:

An Expressions of Interest (EoI) for eligible companies for a public tender to establish a Long-Term Agreement for the "Storage of concentrated antigens, formulation and supply of vaccines for foot-and-mouth disease for

FAO projects worldwide” was launched in 14 December 2017 and was closed on 15 January 2018. Responses were received from 10 companies.

Activity 1.2.2.4 Support to sharing critical human resources:

No activities have been carried out.

1.2.2.5 Other decision support tools

The EuFMDiS was developed and delivered to pilot countries.

1.2.2.6 Private Sector involvement in Emergency Preparedness and management

No activities have been carried out.

5-Issues for Executive Committee attention arising during implementation

The various discussion papers under 1.2.2 such as sharing critical human resources and private sector involvement in emergency preparedness and management were not addressed during this period. This is due to the focus of the component resources (CM and CS) toward the initial development of the EuFMDiS. Now with the closing of the EuFMDiS pilot project workload can shift back to the topics listed under 1.2.2.

The Contingency Planning (CP) and Vaccination networks are behind in delivery.

Successful completion of the pilot EuFMDiS project has raised the issue of maintain momentum and ensuring on-going user support for central European countries and other MS interested in using decision-support tools.

Key aspects to be considered include:

- User support and maintaining model updates;
- Updating parameters and maintaining data integrity;
- Building confidence and skills through a user forum.

One option could be to consider a regional modelling group/network to support FMD policy/planning with leadership to rotate between participating countries. This group could undertake projects and joint activities in response to priorities and issues identified by CVOs. While EuFMD can continue to support this area in the short-term, consideration will need to be given to longer term funding/support.

6-Priorities for the next six months

Outcome 1: System (networks) in place to assist contingency planning in every member state through providing technical support to the contingency planners and FMD modelling expert groups to improve the national capability on modelling, contingency planning, simulation exercises.

Activity 1.2.1.1 Contingency planning network:

The main focus is to start a new webinar series in line with the work of the GET Prepared Pathway focusing on preparedness and its related topics (planning, training and exercises). This will be in addition to the previous series where the focus was on response

Activity 1.2.1.2 Modelling network:

Further webinars planned for 2018 include:

- Mike Tildesley: Modelling FMD transmission in Kenya using results of transect studies;
- Graeme Garner: Building a multi-country FMD model for Europe – the EuFMDiS project.

Activity 1.2.1.3 Vaccination discussion network:

The main focus is to hold a webinar introducing the guidelines on developing an FMD emergency vaccination operational plan and explore other topics which could be covered under this network.

Activity 1.2.1.4 Development of guidelines:

- The work on the guidelines to develop an FMD emergency vaccination operational plan close to final.
- In synergy to the upcoming Crisis Management workshop under component 1.4 the guide on crisis communication will also be finalized in 2018;

1.2.1.5 European, multi-country animal disease spread model

Participants at the July workshop considered it important to keep the EuFMDiS regional modelling initiative active through a collaborative approach. This could be done by building a regional modelling group/network to support FMD policy/planning in central Europe, continuing to use the existing online project platform, and sharing experiences. EuFMD will facilitate the future contacts, organise online meetings and support follow-up activities.

Future developments could include adding additional countries, adaption of the model to other diseases and incorporation of a wildlife component. The 95th Executive Committee meeting identified incorporation of wildlife into the model as a priority area. A call has gone out under the Future Applied Research program. Several other European MS have expressed interest in using EuFMDiS in their countries.

Outcome 2: Improved system established for providing central resources for crisis situations including decision support tools (including disease spread and economic models), provision for diagnostic supplies, emergency access to national or regional vaccine banks, and sharing of critical human resources.

Activity 1.2.2.1 Economic impact calculator:

Search for new opportunities to receive feedback in the impact calculator.

Activity 1.2.2.2 Support to development of diagnostic banks:

Drafting a concept note to establish a diagnostic bank in the Balkans.

Activity 1.2.2.3 Support to emergency access to vaccine banks:

Continuing work on the AESOP.

Activity 1.2.2.4 Support to sharing critical human resources:

Continuing work on development on sharing critical human resources is needed.

1.2.2.5 Other decision support tools

Continuing work on decision support tools is needed.

1.2.2.6 Private Sector involvement in Emergency Preparedness and management

Continuing work on Private Sector involvement in Emergency Preparedness and management is needed.

7 - Success stories and future emphasis

Improving readiness to manage an FMD outbreak is a priority of the EuFMD program and improving the use of decision-support tools has been a focus of EuFMD training. At the 41st General Session, *Continuing support to animal movement and disease spread modelling, with the outputs to inform contingency planning activities* was identified as a priority for the Standing Technical Committee (STC), to be supported through the allied components of the workplan. Following discussions, a project proposal to adapt the Australian FMD model

When asked how what they had learned in the course would be practically implemented one respondent replied “1- Already, the developed vaccine tender (week 1) has been submitted to the Veterinary Authority and it, likely, produced a difference. 2- Perhaps, organizing a workshop to the lab. staff. 3- Develop a vaccine effectiveness study in Sudan 4- Improve our RBSP “. Participant’s suggestions for improvements included opening parts of the course to wider audiences, increasing the amount of material on field vaccine effectiveness and the need for further support in the design and evaluation of serological studies.



The e-learning was followed by regional workshops on Post Vaccination Monitoring which are reported under the other Pillar II components. The combination of the e-learning and the face-to-face workshops is a particularly effective one and should be replicated again if possible.

Course rating survey

2-FMD Investigation Training Course in Turkish

(See also component 2.1)

This course was conducted in April 2018, working in collaboration with GDFC in Turkey. This was the second time the Turkish language version of the course has been delivered.

The nominated participants were 150 veterinarians from Turkey and 12 Turkish speaking veterinarians from Azerbaijan.

The learning objectives of the course were that after studying the course participants would be able to:

1. recognise the clinical signs of foot-and-mouth disease in cattle, pigs and small ruminants and conduct a clinical examination of suspected animals;
2. age foot-and mouth disease lesions and understand the epidemiological and diagnostic importance of lesion ageing;
3. take appropriate samples for laboratory diagnosis and describe the diagnostic tools available for the detection of foot-and-mouth disease;
4. construct a timeline to carry out source and spread tracing and identify dangerous contacts, being able to prioritise them;
5. identify risk factors for local disease spread;
6. describe the risks of foot-and-mouth virus spread associated to veterinary personnel and relate the characteristics of the virus with appropriate biosecurity strategies;
7. effectively use personal protective equipment (PPE) and establish an effective cleaning and disinfection protocol for visiting foot-and-mouth disease suspected premises;
8. explain the key features of foot-and-mouth disease vaccines and the basic concepts related to vaccine programme implementation and monitoring;
9. describe the different epidemiological settings that determine the objective of a foot-and-mouth disease vaccination programme and outline different vaccination strategies;
10. explain the key features of the Progressive Control Pathway.

9-Gantt charts - Planned activities

OUTPUT 1.2 Improved contingency planning by Members and at European level		YEAR 1													YEAR 2												
Target (Expected Result)	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S		
1.2.1 Provide technical support to maintain and strengthen three networks of contingency planners and FMD modeling expert groups to improve the national capability on modelling, contingency planning, simulation exercises	1.2.1.1 CP network						WEB	WEB					WEB	WEB			WEB	WEB	WEB	WEB	WEB	WEB					
	1.2.1.2 Modelling network	WEB		WEB		WEB	WEB		WEB								WEB	WEB			WEB	WEB					
	1.2.1.3 Emergency vaccination network															WEB	WEB	WEB									
	1.2.1.4 Dev. of guidelines	GTP								GTP		GTP										GTP					
	1.2.1.5 EU, multi-country animal disease spread model	OM	OM	WS	OM	OM							WS														
1.2.2 Develop the system of support to contingency planners for crisis situations including decision support tools (including disease spread and economic models), system for provision for diagnostic supplies, emergency access to national or regional vaccine banks, and sharing of critical human resources	1.2.2.1 Economic impact calculator													GTP													
	1.2.2.2 Support to dev. of diagnostic banks																							GTP			
	1.2.2.3 Support to emergency access to vaccine banks													GTP													
	1.2.2.4 Support to sharing critical HR													GTP													
	1.2.2.5 Other decision support tools													GTP													
	1.2.2.6 Priv. Sector invlvm in Emergency Prep & mgt																							GTP			

EuFMD Phase IV

Report to the EuFMD Executive

April 2018 - September 2018

Component 1.3 - Thrace

Pillar Manager: M. Hovari
Component Manager: P. Motta / D. Donachie
Reporting: M. Hovari / G. Garner
Focal point Executive Ctte:

1. Objective of the component

The **Objective of this component** is improved surveillance and management of FMD and other exotic diseases in the Thrace region of Greece, Bulgaria and Turkey.

The **activities (expected results)** are:

1. Maintenance of FMD freedom in Thrace region, and confidence at all times in this status on the basis of co-ordinated surveillance, and maintenance of confidence in capacity for early detection of FMD and containment if incursions were to occur.
2. Maintenance and improvement of a system for real-time data entry to support management of national surveillance activities aimed at maintaining disease freedom confidence;
3. Achievement of four years of risk-based surveillance results through activities implemented in each country for FMD (and other diseases as decided by Coordination Framework); in 2015-17 with the expected result of providing evidence for freedom from FMD, PPR and LSD in European Turkey and the neighbouring countries;
4. Improvement of capacity to respond to exotic disease incursions into the common border region, through participation in joint exercises and development of harmonised levels of contingency planning.

Activities	Indicators	Baseline: Sept.2017	Target 2 years	Unit of measure	Current Status
1.3.1	Tripartite Management Meetings held	5	9	Tripartite Management Meetings held involving staff of the three countries	7*
1.3.2	Maintain the data entry system with data entry meeting agreed targets	>75%	75%	Percentage of reports entered by field operatives within expected time frame	>75%
1.3.3	The level of confidence in FMD disease freedom in Thrace region is higher than if activities stopped	> 90%	90%	Confidence in disease freedom	>90%
1.3.4	Joint exercises	2	3	Joint exercises of the three countries	2**

*Management Meetings: 13 November 2015, Alexandroupoulos, Greece; 18 October 2016, Alexandroupoulos, Greece; 27 February 2017, Sofia, Bulgaria; 08 September 2017, Athens, Greece; 27 July 2018, Istanbul, Turkey
Tripartite: 27 February 2017, Sofia, Bulgaria; 12, October 2017, Backweston, Ireland

**Simulation Exercise Workshop in Sofia February 2017; Erzurum Training July 2017.

2 - Project team

Role	Name	Status
Pillar Manager	Mark Hovari	Contingency Planning Officer
Component manager	Paolo Motta (until June 2018) Daniel Donachie (from July 2018)	Short Term Professional
National focal points	Tsviatko Alexandrov (BG) Ilektra Fragko (GR) Naci Bulut (TR)	Consultant, SCRPD member Veterinary Services Consultant
Greece	Aris Exakoidis (Field) Christina Fouki (Lab) Alexandra Miteva (Field) Georgi Georgiev (Field)	PSAs and Consultants
Bulgaria	Stoyan Moldovanov (Field)	
Turkey	Abdulnaci Bulut (Lab)	
ExCom oversight	-	-

3 - Countries or partner organizations involved

EuFMD member states: Bulgaria, Greece, Turkey.

4 - Progress Report

Output 1.3.1. Maintain the co-ordination framework for surveillance for FMD freedom in Thrace on the basis of coordinated surveillance, and maintenance of confidence in capacity for early detection of FMD and containment if incursions were to occur.

1.3.1.1. Co-ordination framework between veterinary services and laboratories of the three countries maintained and improved through tripartite, management, and technical meetings

A Management Meeting was held in Istanbul, Turkey, on 27 July 2018. The meeting focused on the current PPR outbreak reported by Bulgaria and looking at the changes of risk due to the upcoming Kurban festival (20 – 24 August). The meeting was attended by EuFMD, National Focal Points (NFPs) of Bulgaria and Turkey and one representative from Greece.

1.3.1.2. Regular assessment of FMD risk present in Thrace, and of preventive and control measures implemented in the area

The FMD risk is regularly assessed with the review of the ongoing surveillance and control measures in the region through the communication of changes affecting the programs defining these measures. Regularly, during the Management meetings Greece, Bulgaria and Turkey directly report on their respective FMD situations. The updated situations on the activities and outcomes, within the framework of FMD surveillance, as well as of other transboundary diseases (TADs), is presented and openly discussed. If risks are identified for the incursion of FMD and other TADs in Thrace these are also jointly addressed and actions discussed.

1.3.1.3. Continuation of system for regular active and passive surveillance of presence and absence of FMD and other TADs

There are currently five national consultants/PSAs implementing the activities for the surveillance programme in the Thrace region. Campaigns of awareness and communication for the risk of FMD and other TADs were targeted at farmers, aiming to promote their involvement in reporting presence or absence of infectious diseases including FMD.

Output 1.3.2. Maintain and improve a system for real-time data entry to support management of national surveillance activities aimed at maintaining DF confidence.

1.3.2.1 System for real-time data entry maintained

The current online Database through the Google Fusion Tables platform is free of charge and enables sharing online surveillance data from the region. This software automatically provides visualization of geographical locations of the epidemiological units (farms or villages). It also allows to create “heat maps” showing density of population of susceptible animals by species as well as of epi units visited more frequently. The software allows to include data on other Transboundary animal diseases (TADs) (LSD, PPR, and SGP) providing the opportunity for future applications and modeling for confidence of freedom for these diseases.

The national consultants regularly provided surveillance data on FMD, LSD, SGP, and PPR in all three countries. The data are regularly entered into the database in all the countries. This system is now standardized and only minor discrepancies are sometimes identified between the direct reporting from the consultants and the data

uploaded on the database. Although these do not affect the outputs of the modeling and the confidence in FMD freedom, these discrepancies, and any other issue relating to the real-time data entry system, are regularly communicated and discussed during the Management meetings.

Output 1.3.3. Implement activities in each country for FMD risk-based surveillance (and other diseases as decided by Coordination Framework); in 2017-19 with the expected result of providing evidence for freedom from FMD, PPR and LSD in European Turkey and the neighbouring countries

1.3.3.1 Regular analysis of the active surveillance carried out for FMD and other TADs and reports of such activities shared between countries and institutions

The confidence in FMD freedom in the Thrace region was constantly above 95% for both the 1st cycle of 2018. The data on clinical and laboratory surveillance for the SGP and PPR were also provided. The cycle reports have been sent to the NFP for approval and were discussed at the Management Meeting in July. During the PPR outbreak in Bulgaria, regular contact was maintained with the three countries. Bulgaria provided an update on a weekly basis, while Turkey has shared their surveillance and control measures due to the outbreak. Greece was made aware of the situation and filed consultant was contacted to further increase vigilance in the areas bordering Bulgaria and Greece.

1.3.3.2 Provision of evidence on effectiveness of FMD and other TADs vaccination (if relevant) in the Thrace region, building on the outcomes of 2015-2017

The FMD post-vaccination immunity study carried out in Turkish Thrace in 2017 requires a follow-up in 2018 to validate the previous results and provide solid evidence of the immunity currently provided in the field.

1.3.3.3 Assessing and improving regular farmer reporting (passive surveillance) for FMD and other TADs in the Thrace region

A training workshop has been designed and developed by EuFMD (**1st Disease Reporting Training of the EuFMD: How to evaluate FMD reporting in Thrace?**), and was carried out in Svilengrad, Bulgaria on the 13-16 March 2018. The aims of the workshop were to review the current disease reporting systems in the Thrace region, identifying major gaps and barriers in the system, and simultaneously provide training for official veterinarians from the three countries, and operating in the region, in conducting formal assessments of the disease reporting systems to inform future interventions.

The training activities included:

- A pre-workshop expert elicitation exercise on the effectiveness of the disease reporting system was conducted with central veterinary administrations (repeated with field veterinary officers at the workshop)
- Face-to-face training focused on principles of surveillance for early detection and characterization of the reporting system in terms of linked events (components) using decision/scenario trees.
- Questionnaire surveys of livestock owners.

1.3.3.4 Activities to improve farmer reporting in the Thrace region

The workshop conducted in Bulgaria in March 2018 has provided an initial baseline assessment of the status of disease reporting in the region.

Both the central administration and the local veterinary authorities reported similar levels of effectiveness (around 40-50% that a single infected farm would be notified) and identified disease and reporting awareness as key issues in the disease reporting system. Disease awareness was the key weakness identified by central administration in Bulgaria and Greece, and in the latter country it was coupled with the correct implementation of investigations following reporting of a suspicion. Conversely, in these two countries the local officials

highlighted that farmer reporting of a suspicion was the key concern from their perspective, nevertheless, this outcome varied between livestock production systems. In Turkey, disease awareness was identified as the key weakness in the disease reporting system by field veterinarians, particularly among backyard and small producers, while the central authorities did not report any particular weakness in the current reporting system. These findings were confirmed through the survey of Bulgarian livestock owners

Although the number of livestock owners surveyed for the field survey was small and biased by convenience sampling, the awareness of foot and mouth disease (FMD) and of disease reporting procedures were identified as priorities for improvements.

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

1.3.4.1 Regular support for laboratory (reagents and trainings) on FMD and other TADs.

The procurement of diagnostic and sampling materials is managed regularly between NFPs and EuFMD. The diagnostic kits are currently procured centrally by EuFMD in coordination with the NFPs and national PSAs. The field and laboratory consumables are, conversely, being directly procured within each country by the national PSAs.

New kits were procured by EuFMD for Greece over summer 2018.

1.3.4.2. Organization of joint trainings and/or exercises to improve and assess the emergency preparedness in Thrace region and strengthen the coordination between countries in case of an emergency

Further with the NTFs is needed to define the aim and objective of the next joint exercise.

5 - Issues for Executive Committee attention arising during implementation

Currently, by maintaining the current active surveillance activities for FMD, PPR and SGP in the THRACE region, the project can fulfill its initially set objectives with the current budget available.

6 - Priorities for the next six months

Outcome 1.3.1:

1.3.1.1 To organize and hold the next Tripartite meeting.

1.3.1.2 To continue the on-going co-operation and updating on the FMD situation in Thrace (including preventive and control measures and information of the passive surveillance in the countries).

Outcome 1.3.2:

1.3.2.1 To continue use the online platform, develop and implement system of backups, and improve the Operational Manual if needed. Explore possibilities for improving data management and spatial visualizations.

Outcome 1.3.3:

1.3.3.1 To produce and circulate on quarterly basis the relevant cycle reports for 2018 using data regularly uploaded in the online platform.

1.3.3.2 Implement a new study on post vaccination serology s in 2018 to validate the previous results, and the design and implementation of a study on vaccine effectiveness in Turkish Anatolia, outside the Trace region.

- 1.3.3.3 Follow-up the findings from the 1st Disease Reporting Training of the EuFMD in March 2018 (Bulgaria), with the National Focal Points and support upcoming initiatives.
- 1.3.3.4 Draw up a concept note for a joint simulation exercise for the region.

Outcome 1.3.4:

- 1.3.4.1 To continue to procure necessary laboratory and field material and consumables for the surveillance activities according to the direct procurement started in June 2017. Laboratory diagnostics are continuing to be procured by EuFMD in coordination with the NFPs.
- 1.3.4.2 Follow the FMD wildlife leaflet translations in the three countries. Based on the outcomes of the 1st Disease Reporting Training of the EuFMD in March 2018 assess if joint simulation exercise for the three countries would be beneficial to support outcomes 1.3.3.3 and 1.3.4, if support from the countries and funds are available.

7 - Success stories and future emphasis

The EuFMD Workplan 2017-19 for Component 1.3 THRACE was presented and discussed to identify priorities and key activities. One key highlight focused on providing evidence on the level of passive surveillance in the region. Following these recommendations, the 1st Disease Reporting Training of the EuFMD was held in Bulgaria 13-16 March 2018. This training workshop was well-received by participants. Key outcomes increased knowledge of methods for reviewing disease reporting systems and improved skills for conducting field surveys to investigate and evaluate livestock owner disease reporting by the participants. In all the three countries awareness of disease and of reporting procedures varied between livestock production systems. Awareness of both disease and reporting procedures was consistently lower among commercial small ruminant farms (in Greece and Bulgaria), small-scale commercial pig and backyard herd farms (Greece), large commercial beef herds (Bulgaria) and backyard herd farms (Turkey). Targeted communication campaigns should be designed and conducted particularly for these categories of livestock owners.

8 - Budget (€)

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
377,000	119,919	63,500	49%	193,581

EuFMD Phase IV
Report to the EuFMD Executive
Period April 2018 – September 2018
Component 1.4 - Balkans



Pillar Manager: M.Hovari

Component Manager: D.Donachie

Reporting: M. Hovari

Focal point Executive Ctte:

1. Objective of the component

The objective of component is to improve emergency management capacity for FMD in the Balkan region.

The targets (expected results) are:

1. Confidence in the coordination framework for western Balkan countries as a tool to ensure the continuous development, testing and improvement of national emergency management plans, and to ensure sufficient FMD laboratory capacity for crises;
2. Contingency plans for FMD agreed at national level and tested through at least one exercise. Contingency plans comply with EU legislation;
3. Integration of national FMD reference centers (laboratories) in the national CPs and establishment of a system of immediate regional diagnostic support for an FMD crisis.

Activities	Indicators	Baseline: Sept 2017	Target 2 years	Unit of measure	Current Status
1.4.1	Management and High Level Policy Meetings held compared to if project was not supported.	0	3	Number of meetings	2*
1.4.2	Number of countries having a national or multi-country FMD simulation exercise	4	7	Number of countries having a national FMD exercise	4**
1.4.3	Participation in Balkan region proficiency test exercises	6	8	Number of National participations in exercises in 24 months	8***

* On-line management meeting, October 2017, Small management meeting, Ohrid, F.Y.R. of Macedonia 17-19 April 2018

**On-line Greek national SimEx, July 2017

*** PTS 2017: Croatia, Bulgaria, Romania, Albania, F.Y.R Macedonia, Serbia, Kosovo and Moldova

2. Project team

Role	Name	Status
Pillar Manager	Mark Hovari	Contingency Planning Officer
Component manager	Daniel Donachie (start July 2018)	Short Term Placement
National focal points:		
Albania	-	
Bosnia and Herzegovina	Zorana Mehmedbasic	Head of Dept for Animal Health & Welfare
F.Y.R of Macedonia	Biljana Strojmanovska	
Kosovo	Bafti Murati	
Montenegro	Mevlida Hrapovic	
Serbia	Budimir Plavsic	Head of Animal Health Dept
Bulgaria	Tsviatko Alexandrov	Member SCRD, Head of Animal Health
Romania	Ioana Alexandra Neghirla	Head,AHCD Service Nat. Sanitary Vet &FSA
Croatia	Martina Rubin	
Moldova	Maxim Sirbu	
Ukraine	-	
Greece	Chrysoula Dile	
Turkey	Abdulnaci Bulut	
Laboratory network coord.	Kiril Krstevski (from June 2018)	Junior STP

3. Countries or partner organizations involved

- EuFMD member states directly involved: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Serbia, FYR of Macedonia and Romania;
- Non EuFMD member states directly involved: Kosovo, Montenegro, Moldova and Ukraine (as per 42nd EuFMD General Session);
- Greece and Turkey are beneficiaries and supported under Component 1.3 THRACE.

4-Progress Report

New component manager Daniel Donachie has started his appointment in July 2018.

New jSTP and leader of the Balkan Laboratory Network Kiril Krstevski started his assignment in June 2018.

Output 1.4.1. Confidence in the coordination framework for western Balkan countries as a tool to ensure the continuous development, testing and improvement of national emergency management plans, and to ensure sufficient FMD laboratory capacity for crises.

Activities

1.4.1.1 System of mutual assistance and coordination between countries implemented (networking – diagnostic support – expertise)

Work on drafting a Statement of Intentions (Sol) which aims to establish a cooperation in the Balkan region and beyond for increased emergency management capacities through knowledge exchange and mutual resource sharing for Foot and Mouth Disease and other priority TADs was started, but it is not ready to be circulated.

1.4.1.2. Co-ordination framework between veterinary services of the region maintained and improved through high level policy and management meetings

The EuFMD Workshop on “Risk Assessment and GET Prepared Pathway” was held in Ohrid, F.Y.R. of Macedonia – 17-19 April 2018 acted as a short management meeting for the Balkans.

1.4.2. Contingency plans for FMD agreed at national level and tested through at least one exercise. Contingency plans comply with EU legislation.

Activities

1.4.2.1 Workshops/trainings held to address specific themes of emergency management

A EuFMD Workshop on “Risk Assessment and GET Prepared Pathway” was held in Ohrid, F.Y.R. of Macedonia – 17-19 April 2018. During this workshop the principles of the Get prepared pathway were delivered and the first step in the assessment step was done. Follow up with the three pilot countries is ongoing, to set dates for upcoming national simulation exercises.

1.4.2.2 GET Prepared and simulation exercises

The concept note was finalized, presentation and handouts were drafted for the workshop in Ohrid. Also the concept and outcome were shared with FAO EMC-AH.

1.4.2.3. Veterinary Services and veterinary Faculty partnerships

Kiril Krstevski, from Ss. Cyril and Methodius University in Skopje Faculty of Veterinary Medicine, Skopje, was recruited and started home based work in June 2018 and will join the team in HQ in September 2018. His tasks will focus on output 1.4.3, and to support the component manager.

Output 1.4.3 Integration of national FMD reference centers (laboratories) in the national CPs and establishment of a system of immediate regional diagnostic support for an FMD crisis.

Kiril Krstevski is contacting NRL focal points to encourage them to take part in the PTS 2018. Furthermore, discussions are held on what kind of laboratory activity would be the most beneficial for the Balkan Laboratory Network.

5-Issues for Executive Committee attention arising during implementation

The delivery of the component, especially activity 1.4.2 – national simulation exercises - is significantly behind, therefore most attention should be given to this.

The current financial and human resources make swift progress a realistic goal.

6-Priorities for the next six months

Outcome 1.4.1: Confidence in the coordination framework for western Balkan countries as a tool to ensure the continuous development, testing and improvement of national emergency management plans, and to ensure sufficient FMD laboratory capacity for crises

- Maintain contact with the National Focal Points (NFPs);
- Finalize the Sol (statement of intentions) and organize a management meeting for NFPs, by January 2019;
- Organize a management meeting by January 2019;
- If possible conduct an in country mission to Albania or Kosovo to gain a better understanding in their emergency preparedness and laboratory capacity.

Outcome 1.4.2: Contingency plans for FMD agreed at national level and tested through at least one exercise. Contingency plans comply with EU legislation.

- Organize national simulation exercises in Bulgaria, Serbia and F.Y.R of Macedonia, with a focus on drills and desktop. Outcomes should feed development on the GET prepared pathway and the lessons learnt shall be presented in a management meeting
- Review existing EuFMD materials and explore use for undergraduate studies in the Western Balkan region.

Outcome 1.4.3: Integration of national FMD reference centers (laboratories) in the national CPs and establishment of a system of immediate regional diagnostic support for an FMD crisis

- Follow up with the outcome of the 2018 PTS and encourage NRLs to participate;
- Based on a concept note in agreement with the Balkan Laboratory Network, organize a laboratory activity by January 2019.

7 - Success stories and future emphasis

The emphasis of the component, until the end of the phase IV will be to deliver the GET Prepared pathway to the three pilot countries and disseminate the experience to the other member states in this component.

8. Budget (€)

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
202,110	28,999	26,300	27%	146,811

9-Gantt charts - Planned activities

1.4 Balkans	OUTPUT: Increased confidence in the national capacities of countries in the Balkan region to manage at national and subregional level an FMD emergency		YEAR 1												YEAR 2											
	Target (Expected Result)	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
1.4.1 Activities to maintain and improve the coordination framework for western Balkan countries as a tool to ensure the continuous development, testing & improvement of nat. emergency mgt. plans and to ensure sufficient FMD laboratory capacity for crises	1.4.1.1 System of mutual assistance and coordination between countries implemented (networking – diagnostic support – expertise)		P	P	P	P	P	P																		
	1.4.1.2. Co-ordination framework between veterinary services of the region maintained and improved through high level policy and management meetings		O	M						M	M		M							M					M	
1.4.2 Improve quality and completeness of Contingency plans for FMD agreed at national level and test these through at least one exercise	1.4.2.1 Workshops/trainings held to address specific themes of emergency management								W	S																
	1.4.2.2 GET Prepared and simulation exercises																									
	1.4.2.3. Veterinary Services and veterinary Faculty partnerships																									
1.4.3 Activities to improve preparedness of national FMD reference centers (laboratories) and establishment of a system immediate regional diagnostic support for an FMD crisis	1.4.3.1 Procurement of lab reagents/kits to support a minimum diagnostic capacity and enable participation in PTS																									
	1.4.3.2 Lab training w/s within Balkans through inter-lab partnership																									

EuFMD Phase IV Report to the EuFMD Executive

Component 1.5 – FAR: Fund for Applied Research

April 2018- September 2018



Pillar Manager: M.Hovari
Component Manager: P.Motta
Reporting: K. Sumption / P.Motta
Focal points, ExCttee: C. Bruschke
Standing Technical Committee: E.Ryan

1-Objective of component

Guidance of EC institutions involved in decisions on Research Funding. This includes support for research projects which have been endorsed by the EuFMD STC as being a benefit of the EuFMD objectives: activities to translate research into tools, actions or activities which are of benefit to EuFMD activities: and actions to integrate research outcomes with policy.

Summary

In 2017, the EuFMD, issued three Calls for small applied research projects, of which one in the semester between October 2017 and March 2018. These Calls are relevant to technical issues seen as priorities of the EuFMD member states under the specific Research fund (Fund for Applied Research - EuFMD-FAR) adopted as a component (1.5) of the EC funded Workplan of the Commission:

- I. *4th EuFMD-FAR in February 2017*: twelve (12) project proposals were in-line with the priorities of the call and submitted for review, four (4) were selected for funding.
- II. *5th EuFMD-FAR in July 2017*: three (3) project proposals were selected as in-line with the priorities of the call and submitted for review, one (1) were selected for funding.
- III. *6th EuFMD-FAR in December 2017*: one (1) project proposals were selected as in-line with the priorities of the call and submitted for review, one (1) were selected for funding.

2-Project team

Role	Name	Status
Pillar Manager	M.Hovari	Contingency Planning Officer
Component manager	P. Motta	Secretariat
Standing Technical Committee	E. Ryan, Chairman	
Special Committee for Research:	18 persons acting as experts for the first round technical reviews reviewers	
Focal Point Executive Cttee	C. Bruschke	

3-Countries or partner organizations involved

The STC and SCRPD Committees are the main partners involved.

4-Progress Report

I. 4th EuFMD-FAR (issued February 2017)

1) European multi-country FMD Spread model (EuFMDis) - Project Lead Applicant: Dr Graeme Garner

Signed: 18 October 2017/Duration: 18 months

Overview of project:

This proposal aimed at modifying and developing the Australian Animal Disease model (AADIS) as a training tool to support FMD planning and response, for use by European Union Member States to improve the capability of evaluating vaccination policy, resource management, post outbreak surveillance and management of vaccinated populations. Software modifications and updates are required to adapt the AADIS model to simulate FMD spread and control in European context. The EuFMD, the AADIS team and interested Central European EU States are working together to incorporate representative input data (e.g. livestock populations, farm types and distributions, weather data and animal movement data) to parameterize FMD spread and control.

Overall cost: € 48 600.00 (*although the project proposal has been received though a FAR Call the funds are mobilized under Component 1.2.5).

Status update:

The project has received a very positive response from seven countries (Austria, Bulgaria, Croatia, Italy, Hungary, Romania and Slovenia). An initial workshop to get the project underway was held on 5-7 December 2017, in Vienna, Austria, to bring the participating countries together to discuss the scope of a multi-country European disease spread model, and to identify the country-specific data required and agree on project time frames, and deliverables. A dedicated e-learning page was developed, for project partners, to provide a discussion forum and a depository to share resources. On-line meetings are held at regular intervals to share progress and to discuss upcoming milestone or relevant issues.

The project is on-track to deliver a working model that will simulate spread and control of FMD within and between the participating central European countries by 30 June 2018.

An interim report was submitted on July 2018 and the second funding instalment released.

Issues/delays: none

2) Validating the use of bulk tank milk for surveillance of FMD among commercial dairy farms in endemic settings - Project Lead Applicant: Dr Nicholas Lyons, The Pirbright Institute

LoA Signed: 20 July 2017/Duration: 12 months

Overview of project:

This proposal aimed at evaluating the use of bulk-milk as a prospective, integrated surveillance tool for infection among large-scale commercial farms in the endemic settings of Iran and Kenya. In Iran, in collaboration with the Iranian Veterinary Services (IVO), samples and information are being collected from 20 dairy farms in an animal complex in the Tehran Province (samples collected every 2 weeks for 6 months, followed by NSP-testing of young stock at the end of the 6 month period). Samples, in duplicate, will be tested for tested by rRT-PCR, NSP ELISA and VNT (if sufficient RNA sequence analysis will be performed) at The Pirbright Institute (UK) and the FMD laboratory in Tehran. The observations in the milk will be correlated to reports on clinical disease and the NSP seropositivity at the herd level. In Kenya samples have been collected from 5 dairy co-operatives and one large scale dairy farm

(collection ended November 2017). Samples are shipped to The Pirbright Institute (TPI) (UK) and will be coupled with data on the incidence of clinical disease and the levels of virus detected in the pooled milk.

Overall cost: € 48 881.00

Status update:

Iran: a mission to Iran by researchers at TPI in coordination with collaborators within the Iranian Veterinary Organization (IVO) and the Central Veterinary Laboratory (CVL) was undertaken in October 2017. During the mission the study site was visited, and the study design developed based on discussion with farmers, complex managers and staff at IVO. The capacity of the CVL in performing diagnostic tests was assessed and training requirements identified. The sampling is started in mid-February and the first sample shipment is scheduled in mid-May and the final at the end of the project.

Kenya: milk samples have been collected (by November 2017) and the duplicates shipped to TPI in December 2017. A training session was held in Embakasi FMD laboratory, Nairobi, (27-29th September 2017) for the detection of FMD viral genome from pooled milk samples using the pan serotypic rRT-PCR from pooled milk samples.

An interim report was submitted on February 2018 and the second funding instalment released. Final reports are due by September 2018.

Issues: Any issues with the project development are highlighted. Minor technical issues at the Embakasi laboratory were identified during the mission in September 2017 (e.g. cross-contamination issues).

- 3) *Evaluation in field conditions of a safe and cost-effective protocol for shipment of samples from Foot-and-Mouth Disease suspected cases for laboratory diagnostic (FIELD EVAL INACT)* – Dr Sandra Blaise-Boisseau, French Agency for Food, Environmental and Occupational Health & Safety (ANSES)

LoA Signed: 18 October 2017/Duration: 18 months

Overview of project:

The aim of this project is to evaluate/validate, in real situation under field conditions, the performance and safety of a protocol for improving the cost-effectiveness of FMD samples shipment, based on the inactivation of FMDV on the Lateral Flow Device (LFD). Samples are currently being collected on the field using LFDs in Turkey, Nigeria and Pakistan. LFDs will be processed for viral isolation in national laboratory (NVRI in Nigeria, SAP in Turkey and UM in Pakistan) and submitted to the French Agency for Food, Environmental and Occupational Health & Safety (ANSES), for viral isolation, genome detection, typing and virus rescue after transfection. Test of FMDV detection protocol from inactivated LFDs will be carried out by Merial. In addition, the impact of temperature and storage conditions of the inactivated LFD on the FMDV detection ability will also be tested (ANSES).

Overall cost: € 75 940.00

Status update:

The collection of epithelium and/or vesicular fluid samples from clinical cases (at least 20 samples) is currently being carried out by the national partners in Nigeria, Turkey and Pakistan under the supervision of the leading Institutions (ANSES). The field study started in December 2017 and is due to end in June 2018.

An interim report was submitted on June 2018 and the second funding instalment released. Final reports are due by November 2018.

Issues: No issues were reported with the implementation and development of the project at this stage.

- 4) Validating multiplex real-time RT-PCR as a tool for FMD detection in bulk tank milk (Acronym: Tank Milk Multiplex) – Dr. Michael Eschbaumer, The Friedrich-Loeffler Institut (FLI)

LoA Signed: 26 January 2018/Duration: 6 months

Overview of project:

This project is aiming at providing a proof of concept by developing a tool for milk screening, testing the application of multiplex RT-PCR for foot and mouth disease virus (FMDV) for the viral detection in bulk-milk sample. The 1st stage of the project consist of a laboratory validation of modified multiplex RT-qPCR assay with spiked milk obtained from a commercial source in Germany. Batches of milk will be spiked with defined amounts of culture-grown field strains of FMDV covering a range of serotypes and epidemiological pools. The 2nd stage of the project will aim at evaluating the performance of multiplex RT-qPCR with field samples from an endemic region. Milk samples from endemic countries will be sourced from an external provider (The Pirbright Institute).

Overall cost: € 23 715.23

Status update:

The project started at the end of January 2018.

An interim report was submitted end of May 2018 and the second funding instalment released. The final report was submitted end of July 2018.

Issues: the delay in the signature (about 2 months) was related to minor administrative issues between FLI and the FAO but did not have major impacts on the overall project schedule.

- 5) Alternative vaccine selection techniques – Dr. Anna Ludi, The World Reference Laboratory for FMD (WRLFMD), The Pirbright Institute

LoA signed: 14 May 2018/Duration: 12 months

Overview of project: The project will test and validate improved methods to evaluate the quality of vaccine-induced antibodies and transfer the technology for the test on panels of post-vaccination sera from previously conducted challenge studies. More straightforward protocols for purifying antigens to simplify later technology transfer work to other laboratories will also be developed. **Overall cost:** € 46 834

Status update:

The project started May 2018. An interim report will be submitted by the WRLFMD detailing activities implemented and results achieved and will be presented at the EuFMD Open Session in October 2018.

Issues/delays: none.

II. 5th EuFMD-FAR (issued July 2017)

- 1) FMD RiskmapS (FMD Risk map surveillance system): Development of a FMD surveillance program on risk information and mapping tools for southern European neighbourhood, integrating movement patterns of domestic livestock - Project Lead Applicant: Dr Thierry Lefrancois, French Agricultural Research Centre for International Development (CIRAD),

Signed*: by the end of February 2018/Duration: 18 months.

Overview of project:

The main goal of this project is to reinforce national capacities and to assist the veterinary services of countries in North and West Africa to prevent the introduction and spread of transboundary animal diseases (TADs) and to detect new outbreaks with risk-based surveillance systems. As part of the project, these activities are planned to be potentially extended to European neighborhood South countries (Egypt, Libya and Sudan) in 2019, to promote a regional approach. An innovative method combining qualitative risk analysis with its geographical representation will be applied to disease risk mapping of TADs, integrating domestic livestock movements to better identify high risk areas, and provide decision makers with indicators to target surveillance and control actions

The method propose to improve the capacity to identify risks and risk areas for TADs and progressively train the national veterinary services for collecting, handling, analyzing and mapping livestock flows to identify the associated risks. A special attention is dedicated to information technology for data collection in the field as well as, tools for handling geospatial information, data visualization and risk assessment. A specific emphasis is given to the production of maps, as an essential tool for scientific communication between animal health stakeholders.

The services that will be provided include, the analysis of information collected by countries on market prices, animal movements between countries, the development of a specific web platform, and the assistance in the design of risk based surveillance system in high risk areas, particularly of Morocco, Algeria and Tunisia to improve confidence to detect FMD incursion at an early stage. Additionally, the SP will adapt the EuFMD training material according to the context of the beneficiary countries of North, Central and West Africa and deliver the EuFMD e-learning course on FMD socio-economic impact assessment. Finally, the SP will review the FMD vaccine-uptake potential and other FMD control options over the next 20 years in West and Central Africa.

Overall cost: € 168 000.00

Status update:

The first activity under this project will be a workshop that will take place in Tunis (Tunisia) (27 February- 1 March 2018) on surveillance for early detection and confidence of freedom in Algeria, Morocco and Tunisia ("*Fièvre aphteuse, la détection précoce et la confiance en l'absence de circulation virale : Algérie, Maroc et Tunisie*").

An interim report is due by February 2019.

Issues/delays: none.

III. 6th EuFMD-FAR (issued December 2017)

- 1) *A pilot project for the evaluation of a system for engaging para-veterinarians and animal health workers for FMD surveillance and sample collection and for the preliminary assessment of the demand for FMD control services in Mali* - Project Lead Applicant: Dr Abdoulaye Diaoure, Vétérinaires Sans Frontières Suisse (VSF-Suisse)

Signed*: by the end of February 2018/Duration: 18 months

Overview of project:

The project aims at developing a pilot study to assess the feasibility of engaging para-veterinarians, private animal health service providers or other non-state actors in Mali for FMD sample collection and submission to the national laboratories/authorities and international reference laboratories. Training will be provided to these non-state actors on case detection, sample collection and management (particularly using rapid diagnostic test) to improve their capacity and effective engagement in FMD surveillance in Mali. The project will also provide an evaluation of the

potential for this system to be exported and adapted to other countries in West and Central Africa and the potential for FMD vaccine-uptake potential and other FMD control options in Mali.

Overall cost: € 20 000.00 (*although the project proposal has been received though a FAR Call the funds are mobilized under Component 3.3.2).

Status update: the project is expected to start by the end of March 2018 and the second funding instalment released. An interim report was submitted on July 2018.

Issues/delays: -

5. Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 –Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
372,387	279,645	38,800	86%	53,942

EuFMD Phase IV Report to the EuFMD Executive

Period April 2018- September 2018

Component 1.6 - Emergency technical responses



Pillar Manager: M.Hovari
Component Manager: K. Sumption
Reporting: K. Sumption
Focal point Executive Ctte: L. Bognar

NO UPDATE

EuFMD Phase IV Report to the EuFMD Executive

Period April 2018- September 2018

Component 1.7 - Proficiency Testing Scheme



Pillar Manager: M.Hovari
Component Manager: K. van Maanen
Reporting: M. Hovari
Executive Committee: C. Bruschke

1.7 Proficiency Testing Scheme

1-Objectives of component

The **objective (output)** is Harmonized Proficiency Testing Service for EU and non-EU Members in the European neighbourhood.

The **activities (expected results)** are:

1.7.1 Commission regional PT for better national alignment of the NRLs in the European neighbourhood to the EuFMD and EU standard for FMD diagnostic NRLs performance

1.7.2 Promote and support the participation of 20 non EU EuFMD member states and neighbourhood countries in annual PTS

<i>Activities</i>	<i>Indicators</i>	<i>Baseline Sept 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
1.7	Proportion of target reference laboratories participating	16	21	Number participating over total of neighborhood countries indicated in contract with service provider	14

2-Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	M.Hovari	Contingency Planning Officer
Component manager	K. van Maanen (until Nov.17)	FMD Risk Management Support Officer
Partner organization	The Pirbright Institute (TPI)	Contracted through a Letter of Agreement
ExCom oversight	C.Bruschke	Executive Committee (Netherlands)

3-Countries or partner organizations involved

The **direct beneficiaries** of this component are the nine EuFMD MS and 15 neighborhood countries who are supported to undergo laboratory proficiency testing (see table below).

The **Pirbright Institute** is contracted to carry out this proficiency testing through a Letter of Agreement (LOA).

The 24 laboratories to be included in the PTS under this section of the agreement are:

EuFMD MS not in the EU Serbia; Albania; FYRO Macedonia; Bosnia; Turkey Georgia; Switzerland; Norway; Israel and Montenegro	European neighborhood states: Kosovo; Montenegro; Armenia; Azerbaijan; Ukraine Belarus; Moldova; Iran; Egypt; Lebanon; Libya; Morocco; Tunisia; Algeria; Iraq
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The results of the annual Proficiency Test 2016 and 2017 are presented in the table below (courtesy Don King and Anna Ludi, TPI). PT results are scored according to criteria agreed by the NRLs within Europe, each laboratory receives a personalized anonymous feedback letter to highlight areas in which they could improve, and performance of each laboratory is broadly categorized into one of four groups: (Category 1) to emphasize critical issues where immediate action is required that impact upon the laboratory to correctly identify FMD virus (virology tests) or FMDV infected animals (serological tests), (Category 2) laboratories with serious issues with the performance of individual tests that need to be addressed, (Category 3) to record additional observations which may need to be considered by the laboratory to improve the local performance of individual tests and (Category 4) laboratories whose tests which are fit for purpose and where no further action is required.

In the PT 2016, there has been a change in emphasis from previous years, i.e. the PT has focused on 1) the laboratory's response to an outbreak within the country and 2) laboratory methods and analysis of results for quality assurance purpose. Three panels were available: Panel 1 –Outbreak scenarios for vesicular diseases (including FMD and SVD); Panel 2 –Quality Assurance Panel FMDV samples; Panel 3 –Continuation of outbreak scenarios of FMD and SVD. During the 2018 annual workshop of EU national reference laboratories for foot-and-mouth disease and swine vesicular disease, 8 - 9 2018, Horseley, UK, the results and conclusions of the Proficiency Testing Scheme (PTS) 2017 were presented. The EU NRLs performed well, all scored in category 3 and 4. Overall results were quite good and especially the interpretation of SP ELISA test results has improved than in 2016

Out of the supported countries, Bosnia and Herzegovina, Montenegro, Kosovo, Ukraine, Belarus, Egypt, Jordan, Libya Iran and Iraq, did not take part in the PTS 2017. Comparing the results of 2017 with 2016 we also conclude that two laboratories (Iran and Montenegro) who participated in 2016, did not join in 2017.

For 2017 participating EuFMD (non EU) and European neighborhood labs (altogether n=15, including Israel), none of the labs was in category 1 or 2, so none of the labs had critical or serious issues with individual tests. For the European neighborhood countries that participated in 2017 the proportion of labs in categories 3 and 4 was 57.1% and 42.9% respectively. This is a positive improvement compared with 2016 (77.7% and 22.2%, respectively)

On a related subject, the results of a PTS in the Balkan countries and Eastern Europe: Bosnia and Herzegovina was contacted by EuFMD and encouraged to take part in PTS 2018, Montenegro has informed TPI that they will join in 2018 and Ukraine was contacted by EuFMD who showed interest to participate in PTS 2018.

Phase XXVIII (2016)			Phase XXX (2017)	
Total invited laboratories ¹	94		81	
Total number of shipments ²	70		70	
EURL funded participants				
Participants from European Union (funded by EURL for FMD)	28 (EU member states)		27 (EU member states)	
% of labs meeting target performance ³	Cat-1	0 %	Cat-1	0 %
	Cat-2	0 %	Cat-2	0 %
	Cat-3	60.71 %	Cat-3	44.44 %
	Cat-4	39.29 %	Cat-4	55.56 %
EUFMD funded participants				
Participants from Global Network Labs ²	BVI Botswana, Brazil, Canada ¹ , China, Ethiopia, Kenya, Nepal, Nigeria, Russia, South Africa, Thailand, USA ¹ .		Argentina, Botswana, Brazil, Canada ¹ , Ethiopia, Kenya, Nigeria, Russia, South Africa, Thailand, USA ¹ .	
% of labs meeting target performance ³	Cat-1	0 %	Cat-1	0 %
	Cat-2	0 %	Cat-2	0 %
	Cat-3	60 %	Cat-3	72.73 %
	Cat-4	40 %	Cat-4	27.27 %
Participants from EuFMD Member states (non-EU)	Albania, Georgia, Macedonia, Norway, Serbia, Switzerland, Turkey		Albania, FYR Macedonia, Norway, Georgia, Serbia, Switzerland, Turkey	
% of labs meeting target performance ³	Cat-1	0 %	Cat-1	0 %
	Cat-2	0 %	Cat-2	0 %
	Cat-3	66.6 %	Cat-3	71.43 %
	Cat-4	33.3 %	Cat-4	28.57 %
Participants from neighbourhood countries	Algeria, Armenia, Azerbaijan, Iran, Lebanon, Moldova, Montenegro, Morocco, Tunisia		Algeria, Armenia, Azerbaijan, Egypt, Jordan, Kosovo, Lebanon, Moldova, Morocco, Tunisia	
% of labs meeting target performance ³	Cat-1	0 %	Cat-1	0 %
	Cat-2	0 %	Cat-2	0 %
	Cat-3	77.7 %	Cat-3	70 %
	Cat-4	22.3 %	Cat-4	30 %
Summary of EUFMD funded participants				
Invited				
Panels shipped	Panel 1	23	Panel 1	22
	Panel 2	23	Panel 2	23
	Panel 3	26	Panel 3	25
	Panel 4	14	Panel 4	15
Total number of participants funded by EUFMD	26		25	
Self-funded participants				
Participants			Australia, Israel, Kazakhstan, Namibia, Pakistan, Senegal, Singapore, Swaziland, UAE, & Zambia	
% of labs meeting target performance ³			Cat-1	0 %
			Cat-2	0 %
			Cat-3	50 %
			Cat-4	50 %

4-Progress Report

Output 1.7.1 Commission regional PT for better national alignment of the NRLs in the European neighbourhood to the EuFMD and EU standard for FMD diagnostic NRLs performance

Activities

1.7.1.1: Negotiation of LOA with the Pirbright Institute and

1.7.1.2 Liaison with and review of reports from the Pirbright institute
Negotiation on the new LOA with the TPI are under way.

1.7.2.1: Pirbright manages annual proficiency testing

The summary results of the 2017 PTS are detailed above. Details about the PTS 2019 are not yet known

1.7.3.1. The Pirbright Institute promotes and organizes participation in annual EU reference laboratory meeting for some of the countries listed under 1.7.2.1

EU reference laboratory meeting was held 8-9 May 2018, UK. EuFMD was represented by Kees van Maanen.

5-Issues for Executive Committee attention arising during implementation

More emphasis needs to be made to make EuFMD funded countries to participant at the PTS.

6 - Priorities for the next six months and future emphasis

- Finalize and implement the new LoA with TPI
- Provide support in the 2018 PTS with laboratory contacts available with EuFMD.

7- Budget (€)

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug. 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
46,300	43,395	800	95%	2,105

EuFMD Phase IV
Report to the EuFMD Executive
Period April 2018 - September 2018

Component 1.8 - Risk Analysis and Communication

Pillar Manager: M. Hovari
Component Manager: M. McLaws
Reporting: M. McLaws / M.T.Scicluna / G. Garner
Focal point Executive Ctte: L. Bognar

1.8– Risk Analysis and Communication

1 Objective(s) of component

The overall objective of this component is: to improve the quality, utility and availability of information gathered relevant to FMD risk of entry into member states and facilitate the use of this by risk managers.

OUTPUTS (EXPECTED RESULTS):

- System established and routinely operated to update and communicate the antigen bank priorities based on risk information gathered from Pillar I to III activities, and others;
- System established to ensure that changes in FMD incidence and FMDV circulating lineages/threats in the virus pools is communicated to surveillance managers;
- Tools for improving assessment of risk of entry and consequence of entry into EuFMD MS are improved and used to better identify specific areas for EU/EuFMD attention;
- System for gathering and assessing information on specific risk drivers, such as differential in meat prices between Europe and third countries, is developed and validated for at least one driver.

Activities	Indicators	Baseline: Sept. 2017	Target 2 years	Unit of measure	Current Status
1.8.1	System available to predict Antigen Prioritization	1	1	System available to predict Antigen Prioritization	1
1.8.2	Number of Global Monthly Reports	24	48	Number of Global Monthly Reports	36
1.8.3	Number of Risk Manager Summaries	0	4	Summaries published	0
1.8.4	Pilot study	1	1	Study completed	1*

2 - Project team

Role	Name	Status
Pillar Manager	Mark Hovari	Contingency Planning Officer
Component Manager	Melissa McLaws	EuFMD
EuFMD Monthly Reports	Maria-Teresa Scicluna	STP
National FAO Focal Point: (Co-ordination-national level)	FAO assistant representatives in countries of interest (TBC)	FAO Staff in national offices
FAO HQ Contact	Julio Pinto	Animal Health Officer (Animal Disease Emergencies and Early Warning)
National focal points	Naci Bulut (Turkey) TBC (other countries)	SCRPD member
ExCom oversight	Lajos Bogнар	ExCom member

3 - Countries or partner organizations involved

- i. All EuFMD Member States are direct beneficiaries of this component, and in particular, this component will involve work with Turkey.
- ii. Non EuFMD Member States will also be involved, for instance for information gathering and WelNET: Iran, Pakistan.

4 - Progress Report

1.8.1 System established and routinely operated to update and communicate the antigen bank priorities based on risk information gathered Pillar I to III activities, and others.

Activities

1.8.1.1 Antigen prioritization tool (PRAGMATIST) is finalized and available to interested users

The Prioritization of Antigen Management with International Surveillance Tool (PRAGMATIST) has been developed in collaboration with the WRL to assist vaccine bank managers select which strains are most important to maintain in their vaccine bank. It is a spreadsheet model that considers 1) which strains pose the greatest threat of incursion and 2) ability of available vaccines to protect against the most important antigens are calculated for each vaccine. Draft outputs (tables and charts) from this tool have been produced to include in the Global Monthly Report.

1.8.1.2. System developed and applied for regularly updating both the global distribution of virus strains and the vaccine matching results to inform PRAGMATIST

In this reporting period, the WRL has adopted output from PRAGMATIST for use in their quarterly report (Figure 1). The EuFMD continues to work with WRL on ensuring that the uncertainty inherent in the data is appropriately represented and communicated to users.

1.8.2.3. Format for communicating PRAGMATIST outputs to end-users (vaccine bank managers in free and endemic countries)

Upon request of the user, PRAGMATIST has been shared with the Ukraine (A. Skrypnyk) and the N. American Vaccine Bank (T. Smylie and H. Duque).

1.8.2 System established to ensure that changes in FMD incidence and FMDV circulating lineages/threats in the virus pools is communicated to surveillance managers:

Activities

1.8.2.1 Global Monthly Reports are issued and format is improved

The report continues to be produced on monthly basis by Dr Maria-Teresa Scicluna. Different information sources are used, including OIE WAHID, FAO World/Regional/National Reference Laboratories for FMD and FAO Global Animal Disease Information System data basis, also FAO/EuFMD supported FMD network and FAO/EuFMD projects and field officers information. The report takes an overview on the changes of FMD virus strain distribution within the different pools, to highlight the differences in the FMD movement and to allow an overview evaluation of the effectiveness of the FMD control and eradication adopted in the countries. An online version distributed through EuFMD website.

In this reporting period, a draft of a proposed new format for the GMR was developed.

1.8.2.2 A quarterly summary for Risk Managers is produced on the basis of the information collected under 1.8.1.1 and 1.8.3.1. and is issued at every quarterly GMR

No progress on the quarterly summary was made as 1.8.2.3. was not established.

1.8.2.3 Network of Global Focal Points

Plans have been made to establish a global network of FMD experts, selected from the different FMD pools that will routinely provide data for the constant update of the PRAGMATIST.

A call for applications was published and funding was established. 45 applications were received and the shortlisted applicants were interviewed to establish suitable candidates.

1.8.3. Tools for improving assessment of risk of entry and consequence of entry into EuFMD MS are improved and issued to better identify specific areas for EU/EuFMD attention

A draft outline and workplan for a quarterly FMD risk report has been prepared. This activity depends on:

- Inputs and advice from global FMD intelligence focal points (FPs) for the FMD pool regions
- development of a system and training to collect information from FPs;
- redesign/revision of the GMR;
- availability of findings from EUFMD's regional livestock marketing/animal movement projects

It has been on hold pending recruitment and training of the FPs.

1.8.4 System for gathering and assessing information on specific risk drivers, such as differential meat prices between Europe and third countries, is developed and validated for at least one driver:

Activities

1.8.4.1 Identify and review and descriptive analysis of historical data on livestock and meat prices differential and FMD incidence in Europe and 1 or 2 selected regions ("West-Eurasia", South/East Asia, North-Africa)

No activities have been carried out.

1.8.4.2 Identification of data sources (meat price and animal movements) for the selected regions in Europe and the European neighbourhood ("West-Eurasia", North-Africa); identification of partners for other regions (West/Central Africa, South/East Asia)

A Letter of Agreement (LoA) has been designed with an external Service Provider (CIRAD) to build a partnership for the development and implementation of risk mapping system in North and West Africa for the duration of the current biennium (2018-2019). This partnership, developed mainly under Component 2.3, is aiming at building potential for sustainability of a system for collecting movements and price data over time. For further details, please refer to Component 2.3.

1.8.4.3 Prospective studies on meat/livestock price differentials, movements and FMD incidence within countries and between countries in the selected regions are run based on available funds and data

No activities have been carried out.

5-Issues for Executive Committee attention arising during implementation

The delivery of recruitment and selection of Global Focal Points for each of the pools is progressing slower than originally planned, therefore delivery of the Risk Manager Summaries was also delayed.

6-Priorities for the next six months

1.8.1 System established and routinely operated to update and communicate the antigen bank priorities based on risk information gathered Pillar I to III activities, and others

- Update data in the PRAGMATIST;
- Represent and communicate aspects of uncertainty inherent in the data;
- Workshop in conjunction with the Open Session 2018 to inform potential users regarding the tool, and facilitate their use of it. WRL will participate as co-trainers in this workshop.

1.8.2 System established to ensure that changes in FMD incidence and FMDV circulating lineages/threats in the virus pools is communicated to surveillance managers

- Continue with publication of monthly reports;
- Establish a pool of global experts to review prevalence data and initiate forecasting activities;
- Revise format of Global Monthly Report to include relative prevalence of serotypes/strains at national and pool level, as well as forecasting (at a later date).

1.8.4 System for gathering and assessing information on specific risk drivers, such as differential meat prices between Europe and third countries, is developed and validated for at least one driver

- Build on the outcomes of CIRAD LoA and the Mission conducted in Iran.

7- Success stories and future emphasis

The inclusion of output from the PRAGMATIST in the Quarterly Report of the WRL is a significant milestone towards providing risk managers with the data and information that they need to make decisions the most important antigens to maintain in a vaccine bank. The inclusion of PRAGMATIST information in the Quarterly Report has stimulated interest from potential users, including managers of the N. American Vaccine Bank

Future emphasis should continue to be on strengthening the collaboration with the WRL and improving the flow of information to- and from- professionals working to control FMD globally. This will be done by establishing a system to regularly update the PRAGMATIST data, working with the WRL and OIE/FAO Reference Laboratory colleagues and engaging volunteers and focal points to ensure that the available data are captured and communicated to those who will find it useful to prevent and control FMD.

8- Budget (€) – by activity

Total Budget Workplan activity 24 months	Expenses Oct 17 –Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
84,200	16,535	21,700	45 %	45,965

EuFMD Phase IV

Report to the EuFMD Executive

Period April 2018 – September 2018

Component 2.1 - South East Europe



Pillar Manager: F. Rosso
Component Manager: C. Potzsch
Reporting: C. Potzsch
Focal point Executive Ctte: J. Angot

1-Objective(s) of component

The overall objective of this component is: To improve the ability of Turkey, Georgia and neighbouring West Eurasia countries in FMD management and control to promote their progress along PCP stages and to reduce the risk posed by FMD in the region, with FAO, OIE, EC and EuFMD and the countries in the W. Eurasia region working in coordination under GF-TADS.

OUTPUTS (EXPECTED RESULTS):

2.1.1 Member states (Turkey, Georgia) and immediate neighbours (Armenia, Azerbaijan), and other countries on request, achieve progress within their current Stage of the PCP and in their capacity to manage their programme, and evaluate the feasibility of achieving and maintaining higher stages.

2.1.2 Regional Capacity to manage the FMD risks is improved through development of regional expertise in epidemiology and laboratory disciplines to support the PCP, and on management of control programs, and regional networking to support better information exchange between risk managers in the West Eurasia Roadmap countries

DIRECTLY INVOLVED BENEFICIARIES: The direct beneficiaries of this component are the EuFMD member states Turkey and Georgia and non EuFMD members: Armenia, Azerbaijan, (and possibly other countries in region including Iran, Russian Federation). Indirect beneficiaries: West Eurasia Roadmap participants

RESOURCE BASE

HR: HQ operational costs are identified for support of activities under Pillar II and included in the budget. 2 STPs from Turkey and Kazakhstan support the activities under this component (support shared with other components)

Budget: € 416,006 Agreed at ExCom 94 (including HQ based support services/costs)

Budget for activities (EC-TF): € 356,500 Agreed at ExCom 94 (excluding HQ based support services/costs)

2-Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	Fabrizio Rosso	Animal Health Officer
Component manager	Carsten Potzsch	EuFMD
Other EuFMD Team members:	Ipek Keskin	EuFMD STPs
	Dinara Imanbeyeve	EuFMD STPs
National FAO Focal Point: (Co-ordination-national level)	FAO assistant Representatives in Turkey, Georgia	FAO Staff in national offices
FAO Sub-regional animal health focal points (Co-ordination – Central Asia, Eastern Europe))	Andriy Rozstalnyy (Georgia/Eastern Europe)	FAO Animal Production and Health Officer based in Budapest Office
FAO HQ Contact	Eran Raizman	Head, EMPRES, AGAH Rome
National focal points	Abdulnaci Bulut (Turkey) Lasha Avaliani (Georgia) Zurab Rukhadze (Georgia) Satenik Kharatyan (Armenia) Tamilla Aliyeva (Azerbaijan)	National consultants National consultants National consultants National consultants
ExCom oversight	Jeanluc Angot	ExCom (France)

3 - Countries or partner organizations involved

- EuFMD member states (Direct Assistance) : Turkey, Georgia;
- Non EuFMD members (information gathering and WelNET) : Armenia, Azerbaijan, (and possibly other countries in region including Iran, Russia);
- FAO and OIE (regional roadmap activities) and the EU (coordination of activities in Georgia).
- *Istituto Zooprofilattico Sperimentale del Lazio e Toscana, Italy (IZSLT).*

4 - Progress Report against indicators

Activities	Indicators	Baseline Sept.15	Target 2	Unit of measure	Current Status
2.1.1	Number of countries in region with a Risk Based Strategic Plan that has been accepted by GF-TADs FMD Working Group.	2 (Georgia and Turkey)	4 (Georgia, Turkey, Armenia, Azerbaijan)	Number of countries	4 RBSPs accepted by GF-TADs FMD WG (Georgia, Turkey, Armenia, Azerbaijan)
2.1.2	Participation level from at least 5 countries in the region in online training courses	0	480 participants	Participants engaging in EuFMD e-learning event	480 participants

5. Progress report

Output 2.1.1. Assist with development and monitoring of risk-based strategic plans in the Member states (Turkey, Georgia) and immediate neighbours (Armenia, Azerbaijan) and evaluate the feasibility of achieving and maintaining higher PCP stages

Progressive control Pathway (PCP) and Risk Based Strategic Plans for FMD Control (RBSP)

- All **TransCaucasus countries** (TCC) are in PCP stage 2 and have approved RBSPs. The Georgia and Armenia RBSPs are currently being updated. The Azeri RBSP will be updated after the current restructuring of the veterinary services.
The establishment of FMD low risk and PCP stage 3 candidate zones in the **TCC** were proposed by the veterinary services (VS) of Georgia, Azerbaijan and Armenia. These zones are the Racha-Lechkhumi region in Georgia and the Absheron region in Azerbaijan. In Armenia further discussions are needed on this topic. The updated Georgia RBSP reflects the more aggressive national and zonal FMD control, as Georgia plans to move to zonal stage 3 in 2018. An evaluation mission to verify the effectiveness of the FMD control measures and recommend on improvements was conducted by the 2.1. component manager to Georgia in July. The mission was focused on FMD control and surveillance, improved surveillance and early detection of FMD to reduce the risk of FMD spread, use of clinical investigations to improve confidence of FMD freedom and improvement of FMD awareness. The Racha –Lechkhumi region has a lower risk of FMD introduction and spread because of mountain boundaries and one-way roads leading to this area. Clinical investigation were introduced to increase sensitivity of surveillance. During the mission improvements of FMD control and measures in candidate zone were identified, including corrective actions for vaccine storage/checks, improvements/more risk based clinical investigations to increase sensitivity. An immunogenicity study will be implemented in autumn, and the

workplan of the FMD surveillance advisory group was better defined. The application of Georgia for the PCP Stage 3 (zone of Racha –Lechkhumi) will be presented in November 2018.

- **Turkey** is currently amending the RBSP according to its national FMD strategy. The new plan will include all Anatolian provinces in the FMD Control Zone, except border provinces with Syria, Iran and the TCC. The strategic goal of the plan is that Turkish Thrace becomes free without vaccination, the FMD Control Zone becomes free with vaccination by 2021 and entire Anatolian Turkey becomes free with vaccination by 2023.
- To support this process, GDFC requested EuFMD to provide three additional **workshops on FMD control and outbreak investigation for Eastern Anatolian regions** included in the control zone. The training topics are consistent with the trainings conducted in 2017 but GDFC will lead the 2018 trainings with EuFMD assistance. EuFMD has supported one workshop with two trainers in March 2018, the remaining two workshops will be conducted in the second half of 2018. During these workshops the GDFC epi unit will comprehensively conduct outbreak investigations with forward and back tracing as part of the workshops.

Monitoring FMD control and risks

- The TCC and Turkey presented their national FMD situation and progress during the **FMD Surveillance and Post-Vaccination Monitoring Workshop** in Ankara on 14 – 17 May 2018. The objectives of this workshop were to enhance the expertise on evaluating FMD vaccination and post-vaccination monitoring and surveillance planning in TCC countries and Turkey and to further improve FMD control and progress on PCP-FMD.

The following topics were covered during the workshop:

1. FMD vaccination program, overall objectives and designing a monitoring and evaluation system;
2. Serological surveys as a supporting tool to surveillance and post-vaccination monitoring;
3. Evaluation of the immune response in vaccinated livestock;
4. Evaluation of immunity at population level (combining PVM with sero-surveys for NSP and SP antibodies);
5. Monitoring effectiveness of vaccination program and other control measures;

All countries in the region have consolidated FMD control according to the PCP stage 2 requirements and gradually preparing to move to (zonal) stage 3. Gaps in all countries include irregular booster vaccination, limited coverage of small ruminants and enforcement of legislation and regulations, specifically concerning animal movements.

The main conclusions of the workshop included:

- Countries are encouraged to make use of the Post-Vaccination Monitoring (PVM) guidelines for FMD and also for other important diseases;
- The SAP Institute will support diagnostic capacity building in the TCC countries according to the Welnet workplan 2017-19 and is willing to offer its diagnostic services for the TCC and the countries of the WestEurasian (WE) roadmap.;
- The FMD Surveillance Working Group was launched according to the EpiNet workplan 2017-19;
- TCC countries will conduct one immunogenicity study in autumn 2018 in which the diagnostic kits will be provided by EuFMD;
- EuFMD supports the SAP Institute for additional costs in its increased role in regional diagnostic services and capacity building in the TCC region;
- Sharing information on the vaccination status of livestock and the outbreaks under the Statement of Intentions by using Google Fusion Tables needs to be further improved (difficulties identified with Armenia and Azerbaijan).

- TCC countries will store sufficient amounts of FMD emergency vaccine doses do efficiently respond to outbreaks;
- TCC have budget and logistics secured to conduct serological survey to assess the levels of NSP and SP antibodies and identify gaps in FMD control.

Output 2.1.2. Support better information exchange between risk managers in the West Eurasia Roadmap countries and develop regional expertise in epidemiology and laboratory disciplines to improve regional capacity to manage the FMD risks.

Monitoring PCP progress in WestEurasia

- Through the GF-TADs FMD Working Group, the PCP Support Officer system (PSO) was introduced where a PCP expert is identified to support countries in provisional stages in the development of their RBSP. The 2.1. Component Manager is the PSO for countries in WE. With his assistance Kyrgyzstan has addressed issues raised by the GF-TADs FMD Working Group regarding the Kyrgyz draft RBSP; the reply from the Working Group is pending.

Improving the confidence in effectiveness of control programmes implemented and at FMD risk reducing in the region under the Statement of Intention (Sol)

- According to the Sol the TCC, Turkey, the Russian Federation and Iran agreed to submit regularly **reports of FMD vaccination and outbreaks** to the EuFMD. From these national reports, monthly maps displaying outbreak occurrence and vaccination progress are collated with EuFMD support and accessible to the participating countries and EuFMD. The territories considered for the reporting are: Georgia, the Republic of Armenia, the Republic of Azerbaijan, the Republic of Turkey (provinces: Artvin, Ardahan, Kars, Igdir, Agri), the Islamic Republic of Iran (provinces: West Azerbaijan, East Azerbaijan, Ardebil, Gilan), the Russian Federation (Krasnodar Krai, Karachayevo-Cherkessian Republic, Kabardino-Balkarian Republic, Republic of North Ossetia, Republic of Ingushetia, Republic of Chechnya, Republic of Dagestan, and Adygeya). Currently, Iran does not submit reports.
- **A meeting with representatives of the countries under the Sol** was held during the OIE World Assembly in Paris in May 2018 I.
The following actions were agreed:
 1. Maintenance of the online reporting system by EuFMD in operational form in 2018-19;
 2. The Russian Federation and the Islamic Republic of Iran are encouraged to participate in the Monthly Reporting system in 2018-19;
 3. To establish a “information sharing advisory group for the six countries” to guide the further development of the system, and provide additional training to improve the comparability of the data especially on vaccination in order to enable better in country analysis and comparison;
 4. Vaccination programmes, recognizing the need to monitor the effectiveness of vaccines used in the region:
 - EuFMD will provide training, with its partners, on FMD post-vaccination monitoring, and encourage each country to contribute data on performance of vaccines in use by undertaking small scale vaccination trials
 - Each participating country is encouraged (“agrees”) to continue the monitor its vaccination programme in line with the FAO/OIE Guidelines on PVM.
 5. Risk assessment capacity in the region:

- In support of the national and regional capacities for assessment of risk of FMD introduction/spread, EuFMD will support in 2018 the design of a risk mapping system that can utilise national data on live animals values, market activities and known movement patterns
 - Countries in the sub-region are encouraged to indicate willingness to participate in this action by nominating a focal point (which can be the same person nominated for the Advisory group, point 3)
- To further improve the quality of the vaccination and outbreak reports, a **mapping tool** was implemented based on Google Fusion Tables (situation, progress). Indicators for FMD risk control and vaccination coverage are currently reviewed in cooperation with the Istituto Zooprofilattico Sperimentale del Lazio e della Toscana under the partnership developed with EuFMD. The monthly reports of the TCC and Turkey about the regional FMD risk situation are entered in Google Fusion Tables and are displayed in maps. Improved reporting of vaccination coverage was agreed with the Turkey and TCC. A revised indicator of coverage is now based on the actual number of large and small ruminants vaccinated against the total number of large and small ruminants. There are currently issues in Armenia and Azerbaijan with reporting based on counts of animal vaccinations, these are planned to be solved in 2019.
- During the FMD Surveillance and Post-Vaccination Monitoring Workshop in Ankara in May 2018, the **improved sharing of information** on FMD vaccination and outbreaks under the Statement of Intentions was addressed. A part of this workshop was dedicated to the improved reporting under the Sol for Turkey and the TCC.
- To improve regional FMD risk assessments, animal mobility and livestock and meat market price monitoring will be included into the database of vaccination and outbreak reporting. A **information sharing advisory group** for the six countries will be established to guide the further development of the reporting system, and provide additional training to improve the comparability of the data especially on vaccination in order to enable better in country analysis and comparison.
- One example of regional information sharing and **early warning** under the Sol is that the TCC Veterinary Services were informed by Turkey in early July about the outbreak of lumpy skin disease (LSD) in Artvin province of Turkey.

Support for the West Eurasia Epidemiological (EpiNet) and laboratory (WelNet) network

- The WelNet and EpiNet have been established under the umbrella of WE Roadmap meetings as sustainable regional networks to harmonize the approaches for disease prevention and control. The leaders of the two networks (Lasha Avaliani from Georgia and Abdunaci Bulut from Turkey) have defined an action plan aimed to support the technical capacity of national veterinary laboratories, to better assess the FMD risks and epidemiology in the region and to share the laboratory and epidemiological information available. EuFMD has assisted the implementation of the action plan with activities included in the Component 2.1. of the Pillar II workplan 2017-19.
- The WelNet and EpiNet action plan 2017-18 was revised at a component 2.1. Management meeting in June 2018. Under the action plan presented in the previous EuFMD Component Reports, the activities for Welnet and EpiNet in the second semester of 2018 will include:

Welnet

- a- Welnet focal points for TCC should be identified;
- b- An assessment questionnaire/interviews should be prepared and carried out to assess the capability of countries for implementing immunogenicity studies and including the outcomes of recent proficiency tests;
- c- Review of the assessment questionnaires for laboratory capacity developed by FAO and OIE and identification of way forward for making a comprehensive assessment of laboratory capacities of countries;
- d- Define the support that SAP institute can provide for the immunogenicity studies;
- e- Circulate a questionnaire for comprehensive assessment of lab capacity in TCC;
- f- Define the support that Sap institute can provide for laboratory capacity building in TCC.

Epinet

- a- The focal points of the Advisory group on animal mobility and Advisory group on information sharing should be identified;
 - b- Development of animal mobility work project in support of the national and regional capacities for the assessment of risk of FMD introduction/spread integrating national data on live animals values, market activities and movement patterns;
 - c- Sharing information tool (google fusion table) should be maintained in full operation and functionalities upgraded in order to fulfil the requirements from the Advisory groups on animal mobility and information sharing.
- A **Working Group on FMD surveillance in WestEurasia** was launched in May 2018 during the FMD Surveillance and Post-Vaccination Monitoring Workshop in Ankara. This was one objective of the 2017-19 workplan of the EpiNet of the WE PCP roadmap. The objectives of the group are to:
 - encourage countries of the WE roadmap to submit national plans for FMD serological, virological and clinical surveillance, FMD surveys and studies for review;
 - provide comments and advise to ensure that the plans follow epidemiological principles and are in line with the stage requirements of the PCP and the PVM guidelines;
 - contribute to the improvement and harmonization of the design and planning of FMD surveillance and analysis of data if necessary;
 - liaise with EuFMD as necessary
 Five members have been nominated from the TCC and Turkey under the leader of the group from Georgia (L. Avaliabi). The EuFMD will support the work as necessary (C. Potzsch, EuFMD component manager, G. Ferrari, IZSLT). The group was also introduced during the Sol meeting during the OIE Paris General Session 2018 and will present itself at the 2018 WE Roadmap meeting.

Capacity building and FMD risk reduction in the WestEurasian region**E-learning**

- The following e-learning courses were delivered:
 - In-depth e-learning courses on Post Vaccination Monitoring: participants (four per country) were nominated from Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Kyrgyzstan, Turkey, Tajikistan, and Turkmenistan. For full details of this course please see component 2.4.
 - FMD Field Investigation Training Course (FITC) The Turkish FITC course was delivered in May/June 2018. 163 participants from Turkey and Azerbaijan enrolled to the course and 85 completed it. For full detail see component 2.4.

- A Russian language webinar on Safe Trade and FMD Control course was delivered in June for 70 participants from Azerbaijan, Georgia, Belarus, Ukraine, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Russia.
- Training material and all webinar audio records are available on the EuFMD e-learning website. The training logistics team constantly develops the training websites in cooperation with the trainers, training participants and pillar II staff and improves content and user friendliness.

Workshops

- A workshop on Safe Trade and FMD control was held in Istanbul, Turkey on 23-26 April 2018 in collaboration with OIE. 15 participants from 12 countries (Armenia, Azerbaijan, Georgia, Turkey, Kyrgyzstan, Jordan, Lebanon, Libya, Algeria, Morocco, Palestine, Sudan, and Tunisia) participated. An e-learning induction course was delivered to participating countries before the workshop. The workshop was a step-by-step approach to the understanding of FMD impact on international trade, analysing risk, applying the principles and requirements of the relevant chapters of the OIE Terrestrial Code, and identifying options to reduce the FMD risk associated with trade.

5-Issues for Executive Committee attention arising during implementation

A good collaboration between the countries (Turkey, and TCC) has been observed with proper sharing of risk information through the online tool made available. The Russian Federation and the Islamic Republic of Iran are not actively participations and should be encouraged to participate in the Monthly Reporting system in 2018-19.

Drafting and implementation of more aggressive zonal FMD control and surveillance strategy for TCC and Turkey should be followed up and countries should be continuously supported and assisted for the identification of key areas of improvement.

Immunogenicity and animal mobility studies should be supported to produce more evidence of effectiveness of control measures and FMD (and other TADs) risk of introduction and spread.

6- Areas proposed to give more attention/emphasis in the next 24 month period

1. Progress

- FMD control and surveillance measures identified for stage 3 candidate zones of TCC and Turkey;
- Action-plans for WelNet and EpiNet 2017-18 are being implemented;
- E-learning (courses and webinars) are delivered based on training needs assessment;
- Level of implementation of the Statement of Intention is constantly monitored. New activities are planned and implemented to further improve the quality of information sharing in order to reduce the FMD risk.

2. Major Issues

- Iran joined the meeting under the Statement of Intention during the OIE World Assembly in May 2018 but contributions and cooperation have not re-started yet.

- Drafting and implementation of more aggressive zonal FMD control and surveillance strategy for TCC and Turkey
- Progress with RBSP development for stage 1 countries in the WestEurasian region, i.e. Turkmenistan, Uzbekistan, Tajikistan (not included in the EuFMD workplan but epidemiological connected with TCC).

3. Significant Plans

- Georgia to apply for zonal PCP stage 3 during the 2018 WestEurasia roadmap meeting
- Further development of database for collection of vaccination coverage and risk information in TCC area to improve mapping tool and include data on animal mobility and livestock and meat market price monitoring
- Improve monitoring and evaluation of current strategy and in particular implement small scale vaccination trials
- Providing e-learning courses in Russian for the countries of the WestEurasian roadmap

7. Budget

Total Budget Workplan activity 24 months	Expenses Oct. 17 –Aug 18	Expenses Sep 18 (forecast)	% project completion	Actual available (forecast)
356,500	121,238	29,050	42%	206,212

EuFMD Phase IV Report to the EuFMD Executive

Period April 2018 - September 2018

Component 2.2 - South East Mediterranean



Pillar Manager: F. Rosso
Component Supervisor: F. Rosso
Component Manager: A. Bakkouri / D. Imanbeyeva
Reporting: F. Rosso
Focal point Executive Ctte: J. Angot

1-Objective(s) of component

The overall objective of this component is better FMD management in the neighbourhood of Cyprus and Israel

OUTPUTS (EXPECTED RESULTS):

1. Risk-based Strategy Plans (RBSP) adopted, implemented and monitored in Egypt;
2. RBSP adopted, implemented and monitored in Palestine and Israel;
3. RBSP developed and PCP-FMD progress achieved in Jordan and Lebanon;
4. System in place to provide improved disease risk information through networking for better information exchange to managers of countries under this component for planning risk-based FMD control on risk-based surveillance, risk-based vaccination programmes and vaccine selection for the threats from particularly bordering areas in the Middle-East and sub-Saharan East Africa.

DIRECTLY INVOLVED BENEFICIARIES: Israel, Cyprus, Palestine, Egypt, Lebanon, Jordan.

RESOURCE BASE

HR: HQ operational costs are identified for support of activities under Pillar II and included in the budget. Two STPs from Morocco and Kazakistan support the activities under this component (support shared with other components)

Budget: € 293,883 Agreed at ExCom 94 (including HQ based support services/costs)

Budget for activities (EC-TF): € 260,000 Agreed at ExCom 94 (excluding HQ based support services/costs)

2-Project team

Role	Name	Status
Component Supervisor	Fabrizio Rosso	Pillar manager
Component manager	Abdenacer Bakkouri/Dinara Imanbeyeva	EuFMD consultants
Other EuFMD team members	N/A	N/A
Regional and National consultants:		
National focal points		
Israel		-
Palestine	Iyad Adra	CVO Palestine
Egypt	Mohamed Atea	Deputy CVO Egypt
Jordan	Majed Hawaosha	Head of Animal Health Division
Lebanon	Ibrahim Elias	CVO Lebanon
EARLN	Sabenzia Wekesa	EARLN Coordinator
ExCom oversight	Jean-Luc Angot	Executive Committee (France)

3-Countries or partner organizations involved

The activities will be implemented mainly in Israel and Cyprus as EuFMD members and in Palestine, Egypt, Lebanon and Jordan as neighbouring countries.

The EuFMD works in coordination with FAO offices in Jerusalem and Cairo, and with approval from OIE Beirut and GfTADS' approval of the East African Regional Laboratory Network (EARLN).

The EuFMD is collaborating with *Istituto Zooprofilattico Sperimentale del Lazio e della Toscana* for implementing the activity described in the programme and with Jordan University of Science and Technology (JUST, Jordan).

4- Progress against indicators

Activities	Indicators	Baseline Sept.15	Target 4 years	Unit of measure	Current Status
2.2.1 2.2.2 2.2.3	Number of countries in region with a Risk Based Strategic Plan that has been accepted by GF-TADs FMD Working Group.	1 (Egypt)	4 (Egypt, Jordan, Palestine, Lebanon)	Number of countries	2 RBSPs developed: Egypt and Palestine (1 RBSP accepted by GF-TADs FMD Working Group), 1 RBSP presented (Jordan)
2.2.4	Assist networking through online meetings and sharing of FMD information to risk managers of countries under this component	0	140 participants involving 6 countries	Number of regional participations in online meetings	220 participants from 11 Arabic speaking countries in the NENA region.

5. Progress Report

Output 1. Risk-based Strategy Plans (RBSP) adopted, implemented and monitored in Egypt

EuFMD has been working for many years in Egypt to progress FMD control and has supported the veterinary services of Egypt in reviewing the FMD control strategy. Egypt has finalized a risk-based strategy plan (RBSP) for FMD control which was presented during the third Regional meeting of the FMD Control Roadmap for the Middle East in Doha, Qata, December 2015 and in Jordan, October 2017 and Egypt has been assessed by the Regional Advisory Group to be in PCP stage 2.

Although in the Stage 2 of the PCP, it is important to provide evidence of the monitoring of the level of implementation of RBSP, the regular reports produced by Egypt with data of passive and active surveillance activities are produced with some delays and not on monthly basis. This reduce the understanding of the evolution of the disease in the country and the capacity to assess the effectiveness of the control plan implemented. Furthermore monitoring and evaluation of vaccine quality and vaccination programs is little addressed in current FMD programs in Egypt. This

situation seems to disregard the complexity of appropriate assessment of the vaccine quality and evaluation of the effectiveness of vaccination programs.

In 2018 the programme established in coordination with LLNL/US-DOS was put on hold by Egypt, creating some difficulties for the implementation of the activities originally planned to be implemented with LLNL funds and EuFMD support. Participants from Egypt cancelled their participation to the Workshop on Safe Trade in Turkey and the PVM workshop held in Jordan.

A meeting was carried out in June 2018 in Egypt in order to identify the way forward to re-start the collaboration with EuFMD and understand which support is requested to improve the FMD control and how EuFMD can assist. Representatives of Ministry of Agriculture, General Organization of Veterinary Services (GOVS), Central Laboratory for Evaluation of Veterinary Biologics (CLEBV), Veterinary Syndicate, and FAOEG, participated in the meeting.

The following points were discussed:

1- Vaccine production and control. Dr. Ali (Director of Central Laboratory for Evaluation of Veterinary Biologics) indicated some of the main findings of a recent audit performed on vaccine quality at VSVRI and MEVAC by D.Goovaerts and L.Elsken (November 2017) which should be considered with attention and particularly related to: a) implementation of potency testing by guinea pig serology by serum neutralization test, b) acquire proper BHK suspension cells to be used in fermenter production to improve the vaccine production.

2-Immunogenicity studies. Beside the tests on vaccine quality performed by CLEVB, the implementation of field immunogenicity studies for the vaccines distributed in Egypt has been identified as a priority (at present the following strains are used: O-Panasia, A-Iran 05 and SAT2). This will require a limited number of samples to be tested through ELISA and VNT even though assistance is needed for capacity building at laboratories. EuFMD will support with the definition of the protocol for implementing the study and assistance for liaising with TPI and for the shipment of samples if required.

3- Effectiveness of vaccination programme. The vaccination coverage is at present considered to be at 80% for large ruminants (but no evidence has been provided) and much lower for small ruminants. The objective for 2018 is to improve the coverage for all susceptible species (increase SR up to 80%). The implementation of an identification and registration system (in course) will allow a better control of the animal population and the new system of collecting the animal census for each visit performed in the herds will assist the regular monitoring of the animal population present in different governorates. Regular serosurveillance is implemented for evaluating the immunity at population level but the serosurvey design should be revised.

4- Risk assessment and animal mobility. The main animal movement trends occur along the area of Nile and within the Delta region. Across the borders different control measures have been implemented to better control the importation of cattle from Sudan (specific control protocol implemented and slaughterhouses established close to the border) and for controlling illegal movements of small ruminants from Libya. The proposal of including Egypt in a specific project lead by EuFMD in partnership with CIRAD to improve the capacity of veterinary services to development of risk information and mapping tools and update surveillance protocols (with other participating countries Algeria, Morocco, Tunisia, Chad, Senegal, Mauritania, Libya, Sudan) was well received and can provide more risk information.

5-RBSP monitoring and evaluation. The number of outbreaks is reduced in comparison with last year and it is questioned the role of small ruminants for maintaining the circulation of the disease. Assistance should be provided to guide the monitoring and evaluation phase needed to provide evidence that the plan is effective. Specific attention should be given to: outbreak investigation, surveillance, effectiveness of vaccination, passive surveillance awareness, biosecurity (vets and markets), samples quality. A specific need connected to the RBSP is related to the contingency plan and specifically the opportunity of guiding the design and implementation of a simulation exercise.

6-Training. The FMD Investigation Training courses in Arabic are considered important to improve the awareness and capacities of field veterinarians. The knowledge bank is as well important for facilitating the use of material and tools made available.

All the above listed activities will be supported by EuFMD in the last year of the EuFMD workplan

Output 2. Risk-based Strategy Plans (RBSP) adopted, implemented and monitored in Palestine and Israel

Palestinian Auton. Territories. Palestine has been supported by EuFMD for the development of the Risk Based Strategic Plan. Although the RBSP has been developed and available the country has been assessed in PCP stage 1, in agreement with the Palestinian veterinary services, as the plan is not yet endorsed by the political level. The assessment can in fact allow the Veterinary Services to have the political and financial support requested for the implementation of the plan.

The Palestinian veterinary services were involved in the activities organized at regional level for improving their capacity to monitor and assess the effectiveness of the activities implemented to control the disease. In particular, six participants attended the PVM e-learning and two participants attended the sub-regional technical meeting on PVM. Palestine was as well invited at the workshop on Safe trade and FMD control organized in collaboration with OIE in Turkey.

FMD outbreaks in Palestine were detected in November 2017 in three sheep flocks in villages near Hebron in the PA. Samples of heart tissue was delivered to KVI for diagnosis and an O FMD virus from the O/EA-3 lineage was isolated from the sample. From genotyping that the virus appeared to be close related to the virus that was isolated in the PA and in Ein Shala in May 2017.

In June-July 2018 4 outbreaks were detected in in the north-eastern part of the Jenin governorate, along the Nablus-Jenin road 60. At the time of this draft report it may be assumed that the serotype of the FMD outbreaks in the PAT are homologous or closely related to the FMDV serotype O, which has been reportedly circulating in northeast Israel since April 2018, genotyped O/ME-SA/PanAsia-2. This assumption is underlined by the recent identification of the said strain in sheep in the Israeli village Baqa al-Gharbiyye, situated on the demarcation line ("green line") separating Israel from the Jenin governorate of PAT's West Bank. The aerial distance between Baqa al-Gharbiyye and Arabbeh is 15 km (Promed report)

Israel. Participants from Israel could not attend all the activities proposed under Pillar II due to security issue. In some specific cases the possibility to participate to the e-learning (safe trade induction course and PVM) allowed to keep the country informed and aware of the ongoing activities and to provide some distant training.

In April, an FMD type O was diagnosed in a beef herd in Gazit, from the Panasia2 lineage. This lineage was not involved in the last two years outbreaks. The herd was located 6.5 Km from the Jordanian border and 16.5 Km from the PA but no outbreaks were detected in the neighbouring areas. Several outbreaks are said to have taken place since then, including the current one in Baqa al-Gharbiyye, with west-southwards spread of the virus closer to central Israel; the route of spread could have been through PAT territory.

On the vaccination side the type O is well covered by the vaccine strains currently available (acceptable r1 value for O 3039 and O/TUR/5/09) and there are less worries than about for example type A and SAT2.

Output 3. Risk-based Strategy Plans developed and PCP-FMD progress achieved in Jordan and Lebanon

Jordan. In order to develop Risk-based Strategic Plans in Jordan and Lebanon different workshops have been planned with focal points of the two countries.

At the FMD Road Map Meeting for the Middle East held on 17-19 October 2017 the Regional Advisory Committee has assessed Jordan in provisional stage 2 of the Progressive Control Pathway (PCP) with the condition of finalizing the RBSP by February 2018. After the workshop held in January 2018 and following several drafts produced and revised by the PCP Support Officer - PSO (G.Ferrari) assigned to the country, the RBSP of Jordan was finalized and submitted to the OIE/FAO FMD working group in May 2018.

The RBSP has been drafted with specific focus on the following sectors and objectives: dairy sector (decrease FMD outbreaks and FMDV transmission in cattle), small ruminants (decrease number of outbreaks during seasonal migration), livestock markets (reduce transmission in high risk markets), trade (reduce risk related to international trade and improve exportations). In addition specific actions were identified to ensure vaccine effectiveness (immunogenicity studies), improve awareness and biosecurity of stakeholders, improve passive surveillance, and improve collaborations with academics and countries of the region.

Jordan has not reported any outbreak in the first semester 2018 (in 2017, 54 outbreaks were notified due to FMDV lineage O/Ind2001d).

During the last workshop, it was discussed and agreed to carry out field studies on the quality of vaccines distributed and available in the country (ARRIAH, Schelkovo, VETAL and Merial) with the participation of the Veterinary Service, private sector and JUST. This field study has not been yet carried out.

Lebanon. In Lebanon, after the first workshop to assist the development of RBSP carried out in June 2016, the participants were asked to elaborate on the situation analysis in Lebanon, including aspects of livestock distribution and seasonal movements, risk hotspots and their pathways and the identification of gaps and needs with the Veterinary Services for their role in controlling FMD. Very little activity has been done in the past two years. The Lebanese counterpart indicated that the shortage of personnel available at the central level and the reduced budget did not allow until now to carry out any of the activities agreed during the workshop for the development of RBSP but the Lebanese veterinary services recently contacted EuFMD indicating the intention to re-start the activities for the development of RBSP.

A second workshop was organized in July 2018 focused on the analysis of the current FMD situation, the gaps and needs for risk-based control of FMD (first chapter of the RBSP). The objectives identified were: a-have a good understanding of the PCP-FMD, the Risk-based Strategy Plan (RBSP); b-compile available information and understanding about the FMD risks and impact into the Situation analysis (chapter 1 of the RBSP); c-draft a long-term strategy for FMD control outlining the mid- to long-term objectives for FMD control and that can serve to as a policy note to be endorsed by the Ministry of Agriculture or the Government; d-plan for the continued development of a RBSP, a plan that enables the country to apply for PCP-FMD Stage 2. 12 participants from Lebanon attended, and three from Syria whom were invited in order to facilitate the development of a strategy for FMD control.

Output 4. System in place to provide improved disease risk information through networking for better information exchange to managers of countries under this component for planning risk-based FMD control re: risk-based surveillance, risk-based vaccination programmes and vaccine selection for the threats from particularly bordering areas in the Middle-East and sub-Saharan East Africa

A workshop on **Safe Trade and FMD control** (Turkey 23-26 April 2018) was organized in collaboration with OIE and aimed to assist countries in the European neighbourhood to understand the impact of FMD on trade and to better use of the World Organisation for Animal Health Terrestrial Code for safer trade in animals and animal products. The workshop was held in Istanbul, Turkey, and attended by 15 participants from 12 countries (Armenia, Azerbaijan,

Georgia, Turkey, Kyrgyzstan, Jordan, Lebanon, Libya, Algeria, Morocco, Palestine, Sudan, and Tunisia). The workshop was a step-by-step approach to the understanding of FMD impact on international trade, analysing risk, applying the principles and requirements of the relevant chapters of the OIE Terrestrial Code, and identifying options to reduce the FMD risk associated with trade. The workshop included a field visit to a market and slaughterhouse facility where animal movements from non-FMD free zone to FMD free zone of Turkey are regulated. An e-learning induction course was delivered to participating countries before the workshop

A sub-regional technical meeting on **FMD surveillance and Post Vaccination Monitoring** to facilitate the establishing of a mechanism for Monitoring of control activities and Evaluation of the effectiveness of control measures implemented with particular reference to the assessment of the vaccine quality and evaluation of the effectiveness of vaccination programs. The meeting was held in Amman (Jordan) in May 2018 and attended by 16 participants from Jordan, Palestine, Lebanon, Libya and Sudan. The specific objectives of this sub-regional meeting were to revisit the content of the EuFMD online-PVM training by making use of different scenarios, share experiences and information on current approaches to FMD vaccination and PVM, agree on approaches and procedures to FMD vaccination and PVM in the participating countries, and strengthen regional networking on FMD vaccination and PVM. An e-learning induction course was delivered in March-April 2018 before the workshop.

Initiatives for improving **animal mobility** knowledge in the region have been planned under the LoA with CIRAD for the development of a FMD surveillance programme on risk information and mapping tools for southern European neighbourhood, integrating movement patterns of domestic livestock. Egypt, Libya and Sudan will be involved in the activities.

In the GMR the gaps in **virological surveillance** in pools 4 and 5 are illustrated clearly. Some budget is available for facilitating shipments from countries in sub-Saharan East Africa representing putative threats to countries in the Middle-East.

Sudan was included in the workplan 2017-2019 considering the epidemiological connections with Egypt. A workshop has been organized in Sudan in April 2018 with the objectives to bring together the FMD task force for critical review of the current control strategy, identify gaps in the situation analysis and discuss the implementation of monitoring and evaluation of the control strategy, plan and agree on the activities for developing the RBSP based on the gaps identified including the roles of individual members of the FMD task force. The workshop was held in Khartoum (Sudan) and attended by 15 participants, members of the FMD Task Force and of the supporting committees.

5-Issues for Executive Committee attention arising during implementation

- The risk posed by the instability of Syria and the connected movement of animals across the borders increase the risk of introduction of new strain and spread of the disease in the area. The collection, collation and analysis of risk information connected with animal mobility is essential to better identify risks and risk mitigation measures.
- The current FMD situation of Egypt is a point of concern as evidence of the effectiveness of the control strategy implemented is not provided and report of FMD outbreaks and results of the PVM surveillance not shared with other countries. The recent meeting with General Organization of Veterinary Services and the main gaps identified and actions proposed is promising for achieve the expected objective identified in the EuFMD workplan.
- The approach of organizing a sequence of events including online-training, regional technical meetings and in-country workshops on specific topics (e.g. FMD vaccination and post-vaccination monitoring) is very effective for facilitating the sharing of information and capacity building of different countries.

6-Areas that require more attention in the next period

- Continued support to Egypt (monitoring and evaluation of RBSP implementation, passive and active surveillance, laboratory support, regular shipments to Pirbright, risk based vaccination and post vaccination monitoring);
- Continued support to Lebanon, Sudan and Jordan for RBSP development and implementation
- Continued support to Palestine (monitoring and evaluation of RBSP implementation, passive and active surveillance, laboratory support, regular shipments to Pirbright, risk based vaccination and post vaccination monitoring);
- Implementation of vaccine effectiveness studies in the region in collaboration with local centres of excellency;
- Improving risk information available to FMD risks (sharing of information on vaccination coverage, vaccine quality, animal movements, animal market price).

7. Budget

Total Budget Workplan activity 24 months	Expenses Oct. 17 –Aug 18	Expenses (forecast)Sept 18	% project completion (forecast)	Actual available (forecast)
260,000	90,626	31,720	47%	137,654

8-Gantt charts – Planned program

Activities	Indicators	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
2.2.1 Support to implementation and monitoring of FMD Risk Based Strategic Plan in Egypt	2.2.1.1 a) TOTs: training on outbreak investigation and follow-up of TOT training 2.2.1.1 a) TOT: training on outbreak investigation and follow-up of TOT training; b) Training on advanced outbreak investigation; c) Training on local response in case of FMD outbreak; (activity is dependent on contribution to funding provided by LLNL, USA)		W E B				O M				W E B				W E B				W E B			W E B			W E B
	2.2.1.2 Establishing monitoring and evaluation mechanism at GOVS activity is dependent on contribution to funding provided by LLNL USA)				W S			W S																	
	2.2.1.3 Vaccine quality audit	M																							
	2.2.1.4 Regional technical meeting (activity is dependent on contribution to funding provided by LLNL, USA)							W S																	
	2.2.1.5 Support to Animal Health Research Institute(activity is dependent on contribution to funding provided by LLNL, USA)					M																			
	2.2.1.6 Promoting strategic vaccination and assessment of vaccination effectiveness					W S								M											
2.2.2. Assist finalization & implementation & monitoring of the RBSP in Palestine & Israel	2.2.2.1 Finalization of risk-based strategy plan in Palestine	Activity completed no further actions																							
	2.2.2.2 Establishing M&E mechanism on implementation and impact of RBSP	Activity completed no further actions																							
	2.2.2.3 Support to Central Vet. Laboratory Al Aroub and to Polytechnic University Hebron								M																
	2.2.2.4 Workshops on RBS and risk-based vaccination				W S			O M	M		O M	M		O M			O M								
	2.2.2.5 Steering committee convened and regular meetings held									M														M	
2.2.3 Assist dev. of RBSP in Jordan & Lebanon	2.2.3.1 Needs assessment prior to missions	Activity completed no further actions												Activity completed no further actions											
	2.2.3.2 Provision of training and support		W S				W S			W S				W S				W S				W S			
2.2.4 Assist networking through online meetings and sharing of FMD info to risk managers of countries under this comp	2.2.4.1 Implementation of a lab and epi network	W E B			O M	W E B			O M	W E B			O M	W E B			W E B			O M	W E B				
	2.2.4.2 Sample submission from regions posing risk to Israel supported		L S				L S				L S				L S				L S				L S		
	2.2.4.3 Information on disease risk collated and communicated to risk managers in Israel				V	O M				V	O M				V	O M				V	O M			V	
	2.2.4.4 Support to progressive FMD control in Sudan to reduce risk to Egypt and subsequently to Israel							M						W S								W S			

EuFMD Phase IV

Report to the EuFMD Executive

April 2018 - September 2018

Component 2.3 - Support to REMESA



Pillar Manager: F. Rosso
Component Manager: A. Bakkouri
Reporting: A. Bakkouri
Focal point Executive Cttee: J. Angot

2.3 SUPPORT TO REMESA

1-Objective(s) of component

The overall objective of this component is to assist national FMD risk management as part of the REMESA action plan.

OUTPUTS (expected results):

1. Progress to develop, adopt and implement Risk Based Strategic Plans for FMD control in Libya and Mauritania, and capacity to achieve and maintain PCP Stage 3 or 4 in Morocco, Algeria, Tunisia;
2. Coordination framework in place to facilitate communication, review and guide upon activity implementation nationally and regionally, as needed to progress the REMESA Strategic Plan, including the establishment of surveillance measures aimed to improve security of sanitary barriers between countries or zones with different FMD situations;
3. System in place to provide improved disease risk information for planning of vaccination programmes, including vaccine banks, to support managers in REMESA.

Directly involved beneficiaries: *Algeria, Libya, Mauritania, Morocco , and Tunisia*

Resource base:

HR: HQ operational costs are identified for support of activities under Pillar II. 1 STP from Morocco

Budget : € 367,769 Agreed at ExCom 94 (including HQ based support services/costs)

Budget for activities (EC-TF): € 326,000 Agreed at ExCom 94 (excluding HQ based support services/costs)

2. Project team

Role	Name	Status
Pillar Manager	Fabrizio Rosso	Animal Health Officer
Component Manager	Abdenacer Bakkouri	EuFMD STP
REMESA RCU contacts	M. Bengoumi (FAOSNE)	
FAO Regional Contact (Coordination with FAO NE regional activities)	Mayen Friederike (FAORNE)	FAO Regional Animal Production and Health Officer, Near-East (Cairo)
ExCom oversight	Jean-Luc ANGOT	Executive Committee (France)

3 - Countries or partner organizations involved

FAO and OIE sub regional offices in Tunis as part of the REMESA co-secretariat

Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna" (IZSLER, Brescia, Italy), involved as FMD reference laboratory expertise

Agence Nationale de Sécurité Sanitaire de l'Alimentation, de l'Environnement et du Travail (ANSES, France): experts from ANSES are involved in EuFMD activities in support to REMESA countries.

Jordan University of Science and Technology (JUST, Jordan) for Arabic course material preparation and online courses delivery.

The partnership with CIRAD has been signed (LoA) in January 2018 for the next two years for providing services and carrying out activities, that covers components PII and PII, namely the planned activities for the 2.3 components. The pursued overall objectives will contribute to (1) develop a FMD surveillance programme on risk information and mapping tools for southern European neighbourhood, integrating movement patterns of domestic livestock; (2) design a surveillance for FMD early detection in high-risk areas of North Africa; (3) delivery of the EuFMD e-learning course on FMD socio-economic impact assessment to Francophone countries of North, Central and West Africa; (4) evaluate the potential for development of FMD control options in West and Central African countries.

4-Progress against indicators

<i>Activities</i>	<i>Indicators</i>	<i>Baseline Sept.15</i>	<i>Target 4 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
2.3.1	Number of countries in region with a RBSP accepted by GF-TADs FMD WG	0	1	Number of countries	First drafting Mauritania (pending) Libya (in the pipeline)
	Number of countries in region accepted in PCP Stage 3 or above by the GF-TADs FMD WG	1	2	Number of countries	3 (Tunisia, Algeria, Morocco)
2.3.2	Nb of high-risk border areas where a surveillance system is designed, implemented and functioning	0	1	Number of implemented risk based surveillance	0
2.3.3	Number of participants from region taking part in online training course or webinars annually.	0	200	Participants taking part in online training course or webinars annually.	150

Progress report

The activities are addressed mainly to the North African countries within the REMESA framework: Tunisia, Libya, Algeria, Morocco, and Mauritania. The EuFMD Member States (France, Portugal, Spain, Italy, Cyprus, Greece, and Malta) are also involved as during the REMESA-JPC meetings the programme and results are shared, commented and approved. Other North African countries, part of REMESA but not directly involved in the present workplan component (Egypt, Lebanon and Jordan), can benefit of the activities supported by this component to improve the coordination framework to progress the REMESA action plan (output 2).

Outcome 1: Progress to develop, adopt and implement Risk Based Strategic Plans for FMD control in Libya and Mauritania, and capacity to achieve and maintain PCP Stage 3 or 4 in Morocco, Algeria, Tunisia

a. State of Libya

Following the re-establishment of the contact in November 2017 with the the Libyan veterinary representatives in the margin of the REMESA meeting and subsequently to the meeting with Libyan representatives at FAO headquarters in March 2018 an update of WorkPlan to support Libyan veterinarian services was agreed with the objective to assist FMD control and surveillance activities in Libya:

- With regard to the development of RBSP started with two workshops in 2014, a backstop assistance with regular on-line meetings for a designed taskforce will be implemented as the Libyan veterinary authority -National Center of Animal Health (NCAH) - agreed the concept note on the continued support on progressive FMD control. Activities have not started yet.
- Diagnostic kits were provided and the serosurveillance protocol designed in February 2017 to identify the serotypes circulating in the country in Libya. Following this protocol, re-discussed in March 2018, the survey is being conducted, samples were collected and positive samples will shortly being sent to ISZLER.
- In support to laboratory diagnostic capacity and to the extent that IZSLER accepted to provide in September 2018 training for two Libyan laboratory trainees and EuFMD will cover the related travel and accommodation expenses.
- The study on livestock movement monitoring in the markets is currently being implemented in Libya with financial support and technical assistance of EuFMD to allow a better understanding and the mapping of the risks for North Africa. Initial fieldwork related to data collection Livestock markets is expected to be done by September 2018 while data transcription, analysis and reporting completion is expected for the end of September 2018. The next steps planned for 2019 consist on (1) monthly monitoring and data collection at key markets identified through the study implementation and (2) the development of integration process of the data with regional data within the CIRAD partnership.
- Libyan taskforce members are participating to EuFMD relevant online training courses (post vaccination monitoring course / field investigations training course / risk value analysis along value chain / progressive control practitioners network).

No outbreaks have been reported in Libya even though there is little evidence of an effective notification system. The prevalence of the disease is assessed at 15% according to a serosurveillance which is ongoing with samples mainly collected from the West part of the country and from small ruminants. In order to improve the capacity to identify the virus circulating EuFMD has provided different types of probang that will be used after during the serological surveillance in order to collect samples from seropositive young animals in order to identify the circulating virus strains.

b. Mauritania

A series of six workshops was organized in Mauritania between February 2015 and March 2017 with the objective to assist the country for the development and implementation of the RBSP and to improve the knowledge on FMD circulation in the country. After the activity implemented, efforts were stepped up from September and on as specific commitments were assigned to the FMD taskforces for the finalization of the RBSP (a draft RBSP was expected for July 2017). The implementation of future activities aiming at progressing towards the development of the national RBSP remains conditioned by the effective commitment of the country to achieve this cornerstone. Numerous attempts have been made throughout this period to arouse Mauritania's interest in continuing the work done.

As part of a recent initiative to revitalize contacts with Mauritania, Mauritania's representatives attended the workshop organized by CIRAD in April 2018 and they presented the progress on FMD control and risk assessment. In Mauritania FMD is endemic with three circulating serotypes: SAT 2, A and O (the latest seroprevalence survey conducted in 2012 showed 60% seroprevalence in cattle and 35% in small ruminants). It was agreed during this workshop that EuFMD will cover shipments of laboratory samples (11) to the OIE FMD reference laboratory (ANSES). This samples including sera (6), samples (1) and epithelial tissues (4) were collected in 2017 in a southern region (Gorgol) on the border with Senegal.

c. Algeria, Morocco and Tunisia

Three EuFMD missions were carried out in Tunisia, Algeria and Morocco between November 2017 and January 2018 with the objectives to discuss and assess general and specific needs for the implementation of an early detection and risk-based passive/active surveillance and to prepare the delivery of a regional workshop.

Through EuFMD-CIRAD partnership, two workshops were carried out:

1. “Surveillance for FMD early detection and confidence in the absence of FMDV circulation in Algeria, Morocco and Tunisia”:

This workshop was carried out in Tunisia on 27th February- 1st March 2018 with 23 participants representing veterinary services and main national stakeholders (livestock keepers and private veterinarians) from the three countries and representatives of the FAO and the OIE Sub regional offices. The need of implementing an ongoing surveillance (with the focus on the role of key stakeholders) is considered fundamental to provide good level of confidence that the control measures implemented are effective and that the early detection system has a good level of sensitivity. The set and achieved objectives were:

- ✓ To share and discuss the results of the recent FMDV circulation serosurvey conducted in the countries in 2017;
- ✓ To discuss surveillance options between veterinary services and key representatives of national stakeholders and the possibilities to improve their respective role on FMD early detection.
- ✓ To assess the effectiveness of the current FMD early detection systems and to identify the areas for improvement.
- ✓ To go toward design an ongoing risk based surveillance aimed to provide evidence of the effectiveness of control measures implemented.

Main national stakeholders’ representatives (livestock keepers and private veterinarians) and veterinary services worked together to:

- Map and discuss strengths and weaknesses of the current FMD surveillance systems;
- Define activities needed for improving early detection of FMDV circulation/incursion (working programme with Objectives, Actions, Actors, Indicators, Timeframe, and Needed assistance). These activities should be validated at national level and discussed during the next follow up online meetings.

The workshop was followed up on 11 July 2018 by an online meeting with the representatives of veterinary services with the following main outcomes:

- ✓ An update was provided on the evolution of the epidemiological situation in Algeria following the FMD outbreak reported in June 2018. New FMD topotype (serotype O, Nigeria 2016, topotype EA3) different from the FMD O strain circulating previously was confirmed that means new FMDV introduction. New reported outbreaks in three other districts (which gives a provisional cumulating of four outbreaks in four close regions in the north-central of Algeria with 33 bovine affected). Main measures implemented are (i) outbreaks management (animal sequestration in infected farms, culling of infected and sensitive animal in infected farms), (ii) reinforcing of the clinical inspections in hotspots (outbreaks areas, animal markets and close farms, slaughterhouses, high animal density zones) (iii) animal movement restriction except to slaughterhouses, (iv) Temporary Suspension of Cattle Heifer Imports (v) Raising farmers' awareness campaigns. The epidemiological situation has brought more and more uncertainties for the three countries because the period of the religious festivities of August will face relevant animal movements throughout the territory of the countries.
 - ✓ Countries in the region are expecting favourable results from ongoing vaccine matching tests that is being conducted by Pirbright institute for the new circulating FMDV with the

- available/ordered FMD O vaccine strains and from the immunogenicity study conducted in Morocco with the assistance of IZSLER.
- ✓ Tunisia shared the results of the FMDV circulation survey carried out in Tunisia (2018): 1084 samples were sampled from non-vaccinated lambs in 106 epi-units from 51 high-risk districts , mainly in the Libya and Algeria borders, with an overall séroprévalence of 1,6% (18 positive samples).
 - ✓ With regard to the current epi-situation crisis in Algeria, countries indicated that the objective of the development of active and passive surveillance protocols according to set objectives (to provide evidence of introduction/circulation and improve surveillance for FMD early detection for the three countries) should be suspended until the situation returned to normal. The focus was on the importance of implementing/reinforcing active inspections for clinical case finding, implementing syndromic surveillance in hotspots and high-risk zones, including national borders.
 - ✓ The next online meeting is planned as of mid-September 2018.

2. “Qualitative and cartographic analysis of risks for the optimization of FMD and other transboundary animal diseases surveillance”

This workshop was carried out in Montpellier workshop 23rd -27th April 2018, with the participation of 13 national taskforce from Veterinary Services of six Maghreb and Sahel countries (Algeria, Chad, Mauritania, Morocco, Senegal and Tunisia). The main outcomes of this WS by country were:

- ✓ identification of risk factors and available / missing data;
- ✓ production of introduction and exposure FMD risk maps and the associated GIS queries;
- ✓ planned animal mobility surveys for 2018;
- ✓ risk-based monitoring protocols, linked to risk maps;
- ✓ report of the current FA surveillance;
- ✓ draft of national short (July 2018) and medium (end of 2018) term roadmaps for activities' implementation to be validated at national level.

The workshop is being followed up, starting from July 2018, by online meetings with involved countries for validation of a roadmap and implementation of animal movement surveys and the collection of missing risk information for map updating.

Special support Morocco: At the request of Morocco, EuFMD will consider as of the end of September 2018 to provide its expertise to support the desirability and feasibility of establishing a FMD free zone in accordance with OIE conditions. The success of this prospect would be a success story that could encourage the countries in the region to engage in an effective control program of the disease.

Outcome 2: Coordination framework in place to facilitate communication, review and guide upon activity implementation nationally and regionally as needed to progress the REMESA Strategic Plan, including establishment of surveillance measures aimed improving security of sanitary barriers between countries or zones with different FMD situations

EuFMD networks

The **FMD Francophone network** was created with the aim of improving the networking and facilitate the exchange of knowledge and experience on FMD prevention and control between French speaking countries. Currently, this network that was merged with North African network in mid-2017, has more than 140 participants from more than 20 countries with a forecasted enlargement following the intensification of Pillar III activities, particularly in Central and West Africa. In line with the highest interest shown by participant to the francophone online course “field investigations on the FMD”, launched in June 2018, this network should

become an important platform for networking and sharing animal health information between animal health professionals among francophone countries in the three regions of North, West and Central Africa.

A webinar on Public-Private Partnership, carried out in French for the Francophone network in 14 May 2018 with the participation of representatives of public and private sectors from France, Morocco and Tunisia. The webinar focused on the Improvement of the role of the private veterinarian in the control of FMD, challenges and prospects of his involvement in the surveillance for early detection of FMD.

EuFMD online course

As a part of the activities of components 2.4 (training development and coordination) and 2.3 (support to REMESA network) aiming to strengthen/built national taskforce capacity, participants from the region were participating to the online courses below (For more detail, see 2.4 of pillar II report below):

- i. **Post vaccination monitoring in-depth course (PVM):** Participants (85) from 19 countries, including Morocco (4), Tunisia (4), Algeria (2) and Libya (5) have participated to the second edition of the course delivered from February to April 2018 and dedicated to countries from direct European neighboring.
- ii. **FMD investigations course: (June-July 2018):** Within the joint PII and PIII eLearning activity, around 300 participants from 19 countries from North, Western and Central Africa participated in the French edition of the online course on FMD investigations courses. To overcome the intermittency problems of Internet accessibility, and in parallel with our online training website, innovative approach was launched for this course using the Whatsapp™™ mobile application as well as social media to help on the delivery of course material.
- iii. **FMD Socio-economic impact online course:** The course is being developed with the partnership of CIRAD with the prospect to be delivered as of the end of September 2018 to francophone countries in North, Western and central Africa.

OIE – EuFMD workshop on safe trade and FMD control:

Within the collaboration with OIE, representatives from North Africa (Algeria, Libya, Morocco and Tunisia) that previously participated to the E-learning introductory course have attended the WS on Safe trade and FMD control dedicated to the European neighboring countries. This WS was carried out in Turkey 23-26 April 2018 for 12 countries and aimed to better understand the impact of FMD on trade and to better use the OIE Terrestrial Animal Health Code for safer trade in animals and animal products. It was a step-by-step approach to the understanding of FMD impact on international trade, analyzing risk, applying the principles and requirements of the relevant chapters of the OIE Terrestrial Code, and identifying options to reduce the FMD risk associated with trade.

Outcome 3: System in place to provide improved disease risk information for planning of vaccination programmes, including vaccine banks, to support managers in REMESA

As mentioned above in outcome 1, many activities are being implemented in support to REMESA action plan;

- i. Design and planning for active and passive serosurveillance protocol and identification of material technical support will be conducted during the online meeting with Algeria, Morocco and Tunisia with the objectives to provide evidence of introduction / circulation and improve surveillance for FMD early detection,
- ii. Ongoing activities within CIRAD partnership on Qualitative and cartographic analysis of risks for the optimization of FMD and other transboundary animal diseases surveillance

- iii. Field material (probang kits), financial support and technical support are being provided in support to Libya for ongoing activities related to the serosurveillance activities and animal markets and mobility studies.

As a second step of the participation to the EuFMD online in-depth course on FMD post vaccination monitoring, EuFMD plans to start in September 2018 the organization of a workshop on FMD surveillance and post-vaccination monitoring. This workshop would aim to strengthen/build capacity of vaccine selection capabilities, evaluate the effectiveness of vaccination and design serological surveys in the southern European neighboring.

During the 16th Joint Permanent Committee Meeting of REMESA (Morocco, 18-19 April 2018) the Assured Emergency Supply Option System (AESOP) was presented by EuFMD to promote the system feasibility for FMD vaccines as a complementary mechanism to the conventional vaccine bank systems.

5. Issues for Executive Committee attention arising during implementation

The programme should focus on a better understanding of the risk associated with the incursion of FMDV in the region (e.g. animal movements) and on the analysis of the factors that drive the change of such risks (e.g. market demand). This will be addressed by the activities organized in collaboration with CIRAD on risk mapping. Implementation of studies in region's countries on risk mapping, animal mobility and FMD circulation should be encouraged.

With the effective involvement of key stakeholders, risk-based surveillance for early detection and a risk-based vaccination should be promoted in Algeria, Tunisia and Morocco despite the tendency of the countries to prioritize mass vaccination and surveillance carried out in specific periods.

The development of RBSP and further activities aiming to progress toward its implementation and monitoring remains conditioned by the commitment of Mauritania to finalize the RBSP.

6. Areas that require more attention in the next 24 month period

- a. Maintain the collaboration and coordination established with FAO and OIE in order to provide proper joint assistance and support to the development of a regional FMD control strategy;
- b. Support the development of the coordination framework - REMESA networks (webinar series);
- c. Support the Libyan Veterinary Services in the FMD control and a better understanding of their current epidemiological situation and FMD risks linked to animal movement and trade;
- d. Depending on country commitment, finalize the development of RBSP in Mauritania and promote a regional laboratory network;
- e. Implement FMD early detection system and continuous risk based surveillance in Morocco, Algeria and Tunisia;
- f. Finalize the design of risk based surveillance and virus circulation monitoring, and promote risk based vaccination strategies in Morocco, Algeria and Tunisia;
- g. Support studies on risks associated to livestock value chain and animal mobility and trade.
- h. Tailored assistance for morocco to study the feasibility of implementing zoning with regard to OIE FMD standards starting from September 2018.

7. Budget (€)

Total Budget WorkPlan activity 24 months	Expenses Oct. 17-Aug 18	Expenses (forecast) Sep 18	% project completion (forecast)	Actual available (forecast)
326,000	115,337	29,320	44%	181,343

8.Gantt charts – Planned and Progress Update/ revised programme

2.3 Support to REMESA	OUTPUT 2.3 Remesa: Assist national FMD risk management as part of the REMESA action plan	YEAR 1												YEAR 2																	
	Target (Expected Result)	Activities																													
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S						
2.3.1 Actions to develop, adopt, and monitor implementation of RBSP for FMD control in Libya and Mauritania, and capacity to achieve and maintain PCP Stage 3 or 4 in Morocco, Algeria, Tunisia	2.3.1.1 Training to assist national staff to complete RBSP in Mauritania					W	S																								
	2.3.1.2 Socio-economic study on FMD in Mauritania	Activity completed; no further actions												Activity completed; no further actions																	
	2.3.1.3 Support field FMD serosurveillance and outbreak investigations in Mauritania	Activity completed; no further actions												Activity completed; no further actions																	
	2.3.1.4 Support lab. diagnosis in Mauritania																														
	2.3.1.5 Assistance on training (e-learning,) for nat. taskforce members based in Libya					E	L	T	M										E	L											
	2.3.1.6 Support lab. diagnosis in Libya				L	S								LS					L	S					LS						
	2.3.1.7 Implementation of trainings and workshops to promote RB Surv., early detection and control progs in Algeria, Tunisia and Morocco			O	M			W	S		M	O	M					O	M												
	2.3.1.8 Support lab. diagnosis in Algeria, Tunisia, Morocco				L	S								LS					L	S					LS						
	2.3.1.9 Support emergency preparedness and test emergency response in Algeria, Tunisia and Morocco																														
2.3.2 Coordination activities as needed to progress the REMESA Strategic Plan, including the establishment of an epi-network, and design of surveillance measures aimed improving security of sanitary barriers between countries or zones with different FMD situations	2.3.2.1 Support REMESA coord. activities		M							M											M										
	2.3.2.2 Implementation of epi-network between countries and development of a training credit system		W	E	B		W	E	B		W	E	B		W	E	B		W	E	B		W	E	B						
	2.3.2.3 Assistance and support to the development of a regional control strategy		M				M				M										M										
	2.3.2.4 Design surveillance system to be implemented in high risk areas and support with models and diagnostic kits the active surveillance																				W	S		O	M		O	M		O	M
2.3.3 Activities to implement a reg. lab. network to provide improved disease risk information for planning of vaccination programmes, including vaccine banks, to support managers in REMESA	2.3.3.1 Support implementation of reg. lab. network in Maghreb and Western Sahel countries						W	S			L	S								W	S		L	S							
	2.3.3.2 Support the dev. of regional vaccine bank		M							M										M											
	2.3.3.3 Support the vaccination programmes with tools for designing, implementing, assessing				O	M				O	M								O	M								O	M		
	2.3.3.4 Support studies on risk associated to livestock value and animal mobility					V							V						V										V		

EuFMD Phase IV

Report to the EuFMD Executive

Period April 2018 – September 2018

Component 2.4 - Training development and coordination



Pillar Manager: F. Rosso
Component Manager: J.Maud
Reporting: J. Maud
Focal point Executive Ctte: M. Blake

1. Objective of the component

The overall objective of this component is Improved national and regional capacity for management of FMD through development and evaluation of training programmes for national staff.

The targets (expected results) are:

2.4.1. To have developed a wide range of PCP-FMD resources and training materials in various modes (e-learning, training of trainers, face to face, webinars) and languages for countries in Pillar II.

2.4.2. To have established a method of monitoring and evaluation of PCP-FMD training materials and resources to safeguard the uptake and appropriateness by the intended target audiences (beneficiaries).

2.4.3. Fit for purpose training courses and resources are available for wider use by neighbourhood countries which are largely appropriate and adaptable to the needs of the global community (Pillar III update/ GF-TADs).

Resource base

HR: HQ operational costs are identified for support of activities under Pillar II.

Budget : € 177,068 Agreed at ExCom 94 (including HQ based support services/costs)

Budget for activities (EC-TF): € 148,000 Agreed at ExCom 94 (excluding HQ based support services/costs).

2. Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	Fabrizio Rosso	Animal Health Officer
Component Manager	Jenny Maud	Training Programmes Manager
Network and training support	Nadia Rumich	Network and Training Officer
Co-ordination with components 2.1, 2.2 and 2.3	Pillar II component managers	Secretariat
ExCom oversight	Martin Blake	Executive Committee

3. Countries or partner organizations involved

Countries involved:

The direct beneficiaries of this component are the countries involved in Pillar II activities and listed as beneficiaries under components 2.1, 2.2 and 2.3. In some instances, and with the agreement of direct beneficiaries, training opportunities (particularly e-learning) may be extended to additional neighbouring countries. Additionally, the training resources developed under this component will be repurposed for use for the wider global community under component 3.4.

Partner organizations:

The Royal Veterinary College, London, UK, (RVC) provide technical inputs and pedagogical advice in the development of training courses, particularly the Introduction to the Progressive Control Pathway e-learning course.

Online training courses already developed will be adapted and delivered in French through the partnership with CIRAD.

4. Progress against indicators

Activities	Indicators	Baseline Sept.15	Target 4 years	Achieved Sept 18	Explanation of indicator
2.4.1 Develop new courses after completion of regional needs and capacity assessment	New courses dev after reg.gap analysis	0	4	6 - Socio-economic impact (24hrs); - Risk Analysis Along the Value Chain (24hrs); - Field Investigation Training (12 hrs); - Introduction to the Progressive Control Pathway (6 hrs); - Post Vaccination Monitoring (24 hrs- in combo with PIII); -FMD Laboratory Investigation Training Course (12hrs- in combo with PIII) - Safer Trade and FMD Control (4 hrs) - Containment Zones (4 hrs) - Risk Based Strategic Plan (4 hrs)	New online training courses dev., one course equivalent to 20 study hours
2.4.2 Develop monitoring framework for PCP-FMD training courses and materials	% of training courses satisfying M&E criteria	0	100	100	% of courses meeting M&E criteria

5. Reporting of activities

Reporting format	Responsibility	Output	Distribution	Sent out by
Six monthly report to ExCom	Component manager	Written report for ExCom	ExCom, STC	Network and Training Officer
Report on results of monitoring and evaluation of training courses	Component manager	Written report	Executive, summary to ExCom, STC	Component manager
Report on usage statistics of e-learning website	Component manager and Royal Veterinary College	Written report	Executive, summary to ExCom, STC	Component manager
Annual Report for General Session	Training Programme manager	Written report	Member States	Network and Training Officer

6. Progress report

Output 2.4.1: To have developed a wide range of PCP-FMD resources and training materials in various modes (e-learning, training of trainers, face to face, webinars) and languages for countries in Pillar II

Regular communication with nominated training focal points in each “Pillar II” country in order to guarantee an **ongoing needs assessment framework** continues. This includes feedback sent to focal points after each training course on the performance of their nominated participants, alongside regular updates of upcoming courses. We aim to use this network of focal points to consult on changes to training needs later in 2018. In addition, after every course, the feedback received guides future training development needs (see monitoring and evaluation framework).

An updated outline of the timetable for e-learning development and delivery is shown below:

New e-learning course development for Pillar II 2018 and 2019

Course	2018											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Risk Based Strategic Plan Open Access												
Safer trade introductory modules												
French upgrading of FMD Investigation Training Course												
French language socio-economics												
Russian language Risk Analysis Along the Value Chain												
Containment zone introductory modules												
Update to Progressive Control Pathway e-learning												
FMD Investigation Training Course in Farsi (possible)												

Course	2019								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
French language post vaccination monitoring*									
Russian language post vaccination monitoring*									
French language Risk Analysis Along the Value Chain*									
Russian language Soco-Economic Impact Assessment*									

* development of French and Russian language versions of the in-depth courses is dependant on feedback received by end 2018

E-learning course delivery for Pillar II 2018 and 2019

Course	2018											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Post Vaccination Monitoring for Pillar II												
Safer Trade Induction Course												
Containment zones Induction Course												
French Language Socio-economic impact assessment												
FMD Investigation Training Course in French												
FMD Investigation Training Course in Arabic												
FMD Investigation Training Course in Turkish												
Russian Language Risk Analysis Along the Value Chain												
FMD Investigation Training Course in Farsi (possible)												
Progressive Control Practitioners' Network (funded PIII)												
English language Socio-Economic Impact Assessment (with PIII)												
FMD Laboratory Investigation Training Course (with PIII)												

Course	2019								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
French language post vaccination monitoring*									
Russian language post vaccination monitoring*									
French language Risk Analysis Along the Value Chain*									
Russian language Soco-Economic Impact Assessment*									
FMD Investigation Training Course in Turkish									
FMD Investigation Training Course in French									
FMD Investigation Training Course in Russian									
English language Post Vaccination Monitoring (with PIII)									
English language Risk Analysis Along the Value Chain (with PIII)									

Key changes to the timetable of pillar II e-learning since March 2018:

- Postponement to 2019 of the translation of the Post Vaccination Monitoring course into French and Russian language versions in order to be able to make use of new materials currently being developed by The Pirbright Institute and EuFMD under the GCRF-STARs project (see component 3.4).

- Russian language FMD Risk Analysis Along the Value Chain course brought forwards to 2018 due to delay of the above courses and due to recognized need for support to development of Risk Based Strategic Plans in Russian speaking countries.
- Further development of French and Russian language versions of the in-depth courses will only be carried out if the first in-depth courses in these languages (to be delivered in Oct/Nov/Dec 2018) are successful.
- Additional development of new e-learning modules on containment zones, in partnership with the OIE.
- Possible additional development of the FMD Investigation Training Course in Farsi (pending decision of Government of Iran).

Development of new e-learning courses

1 - Risk-Based Strategic Plan	Learning objectives
<p>Modules from this course were used in the Risk Analysis Along the Value Chain e-learning course in 2017 and in June 2018. The course will be launched as an open-access self-directed e-learning course in September 2018.</p>	<ol style="list-style-type: none"> 1. Be able to describe the position and purpose of the RBSP in the PCP-FMD framework. 2. Include the results of the OIE-PVS evaluation and/or gap analysis to define the needs for strengthening the veterinary services on the control of infectious diseases in general and FMD in particular. 3. Be able to convert risk hotspots, gaps and needs identified into component objectives for FMD control, and strategic risk-based tactics and activities. 4. Be able to define monitoring and evaluation indicators using SMART approach. 5. Be aware of the need for stakeholder consultation for the RBSP to be practically feasible and complied with. 6. Consider the RBSP as a living document for policy development on FMD control.
<p>2- Safer Trade A workshop on Safer Trade and FMD was developed in partnership with the OIE. The delivery of this workshop was coordinated under component 2.1 and is reported there. An online induction course was developed and participants followed this short course for the month prior to the workshop, providing a solid basis in theoretical concepts allowing the workshop itself to be interactive and simulation based. Feedback from both the course participants and the OIE on the online training modules developed was positive and the modules will now be repurposed as an open access e-learning course. The delivery of this material, together with the material on containment zones reported below, as a tutored online course, is currently under consideration.</p>	<ol style="list-style-type: none"> 1. Describe the obligations of WTO Member States with respect to international trade, as specified in the SPS Agreement 2. Identify the role of the OIE in the SPS Agreement, and know where to find the relevant standards 3. Explain the features of FMD virus infection and epidemiology relevant to international trade 4. Explain how the PCP-FMD is relevant to safe trade 5. Define 'risk' in the context of international trade, and explain its relevance to trade

<p>3- Containment zones</p> <p>A second workshop is currently under development with the OIE on the use of containment zones. An e-learning induction course has also been developed for this workshop and is open to participants in September 2018.</p>	<p><i>Introduction to zoning for FMD control //Study time: 30 minutes</i></p> <ul style="list-style-type: none"> • describe the key features of the different types of zones (relevant to FMD control) that are outlined in the OIE <i>Terrestrial Code</i>; • explain in simple terms the circumstances under which each type of zone is suitable to be applied, linking this to PCP stage (or OIE Status) as appropriate; • define the key requirements which should be fulfilled in order to start to apply a zoning approach; • explain the potential benefits of establishment of a zone in terms of facilitation of international trade and/or control of FMD; • explain the challenges and list potential disadvantages of a zoning approach. <p><i>Introduction to containment zones //Study time: 60 minutes (e-learning module to be newly developed for this course)</i></p> <ul style="list-style-type: none"> • describe the OIE <i>Terrestrial Code</i> definition of a containment zone and under what conditions it would be applicable and beneficial; • outline the key pre-requisites that must be fulfilled in order to be able to establish a containment zone; • outline the requirements for establishment and maintenance of a containment zone; • explain the roles and responsibilities of different stakeholders involved in the implementation and maintenance of a containment zone; • explain what should be included in a country's FMD contingency plan in order that the country is prepared to establish a containment zone (legislation, resources, finances, etc).
<p>4- French Language Socio-Economic Impact Assessment</p> <p>The English language Socio-Economic Impact Assessment course was reviewed and updated by CIRAD in July and August 2018. It is now being translated into French, for delivery in October and November 2018.</p>	
<p>5- Open Access Progressive Control Pathway</p> <p>Following the update to the PCP guidelines the open access PCP e-learning course has been updated to reflect the important changes made. A webinar and other communication activities are planned to publicize the release of the new version of the PCP e-learning.</p>	

Delivery of training courses

The following e-learning courses have been delivered to Pillar II countries from March to September 2018:

1-In-depth Post Vaccination Monitoring

This was the second edition of this in-depth course, which involves 24 hours study over a six week period. Countries in the wider pillar II area were each asked to nominate four participants for the course. The course trainers were Giancarlo Ferrari, David Paton and Nick Lyons.

The learning objectives of the course are to

- make rational decisions on vaccine selection and purchase;
- perform and use serological studies to assess vaccine quality and population immunity;
- describe different vaccination strategies and how these integrate into the broader FMD control strategies;
- explain the importance of monitoring vaccination coverage and perform appropriate quantitative studies;
- conduct investigations into reported vaccination failures;
- explain the difference between efficacy and effectiveness and have the ability to perform vaccine effectiveness studies when outbreaks occur in vaccinated populations;
- formulate a broader evaluation of a vaccination programme and use this information to make adjustments to improve the efficiency of control measures relevant to the programme objectives.

The course involved four hour's study per week over a six-week period, with participants working to complete an assignment each week. The tutors provided individual feedback on the assignments submitted.

The course completion was as follows:

	Nominated	Completed
Algeria	1	1
Armenia	4	3
Azerbaijan	4	1
Egypt	4	0
Georgia	4	0
Iran	2	0
Iraq	4	3
Jordan	6	4
Kazakhstan	1	0
Kyrgyzstan	4	0
Lebanon	4	1
Libya	5	1
Mauritania	0	0
Morocco	4	3
Palestine	6	6
Sudan	5	4
Tajikistan	5	0
Tunisia	4	0
Turkey	4	3
Turkmenistan	4	0
TOTAL	75	30

Highlighted in bold in the table above are those countries with strong participation in and completion of the course. The overall level of completion is somewhat disappointing, skewed particularly by those countries in which none of the participants completed the course. Language difficulties certainly act as a barrier to completion with the low performance of those countries that are predominantly Russian speaking indicating the need for Russian language training. A larger number of participants will be involved in each in-depth training course in future, to account for expected completion rates.

The feedback from the course was positive overall, with 85% of the respondents rating the course as excellent. Participants rated the tutor marked assignments particularly highly, and commented that the course had raised their awareness of the importance of post vaccination monitoring.

(AADIS) for use in Europe was submitted and approved under EuFMD – Future Animal Research (FAR) funding in 2017. In October 2017, EuFMD’s Executive Committee endorsed support for this work, with a pilot study involving a number of central European countries. This collaboration builds on an initiative proposed by Austria in 2016, during the CVO meeting, held in Budapest, Hungary to establish regional cross-border modeling for Transboundary Animal Diseases (CroBoDiMo initiative).

The multi-country disease spread modelling study has been an outstanding success. The drive of this small, but dedicated community involved in this project conveys a strong sense of ownership and despite the ambitious time frame has been able to deliver a sophisticated disease modelling tool (EuFMDiS) that can be used to support FMD planning and response at both national and regional scales in Europe.



Other countries, including Spain, FYR Macedonia and Turkey), are also showing interest. Future developments could include adding additional countries, adaption of the model to other diseases and incorporation of a wildlife component. Following 95th Excom discussions, the current focus for the future is on incorporating wild boar in the EuFMDiS model framework.

8- Budget (€)

Total Budget Workplan activity 24 months	Expenses Oct 18 – Aug. 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
142,154	55,975	48680	74 %	37,499

The course involved 12 hours study over a four week period and included two live webinars and a tutored discussion forum.

Summary of course completion:

	Number	Percentage
Completed	85	53
Logged in but didn't complete	31	19
Never logged in	46	28

The course completion was 55% (82/150) for Turkish participants, and 25% (3/12) for Azeri participants. Extensive efforts were made by both GDFC and EuFMD to remind and encourage participants to log in and complete the course. During the post course evaluation EuFMD and GDFC discussed ways to increase completion rates for future courses, including specific allocation of time during office hours to the course, altering the time of year of the training to better fit with vaccination schedules and compulsory completion of the course for the government employees nominated. A larger number of participants will be invited to join the next edition of the course, to correct for expected completion rates.

45% of the participants rated the course in the feedback survey as "Very good" and 47% of them as "Good". 46% of the participants considered the course very relevant and 51% considered it relevant for their needs. Participant suggestions and feedback in the survey will be used to guide future improvements to the course.

3-FMD Investigation Training Course in French

This course was organized for countries in North, West and Central Africa in June and July 2018. Please see component 3.4 for the full report.

Output 2.4.2: To have established a method for monitoring and evaluation of PCP-FMD training materials and resources to safeguard the update and appropriateness by the intended target audiences and beneficiaries and 2.4.2.1 Development of monitoring and evaluation methodology and 2.4.2.2 Monitoring and evaluation of training

The outcomes of all e-learning courses are monitored by an online feedback survey immediately after the workshop, and with summative assessments to verify participant's knowledge used at the end of online training courses. A protocol for evaluation of each training course, based on the evidence provided by the survey and assessments has been developed. All results of surveys and evaluation documents are stored on a dedicated "trainers" section of the EuFMD e-Learning platform, and are shared with relevant nominating organizations.

As the training program enters its fourth year under the current EC funded project there is a need for a wider evaluation of the EuFMD training program as a whole. For this purpose, a call for expression of interest in joining a small team of external advisors to evaluate the EuFMD training program has been publicized. Please see component 1.1 for further details.

Output 2.4.3: Fit for purpose training courses and resources are available for wider use by neighborhood countries and are largely appropriate and adaptable to the needs of the global community

The open access introductory e-learning course on the PCP and on Risk Based Strategic Plans has been made available as a freely available open access resource globally. The Field Investigation Training course is used for both pillar II and pillar III countries. The planned French language Socio-Economic Impact Assessment course will involve participants from both Pillars II and III, including participants from North, West and Central Africa.

6. Issues for Executive Committee attention arising during implementation

Identification of suitable partners for Russian language e-learning development and delivery continues to be challenging. Further investigation into reasons for low completion of in-depth courses in some countries and methods to promote completion of e-learning courses is needed.

7. Priorities for the next six months

The next six months will focus on:

- Development of the following e-learning courses:
 - French FMD Socio-Economic Impact Analysis and Post Vaccination Monitoring;
 - Russian Risk Analysis Along the Value Chain and Post Vaccination Monitoring;
- Delivery of the following e-learning courses:
 - Containment zones e-learning induction course;
 - French FMD Socio-economic Impact Analysis;
 - FMD Investigation Training Course in Arabic;
 - Russian Risk Analysis Along the Value Chain;
 - Russian MD Investigation Training Course;
- Evaluation of the training program.

8. Success stories

The Post Vaccination Monitoring e-learning course was a particular success, with enthusiastic participation of a number of pillar II countries and quality assignments produced. The outcomes of this course were then directly used in the subsequent face to face workshops demonstrating the value of the blended learning modality.

The partnership with the OIE for the development of the Safer Trade and Containment Zones e-learning and workshops has been a valuable collaboration for both organizations and has generated e-learning modules which will be useful as open access resources in future.

9. Areas proposed to give more emphasis in the next 12-month period and activities likely to achieve greatest impact

An additional focus to achieve greater impact is to develop a communication strategy to maximise the numbers of people that make use of EuFMD's freely available open access e-learning courses.

10. Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
148,000	53,732	13,638	46%	80,630

9. Updated Gantt Chart Currently, there is no deviation from planned activities.

OUTPUT 2.4 National and Regional Capacity for the Management of FMD through dev. and evaluation of training programmes for national staff		YEAR 1												YEAR 2												
Target (Expected Result)	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
2.4.1 Develop new courses after completion of regional needs and capacity assessment	2.4.1.1 Implement ongoing needs assessment framework																									
	2.4.1.2 Pillar II component managers conduct needs assessment	Activity completed; no further actions																								
	2.4.1.3 Research existing training resources available	Activity completed; no further actions																								
	2.4.1.4 Plan for training courses and resources to be developed and delivered is completed																									
	2.4.1.5 Development of training courses and resources																									
	2.4.1.6 Delivery of training courses and resources																									
	2.4.1.7 Clear structure for delivery costs of training courses set up	Activity completed; no further actions																								
2.4.2 Monitoring and evaluation of training	2.4.2.1 Monitoring and evaluation of training occurs	Activity completed; no further actions																								
	2.4.2.2 Courses adapted as necessary following results of monitoring and evaluation																									
	2.4.2.3 Courses adapted as necessary following results of monitoring and evaluation																									
2.4.3 Development of courses and resources that are also largely appropriate and adaptable to the needs of the global community (Pillar III uptake/GF-TADs)	2.4.3.1 Training materials and resources are designed to be readily translated and adaptable																									

EuFMD Phase IV

Report to the EuFMD Executive

Period April 2018 – September 2018

**Component 3.1 - Improved system for
monitoring and evaluation of progress of
regional programmes on FMD control**

Pillar Manager: N.Lyons

Component Manager: N. Lyons / N. Rumich

Reporting: N.Lyons

Focal point Executive Ctte

1. Objective of the component

The overall objective of this component is to improve the system of monitoring and evaluation of regional programmes on FMD control.

OUTPUTS (EXPECTED RESULTS):

Support the activities of the FAO-OIE FMD working group including support for producing relevant reports and providing follow-up between roadmap meetings; Development of the GF-TADs website for relaying the results of PCP-FMD Roadmap meetings; Provide relevant training to the activities of the FAO-OIE working group including expert missions as indicated.

Specific Outputs:

1. Gather information, author reports for the FMD Working Group;
2. Activities to support global communication of the PCP situation.
3. Provide training support to the FAO: OIE working group activities.

DIRECT INVOLVED BENEFICIARIES: Activities under this component assist the GF-TADs FMD Working Group in advancing Global FMD Control Strategy

RESOURCE BASE

- HQ based: Staff 2% - Consultant 49.7% (Operational and Technical)
- Budget for activity: 89,894EUR excluding HQ and support costs, total: 116,446 EUR

2-Project team

Role	Name	Status
Pillar Manager	Nick Lyons	Animal Health Officer
Component manager	Nick Lyons/Nadia Rumich	EuFMD
GFTADS-FMD WG	Samia Metwally	FAO
	Laure Weber-Vintzel	OIE
National consultants:	Not applicable	
ExCom oversight		

3-Countries or partner organizations involved

Countries involved: this component involves collection of data at a global level from countries working through the PCP-FMD, and support through roadmap meetings to regional groups.

Activities under this component are carried out in order to assist the activities of the GF-TADs FMD Working Group.

4-Progress against indicators

Activities	Indicators	Baseline Sept 2015	Target 2 years	Unit of measure	Current Status
3.1.1	Gather information, author reports for the FMD Working Group	4	4	Number of reports	0
3.1.2	Activities to support global communication of the PCP situation	0	50% increase	Website usage statistics	0
3.1.3	Provide training support to the FAO:OIE working group activities	1	1	International training events	1

Progress Report

Progress in this component is now significant since EuFMD has received requests from the FAO-OIE FMD working group. An expert mission request has been received by the working group to assist Gulf States in developing risk-based strategic plans. This is due to take place in September 2018. Part of this component supports the activities of the PCP Support Officer system which has been approved by the working groups (details provided under component 3.2).

3.1.2: Of note the improved communication since an EuFMD intern has been working on supporting the development of the GF-TADs website to increase visibility for their activities. A new section of the GF-TADs website, brings to light progress made to date, and increases visibility of upcoming events of the GF-TADs and its associated Working groups. The website helps to specify the existing frameworks coordinated at FAO and OIE and assist endemic countries through a series of incremental steps to better manage emerging livestock disease threats. With regards to FMD, GF-TADs aims to refine the functional and technical capacities around The Progressive Control Pathway for Foot-and-Mouth Disease (PCP-FMD). The website is an important instrument for communicating this message and to bring attention to Regional Roadmap meetings, and will serve as a portal to assist participants and other stakeholders following national and regional progress in FMD control. The new website has recently been made live but is still undergoing further development to make documents from these meetings more directly assessable to users.

As part of the LoA with CIRAD, a review of the FMD vaccine-uptake potential and other FMD control options in West and Central Africa over the next 20 years is being conducted. The findings of this report will help guide FMD control development for the region, an area where FMD is expected to become increasingly important as livestock systems develop.

A Short Term Professional has been recruited from Rwanda to assist with the activities of the working group who is based within the EuFMD team. A Letter of Agreement has been signed to secure support from IZSLT (*Istituto Zooprofilattico Sperimentale delle Regioni Lazio e Toscana*) in assisting the FAO-OIE FMD working group in providing training support and expert missions including support between PCP-FMD Roadmap meetings.

5. Priorities

Recruitment of Short Term Placement to assist and co-ordinate the activities of the component.
Further consultation with the GF-TADs FMD working group.

6. Budget

Total Budget Workplan activity 24 months	Expenses (actual) Oct 17 – Aug 18	Expenses (forecast) Sept 18	% project completion (forecast)	Forecast available
86,894	31,633	7,000	44%	48,261

7. Gantt Chart

3.1 Support to Global Progress monitoring	OUTPUT 3. Improved system for M&E of the progress of regional programmes on FMD control		YEAR 1												YEAR 2											
	Target (Expected Result)	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
3.1.1 Gather information, author reports for the FMD Working Group	3.1.1.1 Information gathering																									
	3.1.1.2 Provide support to monitoring and evaluation activities of FAO-OIE FMD Working Group including contributions to reports (subject to requests) and providing follow-up between roadmap meetings																									
3.1.2 Activities to support global communication of the PCP situation	3.1.2.1 Website (in collaboration with FAO:OIE working group)		OM			WS		OM		OM		OM														
3.1.3 Provide training support to the FAO:OIE working group activities	3.1.3.1 Contribute to training 12-15 experts on FMD control measures to support countries when requested					WS		OM		OM		OM														
	3.1.3.2 Collaborate with FAO and OIE to support two or three expert team missions each year		TM	TM	TM		WS						WS					WS				WS				

EuFMD Phase IV

Report to the EuFMD Executive

Period April 2018 - September 2018

Component 3.2 - Support to Global Progress

Monitoring of FMD Control programmes

Pillar Manager: N. Lyons
Component Manager: C. Bartels
Reporting: C. Bartels
Focal point Executive Ctte

1. Objective of the component

The overall objective of this component is to enhance the international capacity for the application of the EuFMD/FAO/OIE PCP-FMD through development of tools, guidelines and knowledge transfer.

OUTPUTS (EXPECTED RESULTS):

Dissemination of the principles and applications of PCP-FMD, primarily for countries endemic with FMD but including EuFMD member states and neighbourhood; Developing guiding documents (guidelines and technical notes), trainings and workshops on PCP-FMD

Specific Outputs:

1. PCP toolbox developed for PCP-FMD user community, including guiding documents developed for joint FAO/OIE application;
2. System for training PCP-FMD experts well established and supported by resources.
3. Representation in regional roadmap meetings, FAO/OIE FMD working group and EuFMD executive meeting.

DIRECT INVOLVED BENEFICIARIES: the FMD WG of FAO/OIE; international pool of expertise at national and regional level that utilise the PCP in their work with countries, including European neighbourhood; and Pillar II activities of EuFMD that will use the guidelines/training resources.

RESOURCE BASE: as bullet points and

- **HR: Management** P5 (10%), P2 (5%). Products/Activities: developed with three consultants.

- **Budget for Activities** (EC - TF): excludes HQ based support services/cost: €155,954

2-Project team

Role	Name	Status
Pillar Manager	Nick Lyons	Animal Health Officer
Component manager	Chris Bartels	EuFMD
GFTADS-FMD WG	Samia Metwally	FAO
	Laure Weber-Vintzel	OIE
National consultants:	Not applicable	
ExCom oversight		

3-Countries or partner organizations involved

Application of PCP-FMD is worldwide, particularly for endemic situations (PCP-FMD Stage 1-3). Therefore, there is no tailoring to specific countries. EuFMD will work with FAO and OIE where appropriate in developing these tools and guidelines.

As West Eurasia (component 2.1), South-east Mediterranean (component 2.2) and North Africa (component 2.3) are focal areas for EuFMD, new developed PCP-FMD tools and training may well be first applied in these regions.

4-Progress against indicators

Activities	Indicators	Baseline Sept 2017	Target 2 years	Unit of measure	Current Status
3.2.1	Development and Revision of PCP guidelines for joint FAO/OIE application	5	6	Number of guidelines	5
3.2.2	Training of PCP-FMD experts	6	30	Number of people trained	50
3.2.3	Support the facilitation of regional roadmap meetings, their follow-up actions and associated training or assessment processes	4	a) 5 b) 5 c) 2	a) No of roadmaps supported by EuFMD trained expert annually b) Between roadmap meeting webinars c) Workshops for RAP development	a) 2 b) 1 c) 0

Progress Report

Outcome 1: PCP toolbox further developed for PCP-FMD user community, including norms set, guiding documents developed for joint FAO/OIE application

With the 2nd version of the PCP guidelines recently finalized, EuFMD have reviewed the PCP e-learning modules and developed a number of communication products to explain the changes and the consequences for the PCP community. These communication products will be widely used: EuFMD website, PCPractitioner Network, FMD Regional roadmap meetings, etc.

EuFMD was asked to review the Self-assessment questionnaires that countries were asked to fill out for the PCP assessment procedure during the FMD Regional Roadmap meetings. In collaboration with OIE, a new Self-assessment Tool is developed that includes relevant PCP activities for Stages 1 to 3 in one list of statements. The tool will be made available online and will generate automatic feedback on accomplished and pending activities and for the latter will provide an overview by high and low priority. The SA Tool is going to be used for the upcoming regional roadmap meeting in Central and West Africa, September 2018.

Based on the FAO/OIE guidelines on Post-vaccination monitoring, EuFMD conducted a second online-training course for the Middle East and Northern Africa region between April and May 2018 (reported under 3.4). This online training was followed up by a regional meeting on post-vaccination monitoring in Amman, Jordan with participants from Lebanon, Palestine, Libya, Sudan and Jordan (participants from Egypt cancelled last-minute). As a third tier on this subject, small immunogenicity studies are supported to be conducted in each of the countries (see component 2.3).

The online training course on Socio-economic impact assessment of FMD is currently under review with CIRAD. CIRAD will modify the course content and translate it into French prior to delivering online training to the Francophone countries of North, Central and West Africa planned for autumn, 2018. This is being supported under Pillar II with added benefits for Pillar III countries. See also the training programme under component 3.4.

Outcome 2: System for training PCP-FMD experts well established, and as part of the GF-TADS led implementation of the GF-TADS strategy, contributes to national and regional PCP progress

- a) Needs for PCP-FMD training in Asia and Africa (activity 3.2.2.1) are investigated in part with components 2.4, 3.3 and 3.4.
- b) Training for FAO/OIE regional officers is an ongoing discussion for the FMD Working Group: the actuality of the training, the selection of appropriate FAO and OIE regional staff and sustained support for those trained

- and applying the training. In line with this intention, EuFMD is planning to support the development of regional support officers (PSOs). See outcome 3 for further details of this new system.
- c) The same applies for the training of FMD Experts on the PCP-FMD. The FMD Working Group is currently reviewing a core list of FMD experts for this training.
 - d) In September 2018, the Kingdom of Saudi Arabia supported a follow-up workshop on development of a risk-based strategy plans for five Gulf countries. The FMD Working Group is discussing the idea to extend such workshop to other countries in the region.
 - e) The PCP Practitioner Network held two monthly sessions: “Apparent vaccine failure” and “Stakeholder identification, consultation and engagement”. Both sessions had participants from endemic regions (Africa and Asia) and FMD free regions (Europe). More information is with Component 3.4
 - f) Under the programme of the OIE subregional representation in Bangkok, the national FMD committees of Cambodia, Lao PDR and Myanmar are currently supported in developing a RBSP for FMD control. These are expected to be presented at the next SEACFMD meeting in Vietnam later this year.

Outcome 3: The GF-TADS system for PCP assessment is maintained and/or further improved, and the quality and impact of regional roadmap meetings in at least 3 regions further improved

PCP-FMD Regional Roadmap meetings

In July 2018, a regional PCP-FMD Roadmap meeting was held in Entebbe, Uganda. This provided the opportunity for regional networking and for countries to provide updates on their PCP progress and be assessed by the Regional Advisory Group. This was the first such meeting since 2014 and EuFMD supported four participants (one from the East African Regional Laboratory Network and three from EuFMD). The main outcomes of this meeting were:

1. A new RAG was appointed being the CVOs for Uganda, Republic of Sudan and Kenya.
2. Requests were made to the GF-TADs FMD working group for further support in developing country control strategies and all countries to be encouraged, supported and committed themselves to reach at least Stage 2 of the PCP-FMD by 2020.
3. Post vaccination monitoring was discussed and countries were encouraged to become critical buyers of FMD vaccines
4. The outcome of PCP assessment was as follows: PCP Stage 0: Burundi (downgraded from stage 1), provisional PCP Stage 1: Comoros, Eritrea, Ethiopia, Kenya, Somalia and South Sudan, provisional PCP Stage 2: Sudan, PCP Stage 2: Uganda. Rwanda is to be assessed through an online interview as they were unable to make the meeting.

PCP Support Officer (PSO)

The EuFMD PCP Support Officer (PSO) proposal to the FAO/OIE FMD Working Group was agreed by both OIE and FAO in May 2018. Following a letter of introduction sent to the OIE delegates by the FMD WG, PSOs have started to provide follow-up to individual countries. PSOs provide support to countries assigned provisional PCP stages with occasional exceptions when the RAG or Working Group deems such support particularly important. A summary of the system so far includes:

1. PSOs have liaised with the country PCP focal points and the local or regional FAO and OIE offices to follow up the recommended actions of the WG/RAG including provision technical advice where appropriate;
2. The method of follow-up provided by the PSO is tailored to the individual needs of the country but will likely include follow up communications and online meetings with a nominated focal-point in each country. In occasional instances country missions may be performed if deemed necessary and if funds are available;
3. Currently six PSOs are assigned from the group of EuFMD technical consultants. However, further training and recruitment of PSOs is envisaged in particular to support the emerging needs of Central

- and West Africa but also to transfer PCP expertise to the regions. (see the countries in provisional Stages 1 and 2);
4. The online PSO repository is filled with relevant documentation including workshop approaches and presentations;
 5. An information package for countries is compiled with elementary information on PCP-FMD, the RBSP and reference to relevant online training modules.

This table provides an overview of the state of affairs in July 2018.

Country	PSO	Response to PSO contact	Follow-up actions
Afghanistan	G. Ferrari	Yes	There was a meeting with the CVO in Kabul. The FMD working group has been contacted by Giancarlo to understand what the position of Afghanistan is after the RBSP was presented in the Sri Lanka meeting (December 2016) and then submitted to the working group
Lebanon	G. Ferrari	Yes	Under EuFMD workplan to support development of RBSP. Next RBSP workshop 26-28 July 2018
Jordan	G. Ferrari	Yes	Under EuFMD workplan to support development of RBSP. Next RBSP workshop
Kuwait	G. Ferrari	No	
Bahrain	G. Ferrari	Yes	The RBSP submitted by the country is already with the FMD working group.
Syria	G. Ferrari	Yes	Invited for RBSP workshop in Lebanon 26-28 July
Iraq	G. Ferrari	No	
United Arab Emirates	G. Ferrari	No	
Sri Lanka	C. Bartels	No	Plan to contact CVO/OIE Delegate by skype
Bangladesh	C. Bartels	No	Plan to contact CVO/OIE Delegate by skype
Bhutan	C. Bartels	No	Plan to contact CVO/OIE Delegate by skype
Kyrgyzstan	C. Potzsch	No	Carsten plans to contact CVO by a call
Saudi Arabia	N. Lyons	No	Regional workshop on RBSP scheduled for 2 nd week September. Organized by OIE, including other countries as Yemen, UAE, Kuwait, Bahrain
Sudan	K.VMaanen	No	Under EuFMD workplan to support development of RBSP
South Sudan	K.VMaanen	No	
Mozambique	D.Paton	No	
Malawi	D. Paton	Yes	EMC mission scheduled for 15-22 July, with plans to include country visits to Zimbabwe and Zambia
Tanzania	D. Paton	Yes	Draft RBSP submitted and under review by D.Paton
Zimbabwe	D.Paton	No	See Malawi

5-Issues for Executive Committee attention arising during implementation

EuFMD is now a full member of the FMD Working Group. This will facilitate a better understanding of the near-future plans laid out by the FMD Working Group as well better coordination and more direct collaboration between EuFMD and the FMD Working Group.

6. Areas proposed to give more attention/emphasis in the next 24-month period

The PSO system intends to give positive support for countries to follow up on progressive FMD control after attending the regional roadmap meetings. Where the current PSOs are selected from the pool of EuFMD consultants, EuFMD plans to establish a varied roster of PSOs that is balanced by gender and region.

7. Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sept 18 (forecast)	% project completion (forecast)	Actual available (forecast)
155,954	52,575	7,600	39%	95,779

8. Gant chart

3.2 Methods and guidelines for application of PCP-FMD	OUTPUT 3.2 Improved capacity, methods, and guidelines for application of the EuFMD, FAO and OIE progressive control pathway (PCP) for FMD	YEAR 1												YEAR 2											
	Target	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
3.2.1 Dev. and Revision of PCP guidelines for joint FAO:OIE application	3.2.1.1 Revision of general PCP-FMD guidelines																								
	3.2.1.2 Support to developing guidelines on socio-economic impact assessment of FMD																								
	3.2.1.3 Dev. additional guidelines relevant to PCP-FMD stage 0-3 (incl. that requested by the FAO/OIE WG) including: RAP, NCP, conducting sero-surveys; value-chain analysis; risk assessment; stakeholder consultation; PCP check lists.																								
	3.2.1.4 In response to country requests, development and broadcasting of e-learning materials including organizing PCP-FMD e-learning courses for countries in stage 0-3 (in line with activities under components 2.4, 3.3 and 3.4)																								
3.2.2 Training of PCP-FMD experts	3.2.2.1 Explore financial resources for training PCP-FMD experts																								
	3.2.2.2 Support the dev.t of PCP-FMD experts training prog																								
	3.2.2.3 Support and maintain a network of PCP-FMD experts through their involvement with the PCP Practitioners Network (see comp 3.4)																								
	3.2.2.4 Explore ways to accredit PCP-FMD trainers (see also comp3.4)																								
3.2.3 Support facilitation of reg.roadmap meetings, follow-up actions and associated training or assessment processes	3.2.3.1 Support the facilitation of regional roadmap meetings (MENA, West Eurasian, Eastern Africa, SADC, SAARC, others), including reporting																								
	3.2.3.2 Support to follow-up on Target (Expected Result) and actions agreed during the regional roadmap meetings																								
	3.2.3.3 Adaptation of PCP-FMD assessment materials and procedures at reg. roadmap meetings, dependent on revision of PCP-FMD guidelines (activity 1.1) and request from FMD-Working Group.																								

EuFMD Phase IV
Report to the EuFMD Executive
Period April 2018 - September 2018
Component 3.3 -Laboratory support

Pillar Manager: N. Lyons
Component Manager: C. van Maanen
Reporting: N.Lyons
Focal point Executive Ctte:

1. Objective of the component

The overall objective of this component is:

improved international FMD reference laboratory services and their contribution to regional epidemio-surveillance networks

This component will continue to give support for improved international FMD reference laboratory services and their contribution to regional epidemio-surveillance networks. The outputs of this component should result in an increased level and quality of surveillance information from the OIE/FAO Lab Network, with progress towards the targets required for regional roadmap vaccine priority setting in at least the 4 priority virus pools (pools 4, 5 and 6 in Africa and pool 3 in West Eurasia).

Most activities under this component will be subcontracted to the Foot-and-Mouth Disease World Reference Laboratory (WRLFMD) under a Letter of Agreement (LoA) between FAO and The Pirbright Institute (TPI). Expected results include: improved coordination and international harmonization in methods and other support to activities by the OIE/FAO global FMD laboratory network; a level of international surveillance performance in priority virus pools and countries that meet or exceed minimum the required for regional vaccine match recommendations; through diagnostic activities managed by the WRL, epidemio-surveillance networks in priority pools that function effectively in gathering, sharing and improved use made of surveillance information; and support for a global proficiency test scheme to include 12 laboratories in the global network.

Activities in 2017-19 will re-invigorate regional laboratory networks, with better epidemiology linkages, to ensure better technical expertise development at regional levels, underpinning surveillance and regional roadmaps. The Foot-and-Mouth Disease Laboratory Investigation Training Course (FLITC) for which modules have been developed by TPI has been delivered for the first time in October 2017 in collaboration between EuFMD will be delivered again at least once in 2017 – 2019.

In West and Central Africa, the initial focus will be on identifying regional partners for collaboration, and a thorough assessment of competency gaps, training needs and appropriate training modalities for the region (see also component 3.4). We will explore the use of Francophone institutions with existing experience in the region as delivery partners for relevant projects with the aim to subcontract activities under a LoA. Considering the significant gaps in virological surveillance and disease intelligence in West and Central Africa, local partners have already been sought to undertake a project to enhance surveillance through the use of lateral flow devices working with the newly appointed EU FMD reference laboratory at ANSES.

OUTPUTS (EXPECTED RESULTS):

1. Coordination of international harmonization in methods and support activities by the OIE/FAO global FMD laboratory network.
2. Support to international surveillance performance in three priority virus pools including sample shipment, training and supervision of Regional Support Laboratories (RSLs) to meet or exceed minimum surveillance requirements.
3. Development and implementation of training materials and courses for epidemio-surveillance networks in 3 priority pools.
4. Support for a global proficiency test scheme, to include 12 laboratories in the global network.

DIRECTLY INVOLVED BENEFICIARIES: The direct beneficiaries from this component are the WRLFMD and all countries that submit samples and make use of the epidemiological and vaccine matching advice provided. Also the laboratories in the global network that benefit from the proficiency tests and other laboratories that benefit from the training provided. Finally the partners in West and Central Africa who will be delivering on the surveillance project in development.

RESOURCE BASE

HR: HQ operational costs € 11,887

Budget for Activities (EC - TF): *excludes HQ based support services/costs.*

€ 628,772 (€ 455,100 total contract WRLFMD – Component 3.3- 416,100 // 39,000 1.7).

2-Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	Nick Lyons	Animal Health Officer
Component manager	Kees van Maanen	EuFMD
STC members involved in oversight role	Stephan Zientara (lab) Nick Lyons (epi)	STC
Contractor	The Pirbright Institute- Donald King	Head, World Reference Laboratory, Pirbright
FAO Contact		Lab Unit coordinator, FAO
Excom oversight	TBC	Executive Committee

3-Countries or partner organizations involved

FAO and OIE developed the joint global laboratory network proposal in collaboration with the World Reference Laboratory at the Pirbright Institute.

4-Progress against indicators

<i>Activities</i>	<i>Indicators</i>	<i>Baseline Sept 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
3.3.1	Number of OIE/FAO Laboratory Network meetings	2	4	Annual International Meeting	3
3.3.2	Number of samples typed in relation to minimum surveillance requirements per pool	0	6	Number of pools where target reached (120 samples per year per target pool from at least 5 countries)	0*
3.3.3	Number of new modules for e-learning and training on laboratory surveillance meeting quality standards	0	3	e-learning modules	1
3.3.4	Number of laboratories supported to take part in global proficiency testing scheme annually	0	10	Laboratories taking part in proficiency testing scheme annually	4.5**

*Based on figures in WRLFMD Quarterly reports from October 2017-June 2018 inclusive

** 9 from of 12 global network labs listed in WRLFMD LoA participated in 2018 test

Progress Report

Output 1. Coordination of international harmonization in methods and support activities by the OIE/FAO global FMD laboratory network.

The 12th OIE/FAO FMD Laboratory Network Meeting was organized in Pretoria, South Africa 28th – 30th November 2017 as covered in the previous report to the executive committee. The next meeting is planned for November 2018 in the UK. The OIE/FAO FMD Reference Laboratory Network is a vital contributor to the global control of FMD and provides opportunities and expertise for developing and sustaining laboratory capacity and capability, exchange of materials and technologies, harmonising approaches to diagnosis and supporting complementary research. Laboratories within the network regularly receive samples for FMD diagnosis from many parts of the world. The in vitro antigenic properties of selected isolates are assessed for vaccine matching and nucleotide sequencing allows precise characterisation of new isolates and tracing of their origin by comparison with viruses held in virus collections. This analysis assists the monitoring of the 'real time' emergence and spread of FMD virus globally.

The text of a Memorandum of Understanding (MoU) that describes the working relationship between the 15 OIE and FAO Reference Laboratories that have responsibility for FMD has been drafted by WRLFMD and agreed by all partners (via the Annual meetings and follow-up teleconferences), and OIE and FAO. The final version of the document has been circulated during 2017 for official signatures.

Exchange of viral sequence data is occurring regularly, for example in the previous two years WRLFMD has exchanged viral sequence data with the OIE/FAO global FMD laboratory network (and other laboratories) including BVI (Botswana), PD-FMD (India), RAHO 6 (Vietnam), APQA (South Korea), LVRI (China) FGBI-ARRIAH (Russia), OVI (South Africa), KVI (Israel), CODA-CERVA/NVRI, (Belgium/Nigeria) JUST (Jordan), SAP Institute (Turkey), ANSES (France), IZSLER (Italy), VRI (Sri Lanka). Where new sequence data has been provided to WRLFMD, genotyping reports have been prepared and circulated to OIE and FAO.

Collaborative studies involving WRLFMD included the coordination and exchange of information associated with the emergence and spread of the viral lineages, evaluation of FMDV vaccines and the development of new diagnostic tests (see publications: Bachanek-Bankowska et al., 2016; Knowles et al., 2016; Eldaghayes et al., 2017; Qiu et al., 2017; Ularanu et al., 2017; Lyons et al., 2017; Saduakassova et al., 2017; Howson et al., 2018; Souley Kouato et al., 2018).

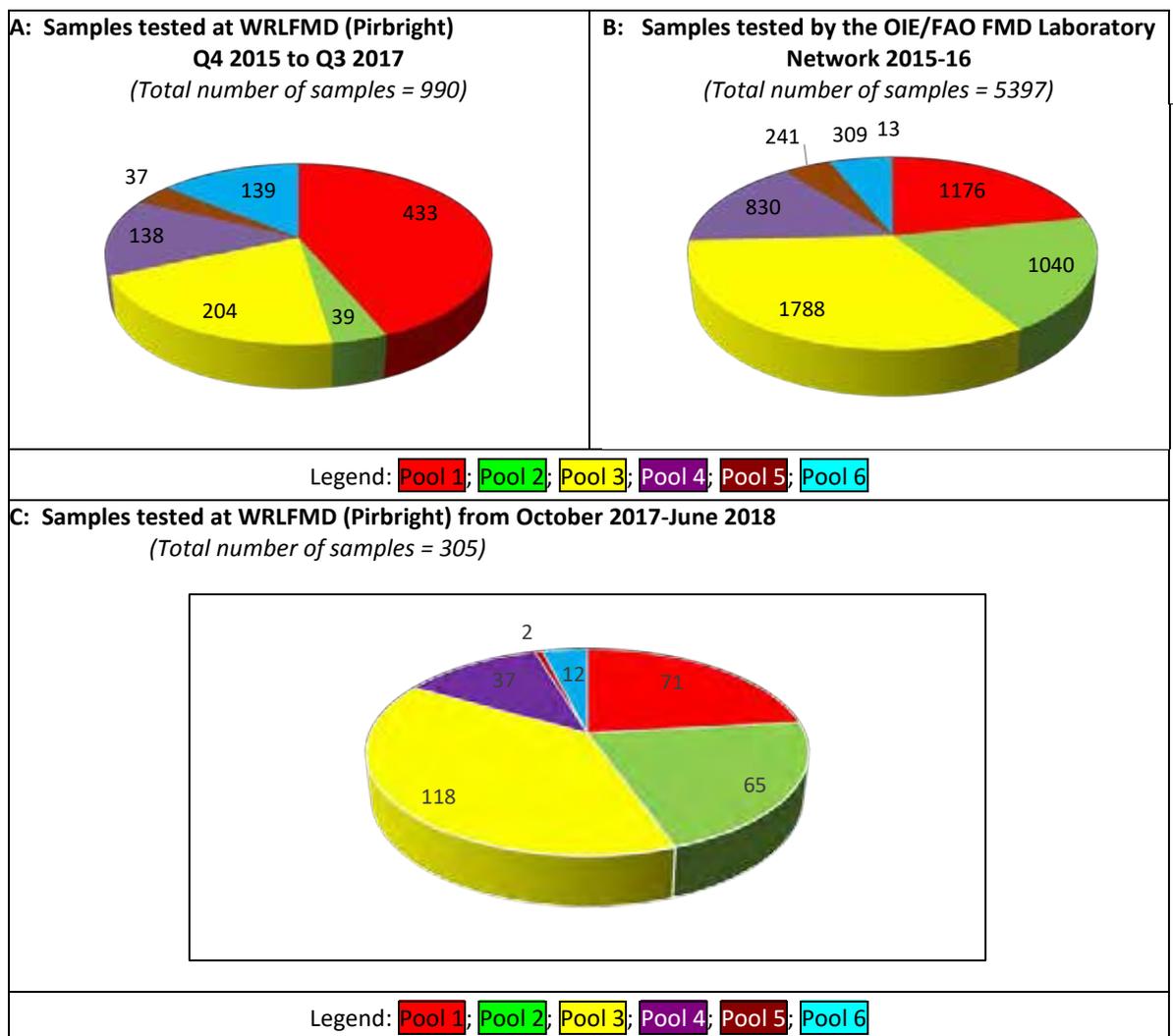
Recent achievements of the OIE/FAO Foot-and-Mouth Disease Reference Laboratory Network:

- Agreement on a memorandum of understanding (MoU) to cover Network activities.
- Initiated and contributed expertise to an OIE Resolution relating to FMDV serotype C (http://www.oie.int/fileadmin/Home/eng/About_us/docs/pdf/Session/2017/A_RESO_2017_Public.pdf adopted by the OIE-GS in 2017).
- An annual report from the network has been drafted and is due to be published in August 2018.
- Regular communication and discussion with individuals (and as a group) regarding FMD outbreaks in regional pools – such as recent cases in North Africa (including exchange of lab data and reports);
- Informal meeting at GFRA meeting in Argentina (June 2018) – to establish working group for review of the OIE Manual;
- Representative from WRLFMD has attended FMD RoadMap meeting in Entebbe, Uganda (2nd-4th July);
- proposal with OIE being discussed to develop capacity for independent vaccine QA/QC at AU-PANVAC.

Output 2. Support to international surveillance performance in 3 priority virus pools including sample shipment, training and supervision of Regional Support Laboratories (RSLs) to meet or exceed minimum surveillance requirements

Over 3000 clinical samples from suspect cases of FMD were tested by laboratories in the Global FMD Network (and associated laboratories) during 2016 (report for 2017 is pending). However, sampling within these pools is not equivalent: surveillance within West Africa (Pool 5) is particularly sparse and efforts are currently underway to collaborate with local partners to enhance sampling for FMDV in this region.

Under the previous WRLFMD LoA covering the period Q4 2015 – Q3 2017 WRLFMD has tested about 500 virological samples per year and the network altogether has tested about 2,700 virological samples per year (see figure below: A&B). Under the current LoA (October 2017-July 2018), 305 samples were submitted to the WRL for virus detection. These came from six pools (see figure below: C). Two hundred and twenty (220) VP1 sequences were generated and vaccine matching tests were performed using 61 isolates from the following serotypes: O (n=33); A (n=14); Asia-1 (n=7); SAT1 (n=1); SAT2 (n=3); SAT3 (n=3). Fifty-four (54) serum samples were also received from Mongolia as part of their post-vaccination monitoring (partially supported from WRLFMD LoA). During this time, a sample shipment has been supported from Sudan and is currently being organised for Kenya, South Sudan and Zambia.



Training and supervision to regional support laboratories: In this reporting period, the WRLFMD staff have provided training in a range of FMD diagnostic and field methods as part of an OIE Twinning Project with NAHDIC in Ethiopia (covered under a separate OIE contract). A two-week practical training course at Pirbright was provided for delegates from Thailand, Ethiopia; Estonia and New Zealand. In the previous two years, the WRLFMD continued to provide two-week practical training courses in FMD diagnostics which have involved delegates from Albania, Malta, Sweden (for 2016), and Israel, Lithuania, New Zealand and Singapore (for 2017). This course covers practical instruction in virological and serological diagnostic methods including virus isolation, real-time RT-PCR, sequencing, Ag-ELISA, SP and NSP serological methods, VNT and vaccine-matching. In addition, tailored courses have been offered at Pirbright to cover RT-PCR methods (2 delegates from Botswana in 2016, and one student from Kazakhstan in 2017), FMD serology (1 delegate from Ireland in 2017), as well as visits to overseas laboratories to deliver specific training in real-time RT-PCR (Kenya; travel for two WRLFMD staff funded under this LoA), sequencing (Tanzania) and vaccine-matching (South Korea). Written advice (via email) on FMD diagnostic methods has been regularly provided to FMD Reference laboratories in many different countries on multiple occasions.

VSF Project in Mali: Under this output, a LoA was finalised with VSF-Suisse on a project related to enhanced surveillance in West Africa using Lateral Flow Devices (LFDs) provided by Boehringer-Ingelheim. In April 2018, a practical training course for VSF was run by EuFMD staff in Bamako covering FMD diagnostics, epidemiology and biosecurity to assist with the finding and collection of samples (including virus inactivation of LFDs). For the project fieldwork, three zones were targeted for sampling to take into account the specificities of livestock farming in Mali:

- (i) a "Western" zone in the Kayes region characterized by animal migration routes between Mali, Mauritania and Senegal
- (ii) a "Central" zone whose main characteristic is the development of a more intensive breeding mode, mainly located in the Bamako peri-urban area
- (iii) an "Eastern" zone rather known as the "pastoral zone" in the so-called Gourma to take into account herd movements between Mali, Burkina and Niger.

Sample collection has been completed and a shipment to ANSES is currently being arranged where the samples will be tested. Further projects are currently being considered under this output including an assessment of LFDs in different ecological zones in WCA and the possible use of environmental sampling.

Output 3. Development and implementation of training materials and courses for epidemio-surveillance networks in 3 priority pools

To revitalise the networks in East Africa, a core group was formed to organize a series of webinars and online meetings. Since February 2016 these have been organized on a monthly basis. In 2016, nine webinars were organised, and the structure has been amended after discussions in the core group and feedback from the audience. In 2017 it appeared quite difficult to organize webinars. A short term professional from the region has been recently employed with one of their tasks being to try and revitalise this network.

A major achievement of WRLFMD has been the recent development of new eLearning modules for field investigation, diagnostic methods and quality assurance. Specific funding to cover the generation of the eLearning packages was provided by BBSRC (UK), but technical content and oversight of the project came from WRLFMD staff and all the material was reviewed by EuFMD staff. EuFMD provided the elearning platform and expertise and hosted the first **FMD Laboratory Investigation Training Course (FLITC)**. This joint WRLFMD/EuFMD FLITC course was successfully provided to >100 scientists during October 2017 with three webinars co-hosted by WRLFMD and EuFMD (inputs and outputs under components 3.3 and 3.4 of the EuFMD work program). A further FLITC is planned in the next year. Further funding has also been secured from BBSRC to develop an e-learning course in Post-vaccination monitoring (PVM), again in collaboration EuFMD which is on target for first delivery by the end of 2018.

Networks in West Africa also need to be revitalised. Since most countries in pool are Francophone, a Francophone network has been set up under the EuFMD umbrella with the valuable assistance of Dr

Labib Bakkali-Kassimi, ANSES, Maison-Alfort, Paris. In 2017, four webinars have been organized with the following topics: 1) Réseau francophone pour le contrôle de la fièvre aphteuse - lancement du réseau et de ses activités; 2) Situation épidémiologique de la fièvre aphteuse et les mesures à prendre pour une détection précoce; 3) Cartographie des risques et leurs utilités dans le contrôle de la fièvre aphteuse; 4) Impact socio-économique de la fièvre aphteuse et le rôle du commerce transfrontalier du bétail dans l'amplification et la dissémination des maladies. WRLFMD staff assisted a recent FMD Investigation Course in French (FITC, see report for component 3.4). A short term professional from the region is due to start with EuFMD in September 2018 to assist development of this network.

In West Eurasia (pool 3) networks also need to be revitalised. Steps forward for development of the West Eurasia networks Epi-net and Welnet in support of better information share have been discussed during the West Eurasia networks online meeting: West Eurasia Networks-discussion on regional needs and networks activity plans proposals, carried out on 11th May 2017, and were discussed in more detail during the "First Regional West Eurasia FMD Epidemiology and Laboratory Networks Meeting" in Tbilisi, Georgia on 18-20 September, 2017. The aim is to support sustainable regional networks development, to promote technical discussions and coordination to address existing gaps in regional FMD control, as well as to consolidate on the past activities and recommendations from the West Eurasia Roadmap meetings. See component 2.1 report for more information.

Output 4. Support for a global proficiency test scheme, to include 12 laboratories in the global network

WRLFMD activities have continued as planned under the current LoA. The 2018 PTS has been completed and results will be summarized in the 2018 annual report of the OIE/FAO FMD Laboratory Network. In total, 81 laboratories were invited to participate with 70 shipments arranged. Twenty-five laboratories were supported by EuFMD under components 1.7 and 3.3. Of the global network participants supported by EuFMD, nine out of 12 invited FMD laboratories actually participated in the 2018 PTS (China, India and Senegal did not participate).

5-Issues for Executive Committee attention arising during implementation

- In December 2017 an East African Regional Laboratory Meeting (EARLN) was organised in Ethiopia under the umbrella of an OIE twinning project between The Pirbright Institute (TPI) and the National Animal Health Disease Investigation Centre (NAHDIC) in Ethiopia. A representative from EuFMD attended the meeting. Many issues were identified regarding the sustainability of this network and actions were agreed. EuFMD in collaboration with TPI/WRLFMD should follow up on these actions which so far has been challenging.
- In West Africa (pool 5) only few countries are active with collecting, testing and reporting samples. The francophone network needs support including identifying subjects and speakers for webinars, but alternative forms of communication are needed in an area where conventional e-learning may not be appropriate. Anglophone countries in this region also require training in sample collection.
- The surveillance project with VSF in Mali has been successful so far with results from LFD testing expected in the next few months. Other projects to enhance disease surveillance are under development.
- Shipments from priority pools (3, 4, 5, 6) realised to fulfil requirements for adequate virological surveillance and disease intelligence (as formulated during 39th General Session). No targets have been reached for any priority pool this year.
- Organisation of training courses for regional support laboratories in pools 3, 4 and 5. Availability of WRLFMD staff for missions abroad can be challenging considering their other duties and responsibilities.

7. Budget

Total Budget Workplan activity 24 months	Expenses (actual) Oct. 17 –Aug. 18	Expenses (forecast) Sep 18	% project completion	Forecast available
628,772	465,927	4,900	75%	157,945

3.3 Lab. support	OUTPUT 3.3 Improved international FMD reference lab services and their contribution to regional epidemio-surveillance networks		YEAR 1												YEAR 2												
	Target	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
3.3.1 Coord. of international harmonization in methods and support activities by the OIE/FAO global FMD lab. network	3.3.1.1 Harmonization of communication and data sharing between network lab. (managed by Pirbright Institute- World Reference Laboratory- WRL)									M																	
	3.3.1.2 Org. of the annual OIE/FAO ref lab meeting including support to reg. support labs to attend (managed by WRL)					W	S			O	M	M		O	M	M		O	M			O	M				
	3.3.1.3 Annual report on global FMD status (managed by WRL)										M													M			
	3.3.1.4 Diagnostic services for samples submitted to WRL (managed by WRL, some tests may be delegated to leading lab. in the global network with WRL support and supervision)																										
3.3.2 Support to intl. surv. perf in 3 priority virus pools including sample shipment, training and supervision of RSL lab to meet or > min.surv. req.	3.3.2.1 Support to sample shipment from labs in pools 4, 5 & 6 and labs from countries/regions with relevant gaps in virological surv. to WRL (managed by WRL)			W	S				W	S			W	S			W	S			W	S			W	S	
	3.3.2.2 Training and supervision to reg. support laboratories in pools 4, 5 and 6 regarding sample collection, lab. analysis, sample archiving and sample selection for shipment (managed by WRL)		W	E	B			O	M	W	E	B			O	M	W	E	B			O	M	W	E	B	
	3.3.2.3 Support to obtain samples from outbreaks			L	S				L	S			L	S			L	S			L	S			L	S	
	3.3.2.4 Procurement of reagents and kits					V	O	M			V	O	M			V	O	M			V	O	M			V	O
3.3.3 Dev. & implementation of training materials and courses for epidemio-surveillance networks in 3 priority pools	3.3.3.1 Current status of laboratory and epidemiology networks in pools 4, 5 and 6 analyzed and needs assessed									M						W	S			W	S						
	3.3.3.2 Development of training material for all relevant FMD laboratory tests including pitfalls and trouble-shooting, biosafety, sample archiving, laboratory management, quality systems etc. (contracted to WRLFMD in Pirbright)					W	S																				
	3.3.3.3 FLITC courses delivered, discussion forums created and moderated, online meetings and webinars org. for all endemic regions/pools in close collaboration with comp 2.1, 2,4 & 3.4																										
	3.3.3.4 Online meetings concerning network mgt, issues, priorities, topics of interest, organized twice a year																										
3.3.4 Support for a global PTS, to include 19 lab in the global network	3.3.4.1 global PTS for 12 network labs including 4 RSLs located in pools 4 & 5																										

EuFMD Phase IV Report to the EuFMD Executive

Period April 2018 – September 2018

Component 3.4 - Global access to PCP-FMD training resources

Pillar Manager: N. Lyons

Component Manager: J. Maud

Reporting: J. Maud

Focal point Executive Ctte: M. Blake

1. Objective(s) of component

The overall objective of this component is **Improved national and regional capacity for the roll-out of the Global Strategy and the management of FMD: Pillar III Training Component.**

Outputs (expected results):

3.4.1 PCP and associated training resources tested, evaluated and available for use (in more than one official language) in African and Asian FMD endemic regions in line with the intentions of the GF-TADS FMD WG.

3.4.2 System established to safeguard the sustainable use of PCP training resources in at least two regions outside the European neighborhood, and supportive to the establishment of regional and global PCP-FMD networks of trainers and users.

Resource base:

Total component budget (EC funded): 221,748 EUR

2. Project team

<i>Role</i>	<i>Name</i>	<i>Status</i>
Pillar Manager	Nick Lyons	Animal Health Officer
Component Manager	Jenny Maud	Training Programme Manager
Knowledge Leader PCP and Practitioners' Network	Chris Bartels	
Partner Organizations	Training activities carried out in collaboration with regional partners and organizations in support of the GF-TADS Global Strategy for FMD control.	n/a
ExCom oversight	Martin Blake	Executive Committee

3. Countries or partner organizations involved

For the roll-out of PCP-FMD training and resources in Asian and African regions, a close collaboration is foreseen with regional FAO or OIE offices. Additionally roll-out may make use of non-governmental organizations (NGOs), bi-lateral or multilateral organizations, especially where such partnerships might bring sources of additional funding or resources. Activities in this component are in support of the roll-out of the Global Strategy for FMD Control.

To date activities under this component have been carried out in close collaboration with the FAO Sub-Regional Office for Southern Africa and the FAO Regional Support Unit for South Asia.

New partnerships are foreseen in South Asia, with Indian academic and governmental institutions, and additionally with NGO's and academic institutions based in, or working in West and Central Africa.

4. Progress against indicators

Activities	Indicators	Baseline Sept 2015	Target 2 years	Achieved Sept 2018	Explanation of indicator
3.4.1	e-learning courses delivered	0	12	8 Southern Africa: FMD Investigation Training Course FMD Post Vaccination Monitoring (joint South Asia) FMD Laboratory Investigation (global) South Asia: FMD Investigation Training Course FMD Post Vaccination Monitoring (joint Southern Africa); FMD Laboratory Investigation (global); FMD Investigation Training Course (2); FMD Risk Analysis Along the Value Chain (also some countries in S, E and W Africa, NENA) West and Central Africa FMD Investigation Training Course in French (1)	Number of e-learning courses delivered to South Asia or African regions.
3.4.2:	Nb of participants from region taking part in online training course or webinars.	0	200	172	Participants engaging in single e-learning event annually (e.g. joining online course or webinar).

5. Progress report

Target 3.4.1: PCP and associated training resources tested, evaluated and available for use (in more than one official language) in African and Asian FMD endemic regions in line with the intentions of the GF-TADS FMD Working Group.

Activities:

3.4.1.1 Plan for modification and delivery of training courses and resources for Asia region

A detailed plan for the activities to be carried out in support of South Asia across the Pillar III programme has been developed and is being used for ongoing consultation with regional partners.

An updated version of the e-learning planned in South Asia under this plan for the next biennium is detailed below:

Course	2017	2018				2019		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Open Access: Introduction to the Progressive Control Pathway								
Open Access: Risk Based Strategic Plan								
Progressive Control Practitioners' Network								
In-depth Post vaccination monitoring								
FMD Laboratory Investigation Training Course								
In-depth Risk Analysis Along the Value Chain								
FMD Investigation Training Course Regional								
National Level Course								
In depth FMD Socio-Economic Impact Assessment								

3.4.1.2 System for M&E established

The system for monitoring and evaluation of training is now well established. All training courses are evaluated by an online feedback survey immediately after the workshop, with summative assessments to verify participant's knowledge used at the end of online training courses. A protocol for evaluation of each training course, based on the evidence provided by the survey and assessments has been developed. All results of surveys and evaluation documents are stored on a dedicated "trainers" section of the EuFMD e-Learning platform, and are shared with relevant nominating organizations.

A more detailed consultation on the monitoring and evaluation of the training program, including external evaluation, is currently being organized (see components 1.1 and 2.4 for more information).

3.4.1.3 Courses delivered and evaluated Asia region

Two e-learning courses have been conducted for South Asian countries in the period March- September 2018.

FMD Risk Analysis Along the Value Chain

This "in-depth" online course took place in June and July and involved 85 nominated participants from all South Asian (SAARC) countries, plus additional countries which were prioritized as requiring assistance in the development of Risk-Based Strategic Plans under the new PCP Support Officer system (see component 3.2).

The course aimed to enable participants to be confident in conducting their own risk analysis and value chain mapping, and that these skills could be used directly to develop or implement FMD control strategies in participant's countries.

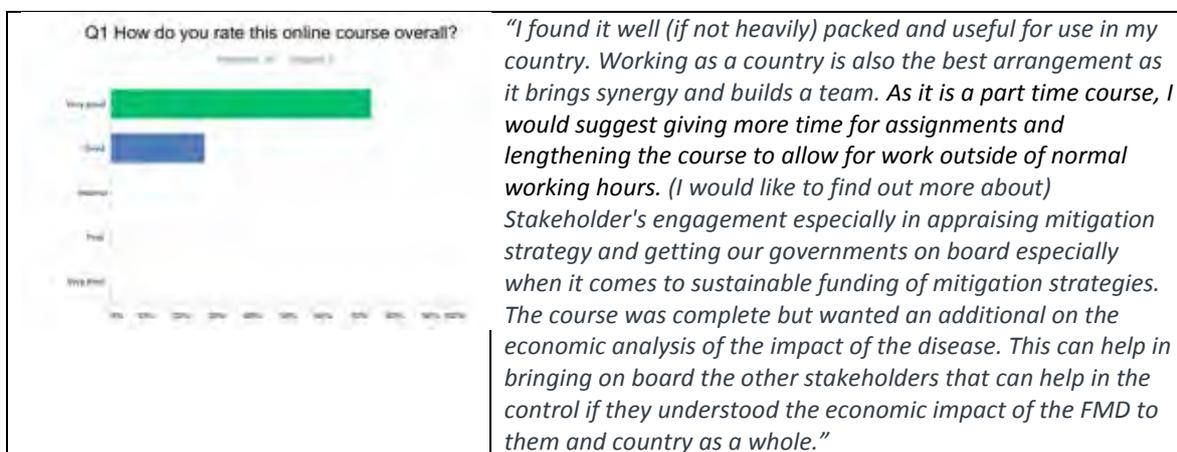
The learning objectives were that participants who complete the course would be able to *apply the key concepts and principles of risk analysis; map value chains in order to identify disease transmission risks and control options; assess the impact and feasibility of candidate risk mitigation measures; apply what you have learned to the development of a Risk-Based Strategic Plan for FMD control.*

The course involved four hours study per week over a six-week period, with participants working in country groups to complete an assignment each week. The assignments are reviewed each week by the course tutors, and additionally through peer review of each other's assignments. The assignments work through the process of mapping of value chains, risk analysis along the chain and identification of risk-based control options and the intention in that the assignments, once completed, can be directly added to a national Risk-Based Strategic Plan (RBSP).

39 of the 86 participants completed all aspects of the course. All except five countries had at least one participant taking a full and active part in the course, and as such, 12 participating countries developed materials that are intended to be used in their ongoing RBSP development. The final versions of the assignments, together with tutor's comments, have been passed to the PCP support officers for the countries concerned.

- Afghanistan, Cambodia, Laos, Myanmar, Maldives *Not completed*
- Bahrain, Bangladesh, Bhutan, Ethiopia, India, Iraq, Kenya, Malawi, Mozambique, Nepal, Nigeria, Pakistan, Sri Lanka, Sudan, Tanzania, Uganda, Zimbabwe *Full set assignments completed*

A summary of the participant's responses to the feedback survey is given below. Feedback was positive with participants stating the course was highly relevant to their needs (94%) and appreciating the practical application of the course. Many participants commented on the high time requirement needed for this course, particularly the course assignments.

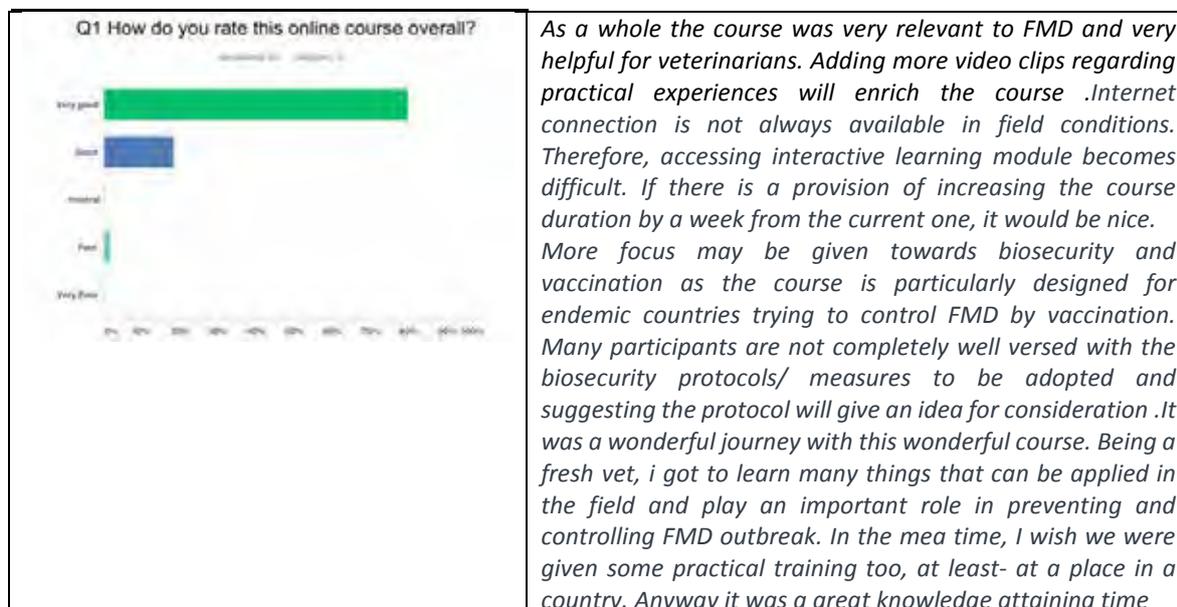


FMD Investigation Training Course for South Asia (2)

This was the second edition of the FMD Investigation Training Course for South Asia and was conducted in July 2018. 184 participants were enrolled in the course. Each participating country's Chief Veterinary Officer (CVO) was invited to nominate participants for the course and in addition it was possible for participants to nominate themselves for the course, and this opportunity was advertised through regional veterinary networks.

The learning objectives of the course were to *recognize the clinical signs of foot-and-mouth disease in cattle, pigs and small ruminants and conduct a clinical examination of suspected animals; age foot-and mouth disease lesions and understand the epidemiological and diagnostic importance of lesion ageing; take appropriate samples for laboratory diagnosis and describe the diagnostic tools available for the detection of foot-and-mouth disease; construct a timeline to carry out source and spread tracing and identify dangerous contacts, being able to prioritize them; identify risk factors for local disease spread; describe the risks of foot-and-mouth virus spread associated to veterinary personnel and relate the characteristics of the virus with appropriate biosecurity strategies; effectively use personal protective equipment (PPE) and establish and effective cleaning and disinfection protocol for visiting foot-and-mouth disease suspected premises; explain the key features of foot-and-mouth disease vaccines and the basic concepts related to vaccine programme implementation and monitoring; describe the different epidemiological settings that determine the objective of a foot-and-mouth disease vaccination programme and outline different vaccination strategies; explain the key features of the Progressive Control Pathway.*

36% of the 189 participants nominated for the course completed all the requirements and gained their certificates. This completion level is lower than the previous version of this course, and follow up is underway to better understand the reasons for relatively low completion levels. The feedback from those who did complete the course was positive, with a summary given below. Suggestions for improvements to the course included addition of further interactive videos and webinars.



Course survey

National e-learning courses in India

Formal letters have been sent, under the co-ordination of FAO India, to the Indian Council of Agricultural Research (ICAR) requesting collaboration in the delivery of national e-learning courses in India. This proposal has been approved, and work has begun to further co-ordinate with these partners for the adaptation of the e-learning course to the Indian situation.

3.4.1.4 Training needs assessment carried out in West and Central Africa and plan for training to be delivered in the region developed

Initial activities in West and Central Africa have been initiated, with activities initially focused on understanding needs related to field submission of samples and veterinarian/para-veterinarian capacity related to FMD control (see reported elsewhere under Pillar III program).

The letter of agreement concluded with CIRAD (see reported elsewhere) includes a short assessment of training needs in West and Central Africa. This training needs assessment is underway and the report is expected to follow the delivery of the French language socio-economics course, which has been postponed to be delivered in October 2018.

The findings and feedback of the first online course for North, West and Central Africa also provided important information for the training needs assessment for this region (see reported below).

3.4.1.5 Training courses and resources are delivered and evaluated in West and Central Africa.

A first pilot e-learning FMD Investigation Training Course in French was organized in July 2018. The CVO's of all countries in North, West and Central Africa were invited to nominate participants for the course. In addition, the opportunity for participants to nominate themselves was advertised through regional networks. A total of

298 participants were therefore registered on the course. In order to address concerns regarding internet connectivity in West and Central Africa, training materials and discussion forum posts were sent to participants using social media and mobile phone communication (Whatsapp™).

The learning objectives for this course were the same as for the FMD Investigation Training Course for South Asia, listed above.

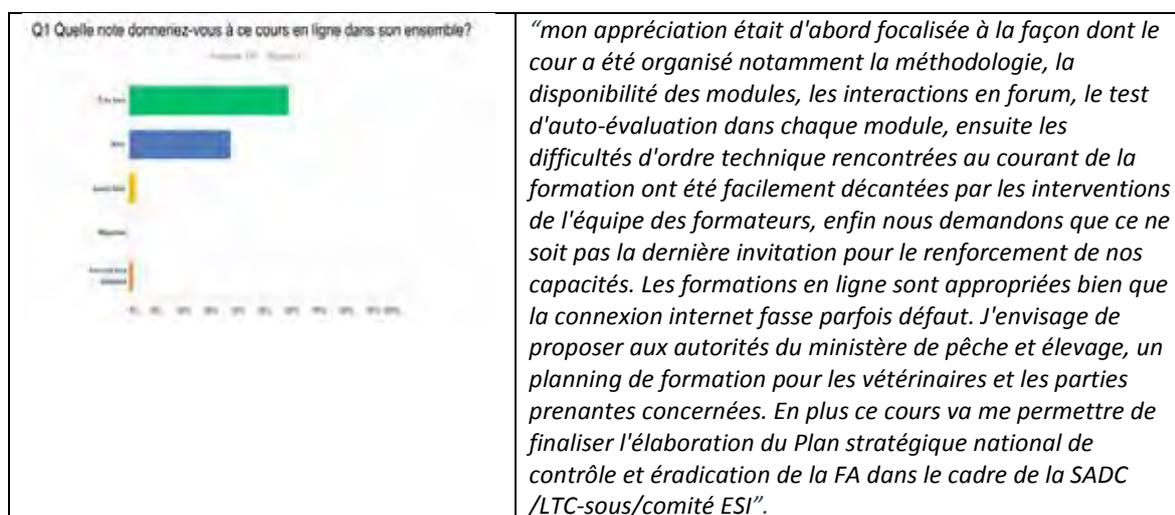
In total, 30% of participants completed the course. The split according to countries was as follows:

Percentage of completion online per country:

Algeria: 24% Benin: 21% Burkina Faso: 56% Cameroon: 23% Central African Republic: 0% Chad: 6%
Congo: 0% Cote d'Ivoire: 47% DRC: 28% Kenya: 0% Gabon: 20% Guinea: 9% Morocco: 68% Niger: 29%
São Tomé et Príncipe : 0% Senegal: 75% Togo: 0% Tunisia : 48%

While the relatively low percentage completion indicates that internet connectivity is challenging in this region, the enthusiastic participation of those who were able to be involved is encouraging. The use of social media and mobile phone technology helped drive additional participation.

Participants responded to a feedback survey, including additional questions related to identifying future training needs. Overall feedback was positive, with participants particularly valuing the discussion forum and interactive elements of the course including videos. Some participants suggested that additional time to complete the course should be given, and requested the addition of further interactive elements. Most participants agreed that they would be able to practically implement what they had learned, and requested further e-learning or training related to the topics of this course, or in addition, further training particularly related to disease control strategies and vaccination.



Course survey

3.4.1.6 Training courses and resources are made available to countries outside the target regions, based on demand from the GF-TADs working group

Places on the FMD Risk Analysis Along the Value Chain e-learning course were made available to countries outside the South Asia and W/C Africa target regions, please see reported above.

3.4.2.1 Develop webinar series and network for global PCP practitioners

Progressive Control Practitioners' Network

Two training topics were conducted under the Progressive Control Practitioners' network in the last six months. The network now has 172 members and between 25 and 45 participants attended each of the webinars. 11 participants have now been awarded a bronze level certificate, indicating that they have completed over 10 hours of training through the network.

A summary of the new training resources developed is included below.

Month Five: Investigation of Apparent Vaccine Failure

Training exercise: discussion of three scenarios of apparent vaccine failure; First webinar: Investigation of Apparent Vaccine Failure; Recorded presentation: Dr Klement: The Field Effectiveness of an Inactivated Vaccine for Prevention of FMD; Second webinar: Investigation of Apparent Vaccine Failure; Job aid: Matrix for investigation of apparent vaccine failure.

Month Six: Month Six: Stakeholders: who are they, why and how can they contribute to progressive FMD control?

First webinar: Introduction to Stakeholders; A short assignment: tools for stakeholder consultation and setting up a multi-stakeholder process; Presentations: Private Sector Veterinary Service Providers and Extension Education; Second webinar: Introduction to Stakeholders, Public-Private Partnership

Francophone network

(Please also see reported under component 2.3)

The Francophone network has global reach with webinars conducted in French language. One webinar has been held in March- September: *Partenariat Public-Privé (2 /2): « Implication et amélioration du rôle du vétérinaire privé dans la lutte contre la fièvre aphteuse »*.

The online course for North, West and Central Africa has been beneficial in generating new audiences for the Francophone network and all those taking part in the online course have been added to the network.

3.4.2.2 Support regional networks in target regions identified under 3.4.1, and provide assistance to networking activities in other regions if appropriate

A proposal to support laboratory and epidemiology networking in South Asia with a series of webinars and online meetings has been developed and communicated to the co-ordinators of the networks however it has not been possible to move further and deliver webinars under these networks. This is a priority for the next six months.

3.4.2.3 Assist collaborating organizations to develop a sustainable system for training

A collaboration with ICAR, India, is now underway, see listed above. Similar partners for delivery of training in West and Central Africa should now be sought.

3.4.2.4 Research additional sources of funding to support training

EuFMD continues to work to support the development of new e-learning course and materials on FMD Post Vaccination Monitoring which is being carried out by The Pirbright Institute, UK. This will be rolled out as a live course, supported by EuFMD, in 2019.

6. Issues for Executive Committee attention arising during implementation

The prioritization of e-learning versus other methods of training for West and Central Africa will be discussed with the Executive Committee, based on the findings of the first pilot online training for this new region.

In addition, the ongoing efforts to improve participation in the Progressive Control Practitioners' network, and the degree to which resources should continue to be assigned to this network, will be discussed.

7. Priorities for the next six months

Priorities for the next six months include:

South Asia:

- National level e-learning course in India (and additional countries if appropriate), through newly developed partnerships
- Virtual support to laboratory and epidemiology networking
- Next regional e-learning courses: FMD Socio-economic Impact Assessment, FMD Laboratory Investigation Training Course.

West and Central Africa:

- Development of a plan for training development based on the findings of the FMD Investigation Training Course and the training needs assessment conducted by CIRAD.

Progressive Control Practitioners' Network:

- Focus on improving cost effectiveness by expanding audience numbers while reducing staff input required.

8. Success stories

The FMD Investigation Training course for North, West and Central Africa is a success story, with a large number of enthusiastic participants participating online and through mobile phone networking.

9. Areas proposed to give more emphasis in the next 24-month period and activities likely to achieve greatest impact

The roll-out of national level e-learning courses in South Asia, particularly in India, have the potential to reach wide audiences with new ideas on FMD control, to build new partnerships and to enhance our understanding of the risks in this strategically important region.

The development of training program and roll-out of additional training courses or resources for West and Central Africa based on the findings of the training needs assessments conducted.

10 .Budget €

Total Budget Workplan activity 24 months	Expenses Oct 17 – Aug 18	Expenses Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
195,532	68,823	9,950	40%	116,759

10.GANTT chart //indicate change

3.4 Global access to PCP-FMD training resources	OUTPUT 3.4 Improved National and Regional Capacity for the Roll-Out of the Global Strategy and the Management of FMD: Pillar III Training Component		YEAR 1												YEAR 2											
	Target	Activities	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
3.4.1 Dev & evaluation of PCP and associated training resources, including pilot training in several regions	3.4.1.1 Plan for modification and delivery of training courses and resources in Asia region																									
	3.4.1.2 System for M&E established																									
	3.4.1.3 Courses delivered and evaluated Asia region				/	/																				
	3.4.1.4 Training needs assessment carried out in West and Central Africa and plan for training to be provided in the region developed								/	/	/	/	/													
	3.4.1.5 Training courses and resources are delivered and evaluated in West and Central Africa														/	/		/	/							
	3.4.1.6 Training courses and resources are made available to countries outside the target regions, based on demand from GF-TADs FMD working group																									
3.4.2 Dev & implement a support network including training prog for the PCP practitioners in at least two regions outside the European neighbourhood	3.4.2.1 Develop webinar series and network for global PCP practitioners				/	/	/	/	/	/	/	/	/													
	3.4.2.2 Support regional networks in target regions identified under 3.4.1, and provide assistance to networking activities in other regions if appropriate.																									
	3.4.2.3 Assist collaborating organizations to develop a sustainable system for training																									
	3.4.3.4 Research additional sources of funding to support training																									

Appendix 4
Six-month report
(Summary)

Summary Component reports – September 2018

Component 1.1 Training for Member States

Indicators

Activities	Indicators	Baseline Sept. 2017	Target 2 years	Unit of measure	Current Status
1.1.1	Knowledge Bank created and in use by MS	500	3,000	Number of participants that have accessed at least one open access training course or knowledge bank resource	1,377
1.1.2	Implement >85 % of the demand driven programme	85%	85 %	Training credits allocated by the 38 MS to training activities or regional initiatives have been delivered by EuFMD	55 %

Progress

Training credits system	The allocation and delivery of the training credits is fully on track. The number of training credits allocated by the Member States to EuFMD training is above 85% and 55% of the allocated training credits has already been delivered. Montenegro has joined EuFMD and has been allocated 10 Training Credits.
Training courses	The training menu uptake has proved satisfactory to MS and there has been no request for new courses.
Main issues	Two Member States did not allocate any of their Training Credits to any of the training courses, thus reallocating their credits to joint initiatives should be considered.
Priorities for the next six months	There is a request from two new countries to create a national tailored Online FMD Emergency Preparation Courses (FEPC). EuFMD has to develop these two online courses into Hungarian and Polish. Delivery of regional approach requests, such as the cross border simulation exercise between Spain and Portugal.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
522,975	165,566	45,000	40 %	312,409

Summary Component reports – September 2018

Component 1.2 Improved Contingency Planning**Indicators**

Activities	Indicators	Baseline Sept. 2017	Target 2 years	Unit of measure	Current Status
1.2.1	Annual Participation in online meetings or webinars	300	300	Participation in online meetings or webinars	517
1.2.2	Number of published: Decisions Support Tools, discussion papers and guidelines that have been peer-reviewed	2	5	Published tools and guidance that has been peer-reviewed	4*

* Position paper on FMD vaccination issues; The AESOP (Assured Emergency Supply Options) paper; EuFMDiS v.1.3 and EuFMDiS user guide.

Progress

EU-FMD-iS	The European FMD spread model (EU-FMDiS) project has finished its pilot phase and a version 1.3 is provided to the pilot countries.
DSTs, discussion papers and guidelines	A Position paper on FMD vaccination issues was delivered in June 2016; The AESOP (Assured Emergency Supply Options) paper was delivered in October 2017 and Expressions of Interest (EoI) for the AESOP was issued. Ten vaccine producer companies are showing interest; The Emergency Vaccination Guidelines will be finalized in 2018; The Crisis Communication Guidelines will be finalized in 2018; The EuFMDiS, a major decision support tool was delivered in 2018.
Networks	The Contingency Planning, Modelling and Vaccination Networks continue to grow in numbers now counting above 800 members.
Major issues	More emphasis in the next period is needed on the topics of: private sector involvement in emergency preparedness and management, development of diagnostic bank and human resource sharing The Contingency Planning (CP) and Vaccination networks are behind in delivery, due to the current focus of the EuFMD-iS.
Significant plans	Work on the EU-FMDiS to incorporate a wildlife component and to engage with further MS who are interested to use the model. The AESOP (Assured Emergency Supply Options) work will be continued with the parties that have shown interest; Drafting a discussion papers with the focus on private sector involvement and development of emergency diagnostic bank in the Balkans. Delivery of webinars under the Pillar I networks.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun. 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
142,154	31,585	6000	26 %	104,569

Summary Component reports – September 2018

Component 1.3 Thrace

Indicators

Activities	Indicators	Baseline: Sept.2017	Target 2 years	Unit of measure	Current Status
1.3.1	Tpt Mgt Meetings held	5	9	Meetings held involving staff of the 3 countries	7*
1.3.2	Maintain the data entry system with data entry meeting agreed targets	>75%	75%	% of reports entered by field operatives within expected time frame	>75%
1.3.3	The level of confidence in FMD disease freedom in Thrace region is higher than if activities stopped	>90%	90%	Confidence in disease freedom	>90%
1.3.4	Joint exercises	2	3	Joint exercises 3 countries	2**

Progress

Management Meeting	A Management Meeting was held in Istanbul, Turkey on 27 July 2018, sharing information and lessons learnt on the PPR outbreak in Bulgaria.
Active surveillance, early detection	The active surveillance activities are regularly implemented: samples are collected on time and analysed in each of the three countries, and data uploaded on the online repository for analysis and communications. The confidence in FMD freedom in the Thrace region is constantly above 95% for both the 1 st and 2 nd Cycle or 2018 The second outbreak of PPR was found during the implementation of the Thrace program.
Training Workshop	1 st Disease Reporting Training of the EuFMD: How to evaluate FMD reporting in Thrace, and was carried out in Svilengrad, Bulgaria on the 13-16 March 2018
Major Issues	The FMD post-vaccination immunity study carried out in Turkish Thrace in 2017 requires a follow-up in 2018 to validate the previous results and provide solid evidence of the immunity currently provided in the field.
Significant Plans	Maintain the achieved high (above 95 %) level of confidence in the absence of circulating FMDV in European part of Turkey and the neighbouring areas of Greece and Bulgaria; To further strengthen the collaboration between the three countries at different operational levels (regular joint training workshops for official veterinarians, improved communication and review of the epidemiological situation and the control measures in the three countries for FMD and other TADs).

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
377,000	100,232	24,000	33%	252,768

Summary Component reports – September 2018

Component 1.4 Balkans**Indicators**

<i>Activities</i>	<i>Indicators</i>	<i>Baseline: Sept 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
1.4.1	Management and High Level Policy Meetings held compared to if project was not supported.	0	3	Nb of meetings	1
1.4.2	Number of countries having a national or multi-country FMD simulation exercise	4	7	Nb of countries holding a national FMD exercise	4
1.4.3	Participation in Balkan region proficiency test exercises	6	8	Nb of National participations in exercises in 24 months	8

Progress

Meeting and workshop	A EuFMD Workshop on “Risk Assessment and GET Prepared Pathway” was held in Ohrid, F.Y.R. of Macedonia – 17-19 April 2018. This workshop also acted as short management meeting for the Balkans.
Collaboration	Balkan Laboratory Network focal point appointed. jSTP, Kiril Krstevski, from Ss. Cyril and Methodius University in Skopje Faculty of Veterinary Medicine, Skopje recruited. New Component Manager, Daniel Donachie started in July 2018.
Issues	Although the number of simulation exercises is behind target, the recent recruitment of Daniel Donachie and Kiril Krstevski will ensure the delivery of component 1.4.2 will be a priority. Their work will be to support the preparation and delivery of exercises in the three pilot get prepared countries whilst collaborating with Dr Sally Gaynor who will be lending her technical expertise to this area
Significant plans	Deliver national simulation exercise in Bulgaria, Serbia and F.Y.R of Macedonia Deliver a laboratory training under the Balkan Laboratory network Organize a management meeting to show progress of the component and discuss next steps with National Focal Points Finalizing the text of the statement of Intentions (Sol) to be proposed to the Member States to aid in their collaboration for emergency preparedness;

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
202,110	15,318	15,000	15%	171,792

Summary Component reports – September 2018

Component 1.5 Fund for Applied Research (FAR)

Progress

6 th Call Dec 2017	Pilot project for the evaluation of a system for engaging para-veterinarians and animal health workers for FMD surveillance and sample collection and for the preliminary assessment of the demand for FMD control services in Mali - Project Lead Applicant: Dr Diaoure,VSF-Suisse	Overall cost: € 20 000.00 (funds will be mobilized under Component 3.3.2). Status update: The project started end of March 2018. An interim report was submitted on July 2018 and the second funding instalment released.
5 th Call July 2017	FMD RiskmapS (FMD Risk map surveillance System): Development of a FMD surveillance program on risk information and mapping tools for southern European neighbourhood, integrating movement patterns of domestic livestock - Project Lead Applicant: Dr Lefrancois, CIRAD	Overall cost: € 168 000.00; Cost 1.550%: € 84 000.00 ; Status update: An interim report is due by February 2019.
4 th Call (Feb2 017)	European multi-country FMD Spread model EuFMDIS:	Overall cost: € 48600.00 (funds will be mobilized under Component 1.2.5). Status update: Very positive response from 7 countries (Austria, Bulgaria, Croatia, Italy, Hungary, Romania and Slovenia). Dedicated e-learning page; On-line meetings. The project is on-track to deliver a working model that will simulate spread and control of FMD within and between the participating central European countries by 30 June 2018.An interim report was submitted on July 2018.
	Validating the use of bulk tank milk for surveillance of FMD among commercial dairy farms in endemic settings) - Project Lead Applicant: Dr Lyons, The Pirbright Institute	Overall cost: GBP42,919.21(€46,336) Status update: <u>Iran</u> : A mission undertaken in October 2017. The sampling is started in mid-February and the first sample shipment is scheduled in mid-May and the final at the end of the project. <u>Kenya</u> : milk samples have been collected (by Nov2017) and the duplicates shipped to TPI in De2017. An interim report was submitted on February 2018 and the second funding instalment released. Final reports are due by September 2018.
	Evaluation in field conditions of a safe and cost-effective protocol for shipment of samples from Foot-and-Mouth Disease suspected cases for laboratory diagnostic (FIELD_EVAL_INACT) – Dr Sandra Blaise-Boisseau, (ANSES)	Overall cost: € 75 940.00 Status update: Collection of epithelium and/or vesicular fluid samples from clinical cases is currently being carried out by the national partners in Nigeria, Turkey and Pakistan. An interim report was submitted on June 2018 and the second funding instalment released. Final reports are due by November 2018.
	Validating multiplex real-time RT-PCR as a tool for FMD detection in bulk tank milk (Acronym: Tank Milk Multiplex) – Dr. Michael Eschbaumer, The Friedrich-Loeffler Institut (FLI)	Overall cost: € 23 715.23; Status update: The project started at the end of January 2018. An interim report was submitted end of May 2018 and the second funding instalment released. The final report was submitted end of July 2018.
	Alternative vaccine selection techniques – Dr. Ludi, The World Reference Laboratory for FMD (WRLFMD), The Pirbright Institute	Overall cost: € 46 834; Status update: The project started May 2018. An interim report will be submitted detailing activities implemented and results achieved and will be presented at the EuFMD Open Session in October 2018.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 –Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
372,387	279,645	4,000	76%	88,742

Summary Component reports – September 2018

Component 1.7 Proficiency Testing scheme**Indicators**

<i>Activities</i>	<i>Indicators</i>	<i>Baseline Sept 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
1.7	Proportion of target reference laboratories participating	16	21	Number participating over total of neighborhood countries indicated in contract with service provider	14

Progress

LOA	Negotiations on the new Letter of Agreement with The Pirbright Institute are progressing well Commitment forecast contract line 39,000
PTS	Results of the 2017 Proficiency Testing Scheme (PTS) are available
Major issues	None
Significant Plans	Finalization and implementation of the Letter of Agreement with The Pirbright Institute. Reviewing the results of the 2017 Proficiency Testing Scheme. Assisting with EuFMD contact points during the implementation of the 2018 PTS, where needed.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun. 18	Expenses Jun 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
46,300	1,861	39,000	88%	5,439

Summary Component reports – September 2018

Component 1.8 Risk analysis and communication**Indicators**

<i>Activities</i>	<i>Indicators</i>	<i>Baseline: Sept. 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
1.8.1	System available to predict Antigen Prioritization	1	1	System available to predict Antigen Prioritization	1
1.8.2	Number of Global Monthly Reports	24	48	Number of Global Monthly Reports	36
1.8.3	Number of Risk Manager Summaries	0	4	Summaries published	0
1.8.4	Pilot study	1	1	Study completed	1

Progress

PRAGMATIST	A user-friendly version of PRAGMATIST now available (the newest version was developed by WRL, with review by EuFMD).
Global Monthly Report	Revised the format of Global Monthly Report to include new charts/tables to communicate the relative prevalence of serotypes and strains and forecasting; Recruitment and training of Global Focal Points was done.
Partnership	Development of partnership with an external Service Provider (CIRAD) (through a Letter of Agreement) for the design and implementation of risk mapping system in North and West Africa during the current biennium (2018-2019). PRAGMATIST has been shared with the managers of the N. American Vaccine Bank.
Major Issues	The delivery of recruitment and selection of Global Focal Points for each of the pools is progressing slower than originally planned, therefore delivery of the Risk Manager Summaries was also delayed.
Significant Plans	Workshop in conjunction with the Open Session 2018 to inform potential users regarding the PRAGMATIS tool, and facilitate their use of it. WRL will participate as co-trainers in this workshop. Establish a pool of global experts to review prevalence data and initiate forecasting activities

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jun 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
84,200	16,549	15,000	37 %	52,651

Summary Component reports – September 2018

Component 2.1 South East Europe**Indicators**

Activities	Indicators	Baseline Sept.15	Target 4 years	Unit of measure	Current Status
2.1.1	Nb of countries in region with a Risk Based Strategic Plan that has been accepted by GF-TADS FMD Working Group.	2 Georgia and Turkey	4 Georgia, Turkey, Armenia, Azerbaijan	Nb of countries	4 RBSP accepted by GFTADS WG (Geo, Tr, Arm, Azer)
2.1.2	Participation level from at least 5 countries in the region in online training courses	0	480 participants	Participants engaging in EuFMD e-learning	480 participants

Progress

Risk based strategic plans	RBSPs of three TransCaucasus countries (TCC) and Turkey available and implemented. Updated RBSPs from Georgia and Armenia have been shared for comments with EuFMD. Azerbaijan will send its updated version by August 2018.
Regional workshops and training	A workshop on FMD surveillance and post-vaccination monitoring was carried out in May 2018 in Turkey with participants from Turkey, Armenia, Azerbaijan and Georgia. National FMD control activities to approach PCP stage 3, immunogenicity studies in the TCC and Turkey and improvements in the newly established mapping tool of the information sharing database (developed under the statement of intention) were agreed.
Online training	The Turkish language FITC was delivered in May/June 2018. 165 participants from Turkey and Azerbaijan enrolled. Post Vaccination Monitoring was delivered to four participants per country from Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Kyrgyzstan, Turkey, Tajikistan, and Turkmenistan. A Russian language webinar on Safe Trade and FMD Control course was delivered in June for 70 participants from Azerbaijan, Georgia, Belarus, Ukraine, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Russia.
Issues	Progress with RBSP development for stage 1 countries in the WestEurasian region, i.e. Turkmenistan, Uzbekistan, Tajikistan (not included in the EuFMD workplan but epidemiological connected with TCC) Iran has joined the meeting under the Statement of Intention during the OIE World Assembly in May 2018 but contributions and cooperation have not re-started.
Priorities	Definition and implementation of control and surveillance measures for PCP stage 3 candidate zones in Racha-Lechkhumi of Georgia, Absheron region of Azerbaijan and in Armenia. Revision of current RBSP and evidence of monitoring and evaluation process. Design and implementation for the immunogenicity studies. Further develop the information sharing database (with more risk info).

Budget

Total Budget Workplan activity 24 months	Expenses Oct. 17 –Jun 18	Expenses Jun 18 - Sep 18 (forecast)	% project completion	Actual available (forecast)
356,500	118,330	60,000	50%	178,170

Summary Component reports – September 2018

Component 2.2 South East Mediterranean

Indicators

Activities	Indicators	Baseline Sept.15	Target 4 years	Unit of measure	Current Status
2.2.1 2.2.2 2.2.3	Number of countries in region with a Risk Based Strategic Plan that has been accepted by GF-TADs FMD Working Group.	1 (Egypt)	4 (Egypt, Jordan, Palestine, Lebanon)	Nb of countries	Achieved: 2 RBSPs developed: Egypt and Palestine (1 RBSP accepted by GF-TADs FMD Working Group), 1 RBSP drafted: Jordan
2.2.4	Assist networking through online meetings and sharing of FMD information to risk managers of countries under this component	0	140 participants in 24 months involving 6 countries	Nb of regional participations in online meetings	220 participants from 11 Arabic speaking countries in the NENA region.

Progress

Training	An in-depth e-learning course on FMD Post-Vaccination Monitoring was delivered on April 2018 to 85 participants from 19 countries (Egypt, Lebanon, Jordan, Palestine, Sudan Libya, Morocco, Tunisia, Algeria, Armenia, Azerbaijan Georgia, Iran, Kazakhstan, Tajikistan, Turkmenistan, Turkey, Uzbekistan, Iraq,).
Risk based strategic plan	A workshop was carried out in July 2018 in Lebanon for participants from Lebanon and Syria to support National FMD Task Forces to revise their national FMD control program along the lines of the PCP (development of RBSP). A workshop was held in Sudan for assisting the country in the finalization of the RBSP and its implementation. A Sub-regional technical meeting on FMD surveillance and Post Vaccination Monitoring was held in Jordan for participants from (Jordan, Lebanon, Palestine, Syria and Sudan) to facilitate the establishing of a mechanism for monitoring of control activities and evaluation of the effectiveness of control measures with particular reference to the assessment of the vaccine quality and evaluation of the effectiveness of vaccination programs.
Issues	Egypt has put on hold the initiatives proposed under the LLNL/US-DOS project. A new action plan has been established (between GOVS and EufMD) to support the main weaknesses. Lack of evidence of the effectiveness of the vaccine used in Lebanon and Jordan as well as in Egypt and Palestine. Risk posed by instability in Syria remain a point of concerns due to animal movements across the borders.
Priorities	Continued support to Egypt according to the agreed priorities (RBSP M/E). Support to Lebanon for RBSP development. Continued support to Palestine, Sudan and Jordan for RBSP implementation. Implementation of field vaccine effectiveness studies. Improve availability of risk information and mapping tools, integrating movement patterns of domestic livestock

Budget

Total Budget Workplan activity 24 months	Expenses Oct. 17 –Dec. 17	Expenses (forecast) Jan 18-Mar 18	% project completion (forecast)	Actual available (forecast)
260,000	78,674	20,000	38%	161,326

Summary Component reports – September 2018

Component 2.3 Support to REMESA**Indicators**

Activities	Indicators	Baseline Sept 2015	Target 4 years	Unit of measure	Current Status
2.3.1	Nb of countries in region with a RBSP accepted by GF-TADs FMD WG	0	1	Nb of countries	First drafting Mauritania
	Nb of countries in region accepted in PCP Stage 3 or above by the GF-TADs FMD WG	1	2	Nb of countries	3
2.3.2	Nb of high-risk border areas where a surveillance system is designed, implemented and functioning.	0	1	Nb of implemented systems	0
2.3.3	Nb of participants from region taking part in online training course or webinars annually.	0	200	Participants engaging in single e-learning event annually	120

Progress

Progress along PCP	FMD serosurveillance and livestock movement monitoring in the markets are being implemented in Libya. A workshop on risk-mapping and risk-based surveillance was carried out in Montpellier with participation of Veterinary Services from six Maghreb and Sahel countries (Algeria, Morocco, Tunisia, Senegal, Chad, Mauritania) for the definition of main risk factors for FMD introduction and spread, the development of risk maps and the launch of animal mobility studies. 15 Participants from Morocco (4), Tunisia (4), Algeria (2) and Libya (5) have participated to the second edition of the PVM course. Morocco has requested assistance for establishing a FMD free zone in accordance with OIE conditions.
Merged Francophone and North African networks	A series of webinars covering the thematic identified as priorities were planned and started to be delivered in French, including a webinar on Public-Private Partnership (14 May 2018) focusing on the Improvement of the role of the private veterinarian in the control of FMD. More than 300 participants to the FMD investigations online course from North, West and Central Africa should be invited to join the francophone network with the aim the built a regional network for animal health information sharing
Issues	Mauritania commitment is needed for the finalization of RBSP. Country was invited to many events and supported in different actions (e.g. shipment of samples) in order to stimulate such interest. An online meeting carried in July 2018 between Alg, Tun, Mor. The change of the epidemiological situation with introduction of the new FMDV toptotype in Algeria (serotype O, Nigeria 2016, toptotype EA3) changed the priorities of the countries now more focused on the implementing/reinforcing active inspections for clinical case finding The activities in Algeria, Tunisia and Morocco should be more focus on a better understanding of the risks (e.g. animal movements) and on the analysis of the factors that drive the change of such risks (e.g. market demand).
Priorities	Implement Risk mapping studies with assistance of CIRAD; Continue follow up in Morocco, Algeria and Tunisia on the design / implementation of FMD early detection and risk based surveillance; promote risk based vaccination strategies; Maintain the assistance to Libya despite of instability.

Budget

Total Budget WorkPlan activity 24 months	Expenses Oct. 17-Jun 18	Expenses (forecast) Jul 18- Sep 18	% project completion (forecast)	Actual available (forecast)
326,000	114,468	20,000	43%	186,532

Summary Component reports – September 2018

Component 2.4 Training development and Co-ordination**Indicators**

Activities	Indicators	Baseline Sept.15	Target 4 years	Achieved March 18	Explanation of indicator
2.4.1	New courses developed after regional gap analysis	0	4	6 (*)	New online training courses developed, one course equivalent to 20 study hours
2.4.2	Percentage of training courses satisfying monitoring and evaluation criteria	0	100	100	Percentage of courses meeting M and E criteria

(*)Socio-economic impact 24hrs, Risk Analysis Along the Value Chain (24hrs); Field Investigation Training (12 hrs); Introduction to the Progressive Control Pathway (6 hrs); Post Vaccination Monitoring (24 hrs- in combo with PIII); FMD Laboratory Investigation Training Course (12hrs- in combo with PIII)

Progress

Progress	New courses developed: Risk Based Strategic Plan, Safer Trade and FMD Control, Containment Zones, French language socio-economic impact analysis. Courses delivered: In-depth Post Vaccination Monitoring, Turkish language FMD Investigation Training Course, French language FMD Investigation Training Course.
Issues	Identification of partners and experts for delivery of Russian language version of in-depth e-learning modules.
Priorities	Continued delivery of planned online training courses, particularly focusing on delivery of French and Russian language versions Wider publicity of open access e-learning course opportunities.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
148,000	51,004	15,000	45%	81,996

Summary Component reports – September 2018

Component 3.1 Improved system for monitoring and evaluation of progress of regional programmes on FMD control**Indicators**

<i>Activities</i>	<i>Indicators</i>	<i>Baseline Sept 2017</i>	<i>Target 2 years</i>	<i>Unit of measure</i>	<i>Current Status</i>
3.1.1	Gather information, author reports for the FMD Working Group	4	4	Number of reports	0
3.1.2	Activities to support global communication of the PCP situation	0	50% increase	Website usage statistics	0
3.1.3	Provide training support to the FAO:OIE working group activities	1	1	International training events	1

Progress

Requests	A request has been received from the OIE to provide assistance to a workshop on developing Risk-Based Strategic Plans for Gulf countries.
Reports	PCP Support Officers(PSO) system has been initiated and will be reporting on their activities to the FMD working group. Report from CIRAD on potential for FMD vaccine uptake in West and Central Africa is anticipated.
GF-TADs Website	An intern has been recruited to work on the GF-TADs website. The website is still being developed for relaying the outcome of roadmap meetings and provide links to supportive materials for countries relevant to their PCP stage.
Support	Support to activities assisting the FAO-OIE FMD working group will be provided in part through an LoA with IZSLT. A short-term professional has been recruited to assist with Pillar III activities.
Priorities	Recruitment of additional Short Term Professionals to support other Pillar III activities with South Asia and West Africa for the remainder of this workplan

Budget

Total Budget Workplan activity 24 months	Expenses (actual) Oct 17 – Jun 18	Expenses (forecast) July 18-Sept 18	% project completion (forecast)	Forecast available
86,894	32,426	7,000	45%	47,468

Summary Component reports – September 2018

Component 3.2 Progressive Control Pathway (PCP)**Indicators**

Activities	Indicators	Baseline Sept 2017	Target 2 years	Unit of measure	Current Status
3.2.1	Development and Revision of PCP guidelines for joint FAO/OIE application	5	6	Number of guidelines	5
3.2.2	Training of PCP-FMD experts	6	30	Number of people trained	50
3.2.3	Support the facilitation of regional roadmap meetings, their follow-up actions and associated training or assessment processes	4	a) 5 b) 5 c) 2	a) No of roadmaps supported by EuFMD trained expert annually b) Between roadmap meeting webinars c) Workshops for RAP development	a) 2 b) 1 c) 0

Progress

PCP guidelines	New PCP guidelines have been released. The EuFMD has reviewed the PCP elearning modules and developed a number of communication products to explain the changes and the consequences for the PCP community. The EuFMD and OIE are developing a new online Self-assessment Tool for countries to assess accomplished and pending activities in relation to their current PCP Stage. The output of this tool will support and harmonize the PCP assessment by the Regional Advisory Group and will help PCP Support Officers in prioritizing the support activities.
Online training	EuFMD held a second online-training course for the Middle East and Northern Africa region between April and May 2018; followed by a regional meeting on post-vaccination monitoring in Amman, Jordan with participants from Lebanon, Palestine, Libya, Sudan and Jordan. Small immunogenicity studies are supported to be conducted in each of the countries. The online training course on Socio-economic impact assessment of FMD is currently under review with CIRAD, who will modify the course content and translate it into French prior to delivering to Francophone countries of North, Central and West Africa. This is being supported under Pillar II with added benefits for Pillar III countries. The PCP Practitioner Network held two monthly sessions: "Apparent vaccine failure" and "Stakeholder identification, consultation and engagement".
Issues	The EuFMD PCP Support Officer (PSO) proposal to the FAO/OIE FMD Working Group was agreed by both OIE and FAO in May 2018. The PSO system intends to give positive support for countries to follow up on progressive FMD control after attending the regional roadmap meetings. Where the current PSOs are selected from the pool of EuFMD consultants, EuFMD plans to establish a varied roster of PSOs that is balanced by gender and region. Training of PCP experts is in need of attention over the coming months. EuFMD is now a full member of the FMD Working Group. This will facilitate a better understanding of the near-future plans laid out by the FMD Working Group as well better coordination and more direct collaboration between EuFMD and the FMD Working Group
Meetings /Workshops	EuFMD participated in the East Africa regional roadmap meeting in Entebbe, Uganda in July 2018. EuFMD will participate in the first Central Africa regional roadmap meeting in Douala, Cameroon in September 2018

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 – Sept 18 (forecast)	% project completion (forecast)	Actual available (forecast)
155,954	38,076	5,000	25%	112,878

Summary Component reports – September 2018

Component 3.3 Laboratory support**Indicators**

Activities	Indicators	Baseline Sept 2017	Target 2 years	Unit of measure	Current Status
3.3.1	Nb of OIE/FAO Laboratory Network meetings	2	4	Annual International Meeting	3
3.3.2	Nb of samples typed in relation to minimum surveillance requirements per pool	0	6	Nb of pools where target reached (120 samples per year per target pool from at least 5 countries)	0*
3.3.3	Nb of new modules for e-learning and training on laboratory surveillance meeting quality standards	0	3	e-learning modules	1
3.3.4	Nb of labs supported to take part in global PTS annually	0	10	Labs taking part in PTS annually	4.5**

*Based on figures in WRLFMD Quarterly reports from October 2017-June 2018 inclusive

** 9 from of 12 global network labs listed in WRLFMD LoA participated in 2018 test

Progress

Meetings	Plans for 13 th OIE/FAO FMD Laboratory Network Meeting in November 2018, UK Representative from WRLFMD attended PCP-FMD Roadmap meeting, Entebbe, Uganda (July, 2018)
E-learning	FLITC: Plans for another online laboratory training course in next year PVM: WRLFMD involvement with elearning project collaborating with EuFMD WCA: Plans for e-learning courses in Anglophone and Francophone countries of West and Central Africa using novel approaches and social media
Surveillance gaps	FMDV surveillance project in Mali with Vétérinaires Sans Frontières (VSF) is proceeding well. Training has been provided and samples have been taken using lateral flow devices. Samples are awaiting shipment to ANSES where they will be tested. Further projects on enhanced surveillance in WCA are being explored.
PTS 2018	Proficiency testing Scheme completed for 2018. From the Global FAO-OIE FMD lab network, China, India and Senegal did not participate.
Issues	Regional laboratory networks in East Africa, West and Central Africa and South Asia need attention. Short term-professionals from each region are being recruited to assist. Availability of WRLFMD staff for missions abroad can be challenging considering their other duties and responsibilities.

Budget

Total Budget Workplan activity 24 months	Expenses (actual) Oct. 17 –Jun.18	Expenses (forecast) Jun 18 - Sep 18	% project completion	Forecast available
628,772	47,489	497,489	87%	53,794

Summary Component reports – September 2018

3.4 Global Access to PCP-FMD training resources

Indicators

Activities	Indicators	Baseline Sept 2015	Target 4 years	Achieved September 2018	Explanation of indicator
3.4.1	e-learning courses delivered	0	12	8 Southern Africa: FMD Investigation Training Course FMD Post Vaccination Monitoring (joint South Asia)FMD Laboratory Investigation (global) South Asia: FMD Investigation Training Course FMD Post Vaccination Monitoring FMD Laboratory Investigation (global) FMD Investigation Training Course (2) FMD Risk Analysis Along the Value Chain (also some countries in S, E and W Africa, NENA) West and Central Africa FMD Investigation Training Course in French (1)	Nb of e-learning courses delivered to South Asia or African regions.
3.4.2:	Nb of part. online training course /webinars	0	200	172	Participants engaging in single e-learning event annually (e.g joining online course or webinar)

Progress

Progress	In-depth online course “FMD Risk Analysis Along the Value Chain” June and July 2018.FMD Investigation Training Course organised in South Asia;FMD Investigation Training Course in French language in North, West and Central Africa. Partnership established with Indian Council of Agricultural Research (ICAR) for delivery of e-learning courses in India
Issues	Greater participation needed in online training networks through an enhanced communication strategy
Priorities	Development of ongoing training program for West and Central Africa based on findings of training needs assessment. Continued delivery of e-learning courses in South Asia, particularly national level courses in India.

Budget

Total Budget Workplan activity 24 months	Expenses Oct 17 – Jun 18	Expenses Jul 18 - Sep 18 (forecast)	% project completion (forecast)	Actual available (forecast)
195,532	23,229	20,000	22%	152,303

Appendix 5
FMD global and
regional situation





Update from WRLFMD:

Donald King

Acknowledgements: Valerie Mioulet, Nick Knowles, Anna Ludi, Ginette Wilsden, Mehreen Azhar, Hannah Baker, Kasia Bachanek-Bankowska, Antonello Di Nardo, Bob Statham, Lissie Henry, Jemma Wadsworth, Clare Browning, Britta Wood, Alison Morris, David Paton, Abid Bin-Tarif, Ashley Gray, Beth Johns, Mark Henstock, Nick Lyons, Dexter Wiseman, Julie Maryan, Sarah Belgrave

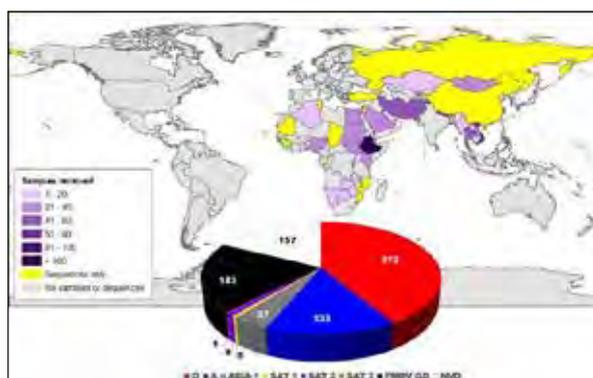





Samples Submissions:

Since EuFMD ExCom in Budapest (March 2018)

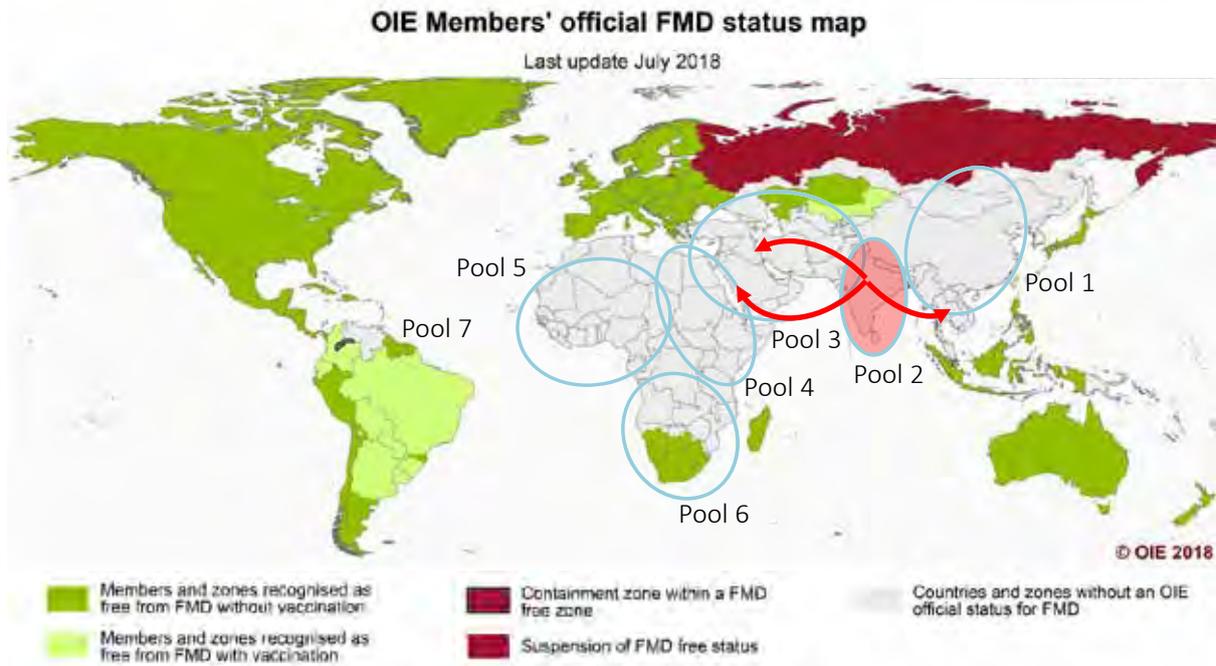
- **Reports issued:** Afghanistan, **Algeria**, Bhutan, Ethiopia, Hong Kong SAR (two batches), Israel, Iran, Kenya, **Malaysia**, Mongolia, Nepal, **Republic of Korea**, South Sudan, **Sri Lanka**, Sudan, **Vietnam**, **Zambia**
- **Additional vaccine-matching tests:** Morocco
- **Sequence exchange (additional genotyping reports):** China (LVRI), Botswana (BVI), Chad (ANSES), **Guinea (ANSES)**, Mauritania (ANSES)
- **Arranging Shipments:** DR Congo, The Gambia & Senegal, Sierra Leone



October 2016-August 2018:
895 samples submitted to WRLFMD

Results/reports can be retrieved
from: www.wrlfmd.org

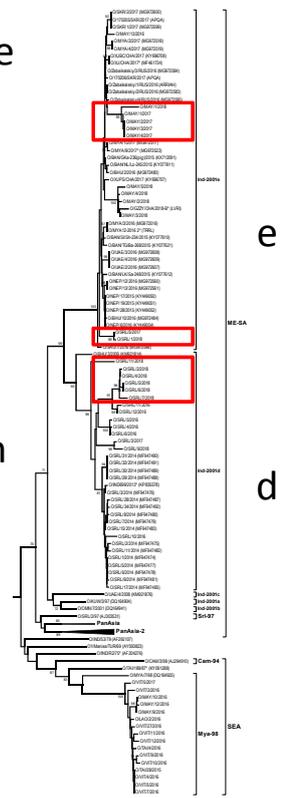
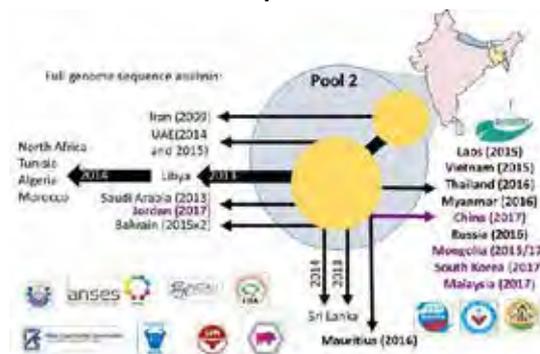
FMD – Global status



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Further expansion and escape of O/ME-SA/Ind-2001

- Data from PD-FMD and WRLFMD provides evidence for the circulation of two genetic sub-lineages (“d” and “e”)
- FMDV positive samples sequenced from Malaysia and Sri Lanka (2017-2018)
- First detection of the O/ME-SA/Ind-2001 lineage in Malaysia (e sub-lineage lineage)
- Evidence for both sub-lineages in Sri Lanka including evidence for a separate introduction from South Asia



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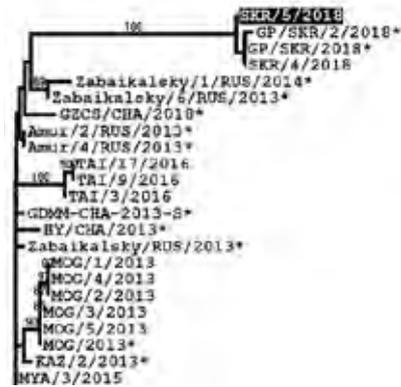
New FMD outbreaks in Republic of Korea

- Two FMD outbreaks in pigs reported in March 2018
- Samples tested at QIA and WRLFMD
- Characterised at A/ASIA/Sea-97
- Another introduction of FMD into South Korea from an East/Southeast Asian country?
- Vaccine matching:

	A/Iran-05	A/May 97	A TUR 20/06	A/G-VII	A22	A24 (1)	A24 (2)
SKR/5/2008	0.45	0.12	0	0.47	0.43	0.19	0.35

¹PANAFTOSA BVS
²BI BVS

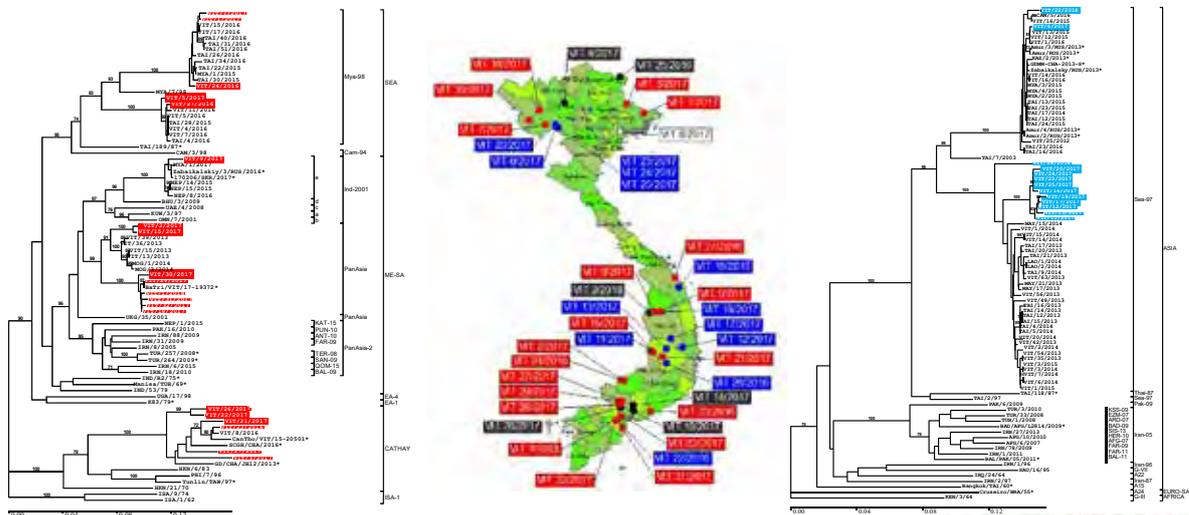
- 2018: 24 FMD outbreaks reported to OIE in DPR Korea (serotype O - tbc)



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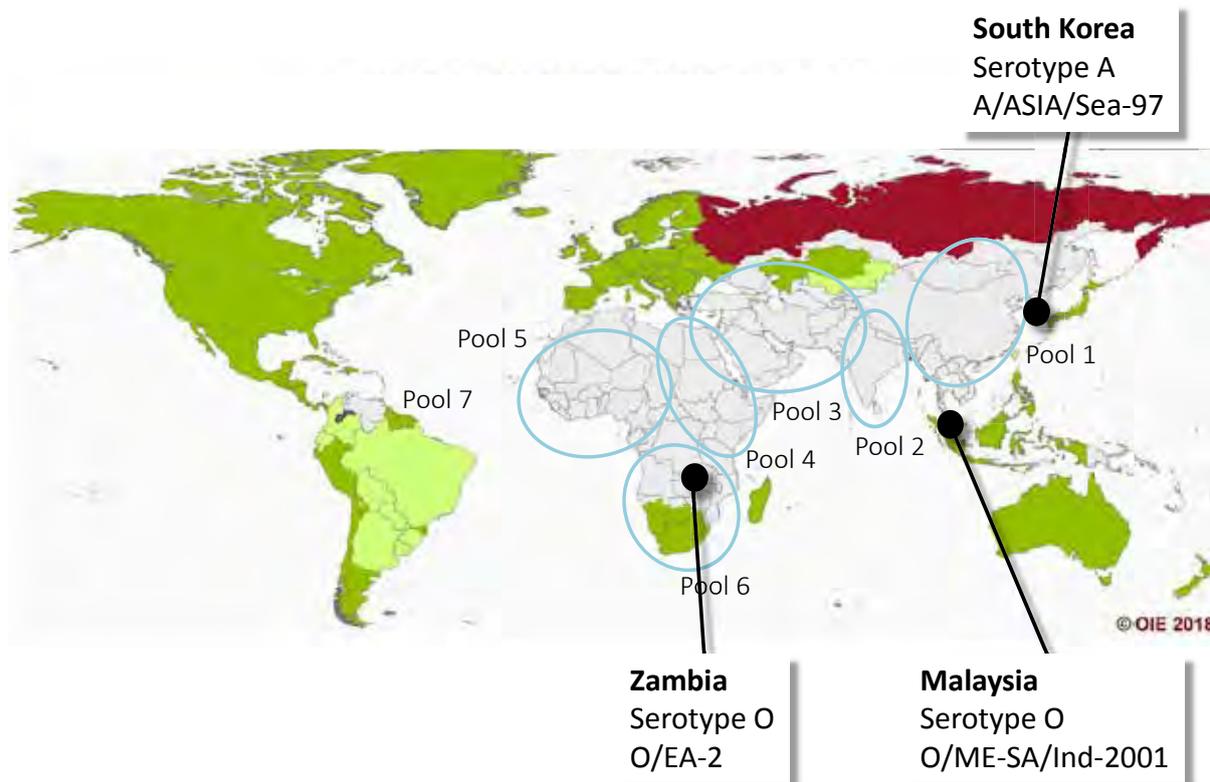
Samples from Vietnam

- Recent submission of 40 samples (2016-2018)
- Remarkable range of (7) FMD virus lineages detected
 - Serotype O topotypes: O/CATHAY, O/ME-SA/PanAsia, O/ME-SA/Ind-2001e, O/SEA/Mya-98 (two genetic clades)
 - Two genetic lineage of A/ASIA/Sea-97



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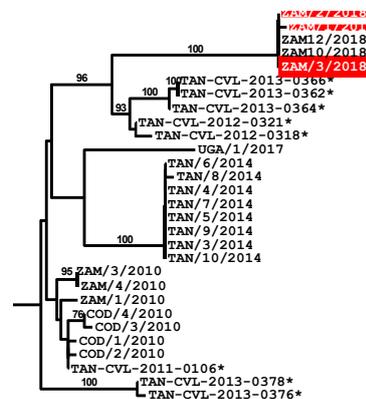
FMD – Recent headlines



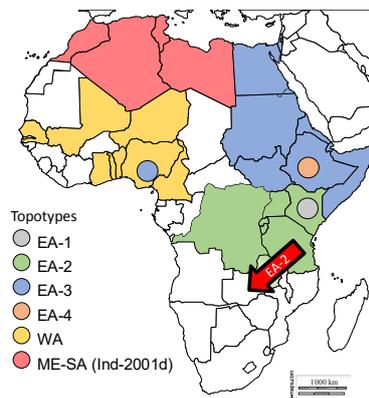
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FMD outbreaks in Zambia

- April 2018: FMD outbreaks reported in cattle - Chisamba and Chibombo in the Central Province

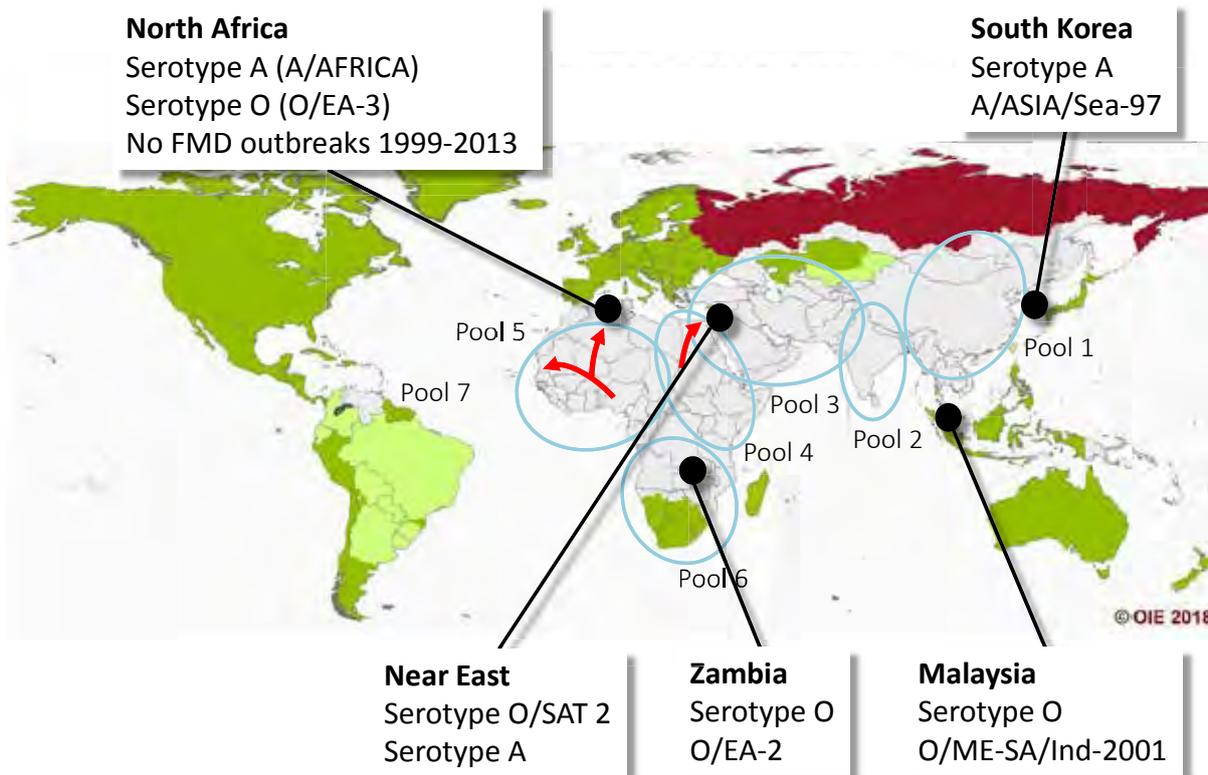


- Samples received to WRLFMD (and sequences from BVI) from Chisamba
- Sequenced as O/EA-2
- Represent new south westerly movement of serotype O into central Zambia?
- Previous O/EA-2 outbreaks in 2010 close to the border with Tanzania (Mbala)



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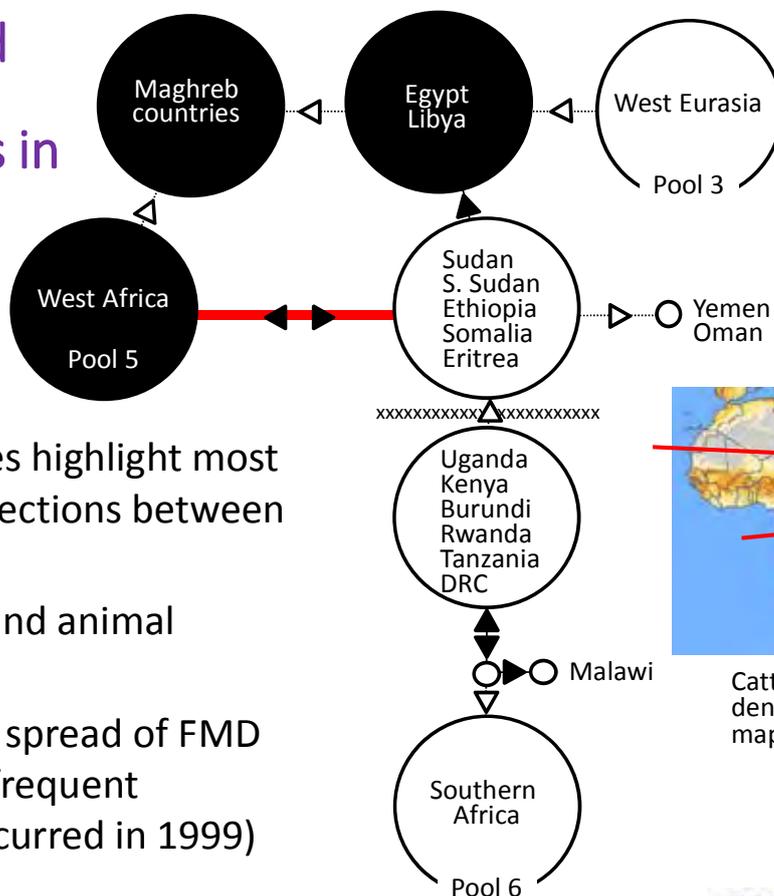
FMD – Recent headlines



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Conjectured regional connections in Africa

▶ Important
 ▷ Infrequent



Cattle density map

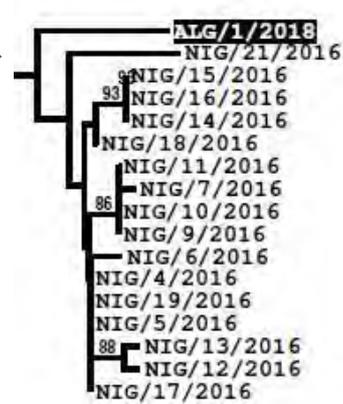


- Viral sequences highlight most frequent connections between countries
- Reflect trade and animal movements
- Trans-Saharan spread of FMD is relatively infrequent (previously occurred in 1999)

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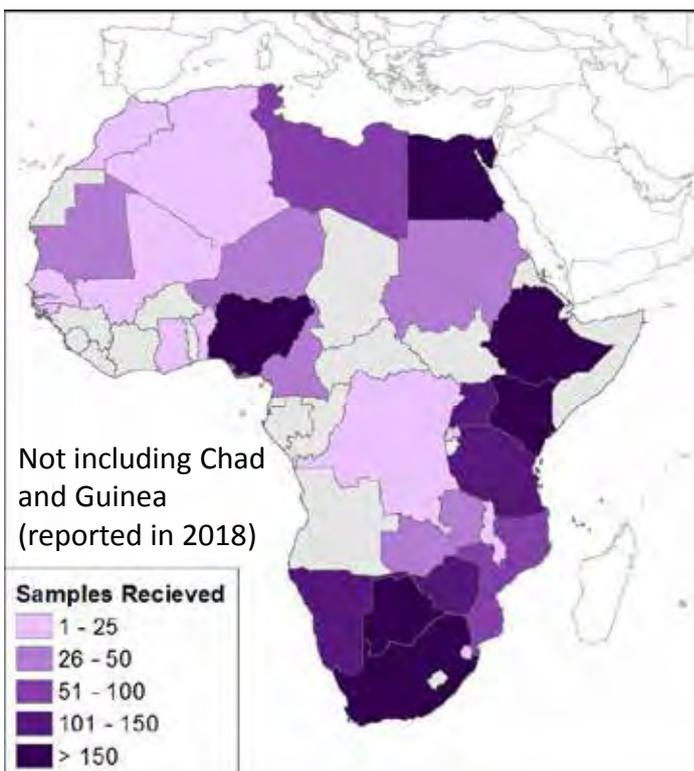
Emergence of new FMDV lineages in North Africa

- Outbreaks reported in cattle
- March 2017: **A/AFRICA/G-IV**
- First cases of Serotype A in the Maghreb > 30 years
 - Algeria 1977
 - Tunisia 1984
- June 2018: **O/EA-3**
- 42 outbreaks
- New threats to Southern Europe?
- Sequence analyse place West Africa (**Nigeria**) as the source of both these incursions



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Gaps in FMD surveillance?



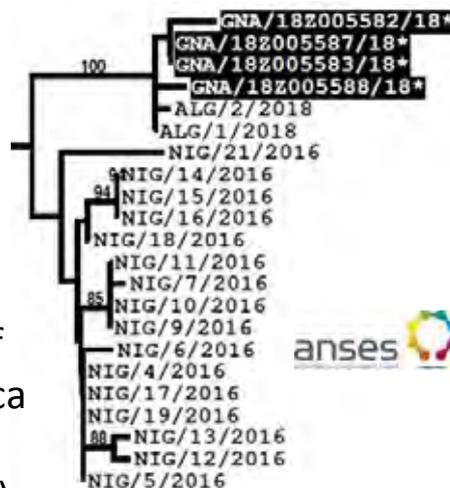
- Data from OIE/FAO Network (2013-17)
- Low levels of sampling (or local reporting) from many countries in West, Central and East Africa
- Biases and difficulties to interpret the origins of transboundary events



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Latest evidence

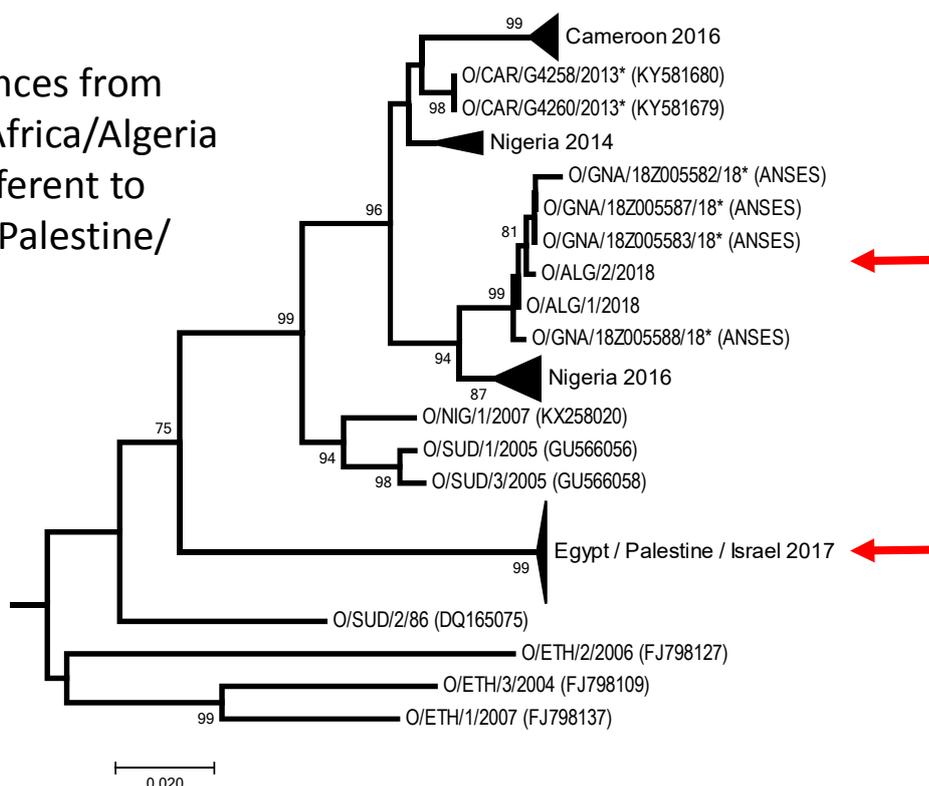
- O/EA-3 sequences from Guinea (via ANSES)
- Samples collected on 1/7/2018
- >99% nt identity to sequences from Algeria
- July-September 2018: Reports to OIE of FMD outbreaks elsewhere in West Africa (The Gambia, Guinea-Bissau and Sierra Leone {& Senegal -not reported to OIE})
- Are these cases linked? – and do they represent the likely origins of the viruses that help us understand how FMDV has recently spread to North Africa?



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Different O/EA-3 lineages are currently circulating

- Sequences from West Africa/Algeria are different to Egypt/Palestine/Israel



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Selecting a vaccine for O/EA-3

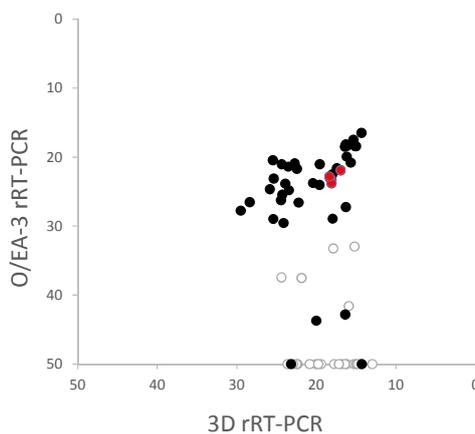
- No potency/challenge tests have been performed
- Results for VNT vaccine matching (2011-2018)
- Algerian isolates generated results indicative of a match to O-3039, O-Manisa and O/TUR/5/2009
- Similar results for 2/3 related O/EA-3 isolates from Nigeria (2016)
- Vaccines currently used in North Africa? (for the previous O/ME-SA/Ind-2001 lineage)

	O-3039	O-Manisa	O/TUR/5/2009
ALG/1/2018	0.51	0.37	0.46
ALG/2/2018	0.45	0.34	0.59
NIG/12/2018	0.66	0.60	0.51
NIG/19/2016	0.52	0.79	0.68
NIG/04/2016	0.26	0.23	0.29
ETH/13/2018	0.34	0.21	0.38
ETH/16/2018	0.21	0.15	0.31
EGY/10/2017	0.47	0.33	0.78
EGY/26/2017	0.33	0.30	0.54
ETH/2/2017	0.20	0.22	0.35
ISR/1/2017	0.32	0.17	0.52
ISR/15/2017	0.52	0.47	0.58
ISR/18/2017	0.62	0.42	0.50
PAT/05/2017	0.26	0.34	0.45
PAT/11/2017	0.60	0.62	0.93
PAT/22/2017	0.40	0.37	0.63
EGY/07/2016	0.27	0.35	0.11
EGY/18/2016	0.01	0.00	0.00
ETH/03/2015	0.85	0.25	1.12
EGY/23/2014	0.22		
EGY/36/2014	0.44		
ETH/22/2013	0.40	0.18	0.81
SUD/04/2013	0.15	0.21	0.60
EGY/19/2012		0.04	0.04
EGY/25/2012		0.48	2.04
EGY/27/2012		0.04	0.04
ETH/04/2012		0.14	0.36
ETH/07/2012		0.20	0.39
ETH/12/2012		0.42	0.89
LIB/54/2012		0.25	0.69
SUD/06/2012	0.38	0.22	0.35
ERI/01/2011		0.21	0.74
ERI/03/2011		0.17	0.68
ERI/18/2011		0.16	0.68
ETH/01/2011		0.69	1.29
ETH/07/2011		0.62	1.05
ETH/13/2011		0.12	0.41
ETH/28/2011		0.14	0.56
ETH/29/2011		0.30	0.50
SUD/11/2011		0.49	1.29

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Specific assays for the detection of O/EA-3?

Britta Wood & Kasia Bankowska: Development and validation of a O/EA-3- specific rRT-PCR



WRLFMD	IV	Sequencir	3D	O/EA-3
SSD/3/2017	NVD	neg	FMDV-GD	positive
SSD/4/2017	NVD	neg	FMDV-GD	positive
SSD/5/2017	NVD	neg	FMDV-GD	positive
SSD/6/2017	NVD	neg	FMDV-GD	positive



Dr Redeat Belaineh Alemu

Sensitivity, sample origin: Algeria, Nigeria, Egypt, Israel, Palestine, Ethiopia

Specificity, virus classification: O/EA-2, O/EA-4, O/WA, O/ME-SA/Ind-2001, O/ME-SA/PanAsia, O/ME-SA/PanAsia-2, A/AFRICA/G-I, A/AFRICA/G-IV, A/ASIA/G-VII, A/ASIA/Iran-05, SAT 1/I, SAT 1/X, SAT 2/VII

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Upcoming events....



- 60th Symposium and celebration on 5th-6th November 2018
 - Previous anniversary events.....



John Brooksby (first head of WRLFMD), Pirbright, 1998



Royal Society, London, 2008

- OIE/FAO FMD Laboratory Network Meeting @ Pirbright - 7th-8th November 2018
- E-learning course on FMD Diagnostics – Jan/Feb 2019 (tbc)
- Practical training course on FMD diagnostics for East Africa – Jan 2019

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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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Appendix 6

Sciensano report

Foot-and-mouth disease activity report

David Lefebvre, DVM, PhD

Service for Exotic Viruses and TSE
Directorate of Infectious Diseases in Animals
Sciensano
Brussels, Belgium

96th Executive Committee meeting EuFMD

Brussels, September 26th-27nd, 2018

.be

Service for Exotic Viruses and TSE

- Head of Service Dr. Kris De Clercq
- Belgian NRL for FMD, SVD, VS, BT, SGP, LSD, RVF and TSE
- From January 1st 2019 onwards EU-RL for FMD, as a partner of ANSES (Maisons-Alfort, France) 
- EU-RL for diseases caused by capripox viruses (SGP, LSD) 
- OIE Collaborating Centre for validation, quality assessment and quality control of diagnostic assays and vaccine testing for vesicular diseases in Europe 
- FAO Reference Centre for vesicular diseases 

Service for Exotic Viruses and TSE

- Ongoing collaborations with FMD partners in endemic countries:

- National Veterinary Research Institute, Vom, Nigeria
(OIE Laboratory Twinning program for capacity building)



- Laboratoire Nationale Vétérinaire, Bujumbura, Burundi
(bilateral collaboration)

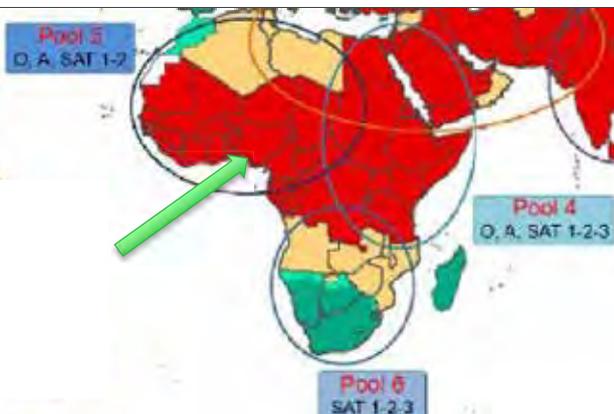


- Botswana Vaccine Institute, Gaborone, Botswana
(bilateral collaboration)



- Major content:

- Provide training for scientific and technical staff: serology, virology, molecular biology; sampling, transportation of samples, biosafety
- Molecular characterization of field samples including full genome sequencing



Nigeria

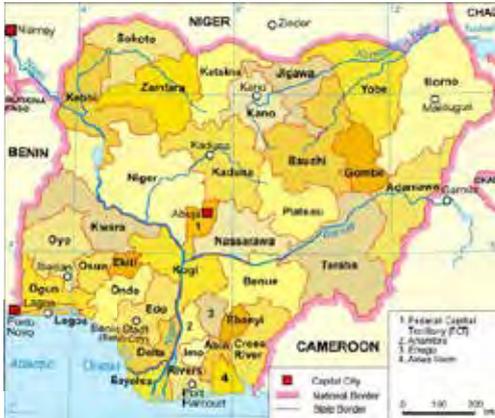
- Largest African economy
- Exportation of oil and gas
- 924.000 km²
- 190 million people
- Subsistence-oriented agriculture - 20 million cattle, 40 million sheep, 70 million goats, 7 million pigs - demand exceeds production
- Significant movement of livestock across the borders and inside the country due to importation and nomadic pastoralism
- No systematic surveillance for FMD, only sporadic notifications
- No control program for FMD, vaccines not locally available



Results of the OIE Laboratory Twinning program for capacity building

- Detection of FMD virus in 4 provinces of Northern Nigeria during the period 2012-2015: **O/WA, O/EA-3, A/Africa/G-IV, SAT1/X, SAT2/VII** (Ehizibolo, Haegeman et al., 2017a, Transbound Emerg Dis)

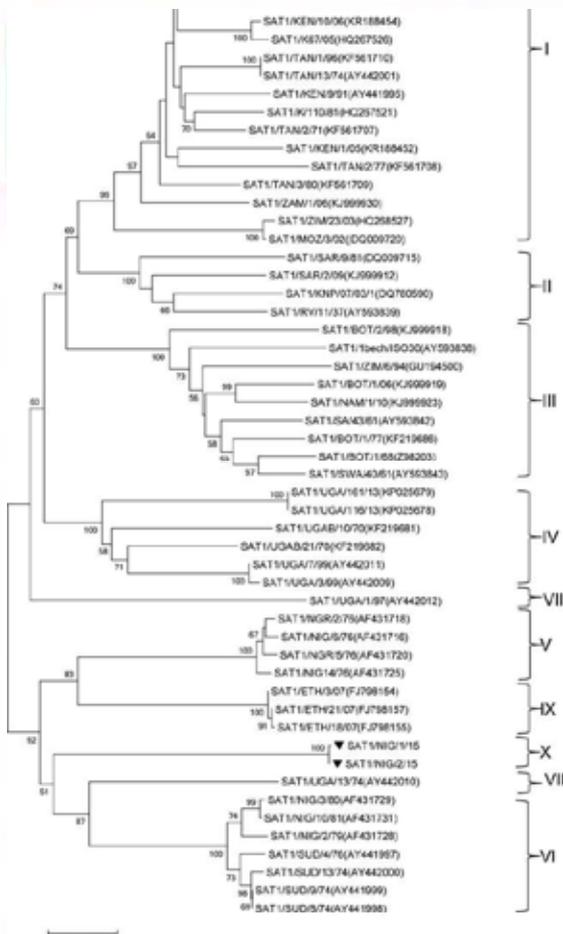
- Epidemiology: complex and highly dynamic



- Most prevalent serotype in Plateau State:
 - 2013: SAT2/VII
 - 2014: O/EA-3
 - 2015: A/Africa/G-IV
 - From end 2015: SAT1/X



Identification of a new topotype: SAT1/X



	<u>% NT homology</u>	<u>% AA homology</u>
--	----------------------	----------------------

Topotype V

SAT1/NGR/2/76	71	79
SAT1/NGR/5/76	70	79
SAT1/NIG/6/76	71	79
SAT1/NIG/14/76	71	79

Topotype VI

SAT1/NIG/2/79	71	78
SAT1/NIG/3/80	71	76
SAT1/NIG/10/81	71	78

- Ehizibolo, Haegeman et al., 2017b, Transbound Emerg Dis
- Vandenbussche et al., 2017, Genome Announc



OIE Laboratory Twinning program for capacity building: ongoing research

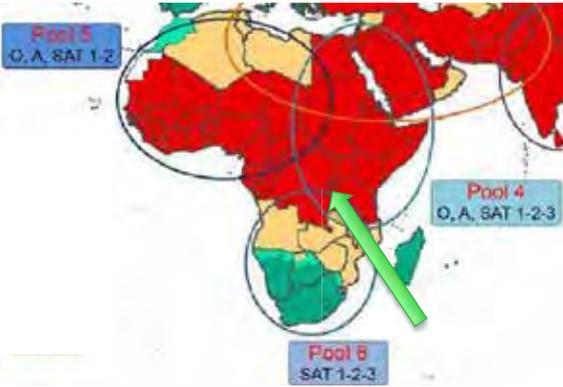
- Additional samples collected in 6 States in Northern Nigeria and in one State in South-West Nigeria: (Ularamu et al., 2019, in preparation)
 - In a single State outbreaks with 2 or 3 different serotypes observed in only 2 or 3 months of time
 - A single serotype isolated at the same time in remote States
- Serological analysis in small ruminants (SR) and wildlife (WL):
 - Confirmation of absence of SAT1 until late 2015
 - Lower prevalence of FMD in SR compared to cattle and WL:
 - 21.7% of SR is positive (SP and/or NSP)
 - Of the SR positive for SP: 17.0% mono-specific (m-s) for serotype (st) O, 23.4% m-s for st A, 31.9% m-s for st SAT2; 27.7% positive for 2 or 3 serotypes (O, A, SAT2)



Results linked with the OIE Laboratory Twinning program for capacity building

- Outbreak of FMD in March 2017 in Algeria
- Isolates A/ALG/2017 typed as serotype A by antigen-ELISA
- Confirmed by VP1 sequencing
- >98% VP1 nt sequence identity with isolates A/NIG/2015 (Ehizibolo, Haegeman et al., Transbound Emerg Dis, 2017b; Vandebussche et al., Genome Announc, 2018)
- Topotype A/Africa/G-IV is endemic in West Africa
- This shows an epidemiological link West Africa – North Africa for FMD
- Route of introduction of this particular virus in North Africa is not yet known: animal movement? Migration of people?
- (data obtained from Pezzoni et al. (IZSLER) and WRLFMD Genotyping Report April 8th 2017)





Burundi

- Economy based on agriculture
- 28.000 km²
- 11.5 million people

- 1 million cattle, 5 million goats and sheep, 0.5 million pigs
- Smallholders: subsistence-oriented, mixed crop/livestock
- Nomadism and semi-nomadism
- Transhumance on seasonal cycles



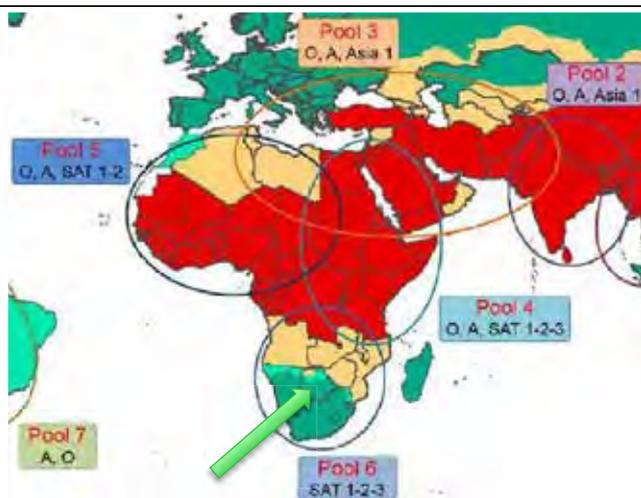

Burundi: FMD epidemic in March 2016

- Assumed to be introduced by cattle imported from Tanzania
- Control measures:
 - Closing cattle markets and banning transhumance and free range grazing
 - Quarantine center in Cankuzo at the border with Tanzania



Burundi: FMD epidemic in March 2016

- Assumed to be introduced by cattle imported from Tanzania
- Control measures:
 - Closing cattle markets and banning transhumance and free range grazing
 - Quarantine center in Cankuzo at the border with Tanzania



Botswana

- 582.000 km²
- 2 million people
- 2 million cattle, 2 million goats (and sheep)
- Rural smallholders
- Diamond industry
- Tourism (wildlife)



OIE Regional Reference Laboratory for Sub-Saharan Africa

- Molecular characterization of FMDV (Van Borm et al., 2016, Genome Announc)
- Training for BVI staff
- PT organized by BVI (SAT1-SAT2-SAT3 FMDV strains from pool 6 – BOT, GHA, NAM, MAL, MOZ, UGA, ZAM, ZIM)



Appendix 7

Item 4 EuFMDis



The banner features the EuFMD logo at the top left, followed by the European Union flag, the eofmd e-Learning logo, a green leaf icon, and the III 30th anniversary logo. The central text reads "EuFMDiS European Foot and Mouth Disease Spread model" next to a stylized virus icon. On the right, a circular diagram titled "IMPROVE READINESS FOR FMD CRISIS MANAGEMENT" lists various components like "FMD NETWORKS", "VACCINATION", and "FRANCOPHONE". Below the diagram, it says "PILLAR I of the EuFMD". At the bottom, a row of logos for "FMD NETWORKS" includes: DIV (Disease Investigation and Vaccination), ANIMALS (Animal Health), CONTINGENCY PLANNING, WELNET, VACCINATION, FRANCOPHONE, EARLY, PCP FMD, PCP PRACTITIONERS, and EuFMDiS.

Progress and Potential

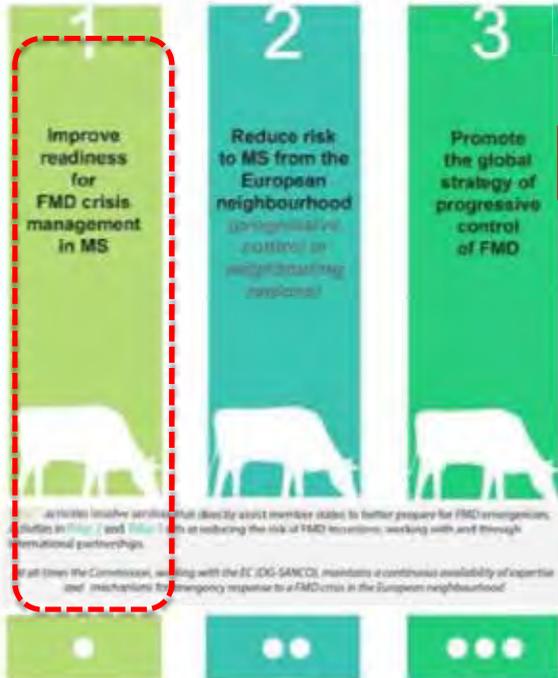


The eofmd logo is located at the bottom right of the banner, with the text "European Commission for the Control of Foot and Mouth Disease" underneath.



The banner features the EuFMD logo at the top left, followed by the European Union flag, the eofmd e-Learning logo, a green leaf icon, and the III 30th anniversary logo.

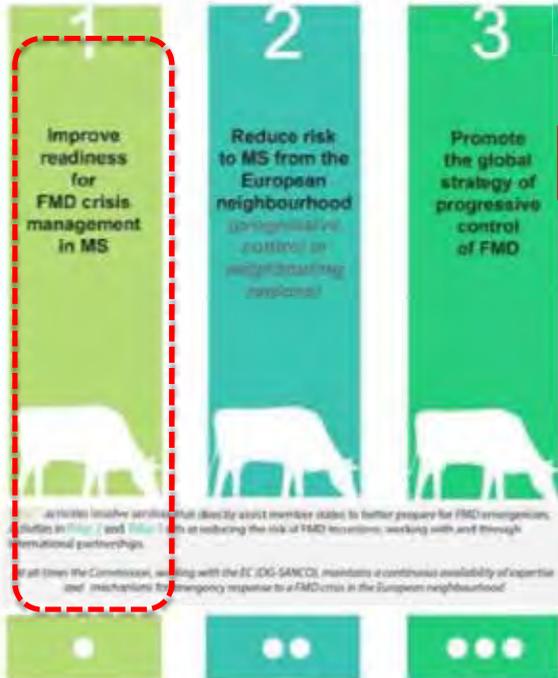
Background of the EuFMDiS project



EuFMD workplan 2015-2019

Components

- 1.1 – Training for Member States
- 1.2 – Improved **Contingency Planning**
- 1.3 - Improved surveillance and management in **Thrace**
- 1.4 - improve emergency management capacity for FMD in the **Balkan region**
- 1.5 - FAR - **Fund for Applied Research**
- 1.6 - Emergency technical responses
- 1.7 - **Proficiency test** scheme
- 1.8 - **Risk Analysis** and Communication



Background

- **2014, 2016 Frascati, Italy – EuFMD Modeling Workshops**
Australian Animal Disease Spread (AADIS) model is used as a training tool
- **2016, Budapest, Hungary - Central European CVO meeting**
Initiative from Austria on Cross Border Disease Spread Modelling (CroBoDiMo) between Central European countries
- **2017, Rome, Italy – Funds for Applied Research (FAR)**
EuFMD funds pilot project for a European multi country FMD modeling initiative.

Background

- **2017, Dublin, Ireland – EuFMD 94th Executive Committee meeting**
European multi-country FMD spread model pilot is endorsed
- **2017, Vienna, Austria – 1st Workshop on EuFMDiS, with 6 pilot countries**
- **2018, Data gathering and close collaboration with 7 pilot countries:**
IT, AT, SI, HR, HU, RO, BG
- **2018, Budapest, Hungary – 2nd Workshop on EuFMDiS**
Model demonstration and training for pilot countries + FYROM and IE

Key components of the EuFMDiS model

Overview

EuFMDiS is based on the conceptual hybrid modelling approach developed for the **Australian Animal Disease (AADIS) model**.

- Developed with funding by the Australian Government
- Sophisticated disease modelling platform and decision-support tool for FMD
- Used in EuFMD disease modelling training workshops (in 2014 and 2016)
- Potential to be used in Europe identified

A formalised collaboration between **EuFMD** and the **Australian Department of Agriculture and Water Resources** has provided royalty-free access to the AADIS software and intellectual property.

Data and Parameters

• Regions

To capture differences in livestock production patterns within a country

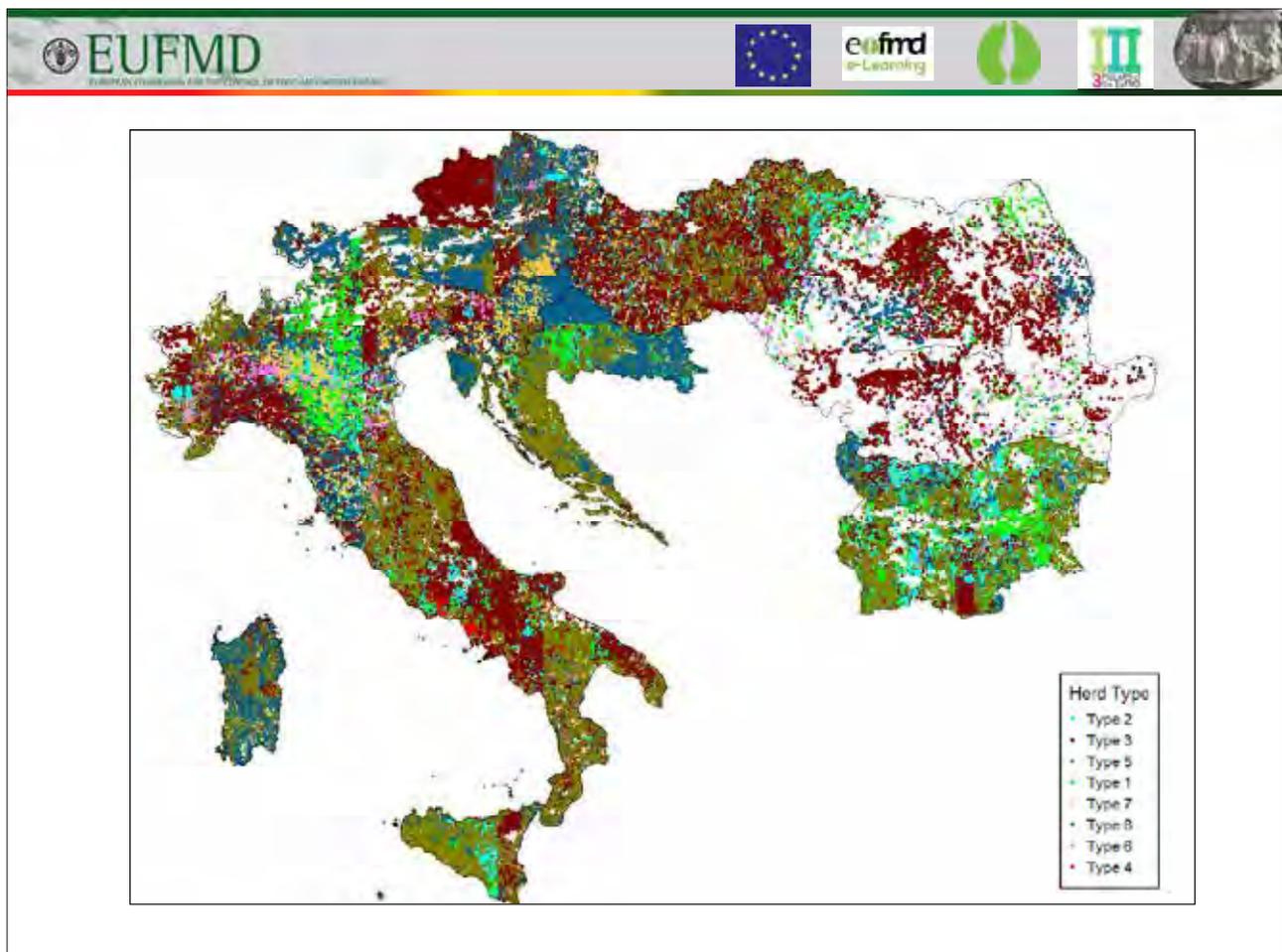
• Herds and herd types

The herd is the epidemiological unit in EuFMDiS. Common herd classification that can be applied across countries: nine herd types defined for central Europe



Country ID	Country	Commercial herds	Backyard herds	Total
1	AT	87477	19190	106667
2	BG	32893	102817	135710
3	HR	47744	70839	118533
4	HU	14982	135417	150399
5	IT	154686	211630	366314
6	RO	12098	591077	603175
7	SI	27362	13370	40372
Total		377242	1144340	1521170

ID	Species	Herd type	Description
1	bov	Large commercial dairy herd	Specialist milk producer. Cattle are kept to primarily produce and sell milk
2	bov	Large commercial beef herd	Specialist beef production. Cattle are kept to primarily produce and sell meat
3	bov	Small commercial cattle herd	Cattle are kept, usually in smaller herd sizes, to primarily produce and sell meat and/or milk on a smaller, local scale
4	buf	Commercial buffalo	Buffalo kept for milk or meat production
5	ov/cap	Commercial small ruminants	Small ruminants are kept to primarily produce and sell meat/milk/wool commercially
6	sui	Large-scale commercial fattening pig herd	Pigs are kept under intensive production system to be grown and sold for slaughter, for pig meat production
7	sui	Large scale commercial breeding pig herd	Pigs are kept under intensive production system for producing replacement pigs to be sold to other holdings (e.g. fattening farms)
8	sui	Small-scale commercial pig	Pigs are kept primarily to produce and sell meat on a smaller, local scale. Generally lower biosecurity than intensive systems
9	mixed	Backyard herd	Small number of animals (cattle, buffalo, sheep, goat, pig) kept primarily for own consumption (non-commercial).



Disease transmission

Within-country spread

- Detailed transmission pathways with jump-diffusion
 - Direct and indirect contacts
 - Airborne spread and Local spread
 - Assembly centres spread

Between country spread

- Using animal movement data (TRACES)
- Regional scale
- Airborne spread and local (proximity) spread

Data needs

- Information on 'contact' behavior of different herd types
- Additional: assembly centres, weather data

Control measures

- **The measures in EuFMDiS are consistent with the approaches described in European FMD Directive (2003)**
- **Flexible and highly configurable**
- **Individual measures can be switched on and off**
- **Success of control measures depend on:**
 - Effectiveness of measures
 - Resources for control

Control measures

- | | |
|---|--|
| <ul style="list-style-type: none"> • First IH detection <ul style="list-style-type: none"> ○ Fixed (or passive) • Movement restrictions <ul style="list-style-type: none"> ○ National livestock standstills ○ Local restrictions (Protection Zone and Surveillance Zone) • Surveillance <ul style="list-style-type: none"> ○ Surveillance visits, priorities, scheduling, periods • Tracing <ul style="list-style-type: none"> ○ Trace forwards, trace back, tracing effectiveness • Suspect premises reporting <ul style="list-style-type: none"> ○ True and false positive reporting | <ul style="list-style-type: none"> • Infected Premises operations <ul style="list-style-type: none"> ○ Destruction, disposal decontamination • Pre-emptive culling <ul style="list-style-type: none"> ○ Dangerous contacts, ring culling, suspect premises culling • Vaccination <ul style="list-style-type: none"> ○ Suppressive, protective, mass vaccination ○ Priorities ○ High risk areas • Post-outbreak management <ul style="list-style-type: none"> ○ Disease surveillance ○ Managing vaccinated animals |
|---|--|








Reporting costs and economic impacts

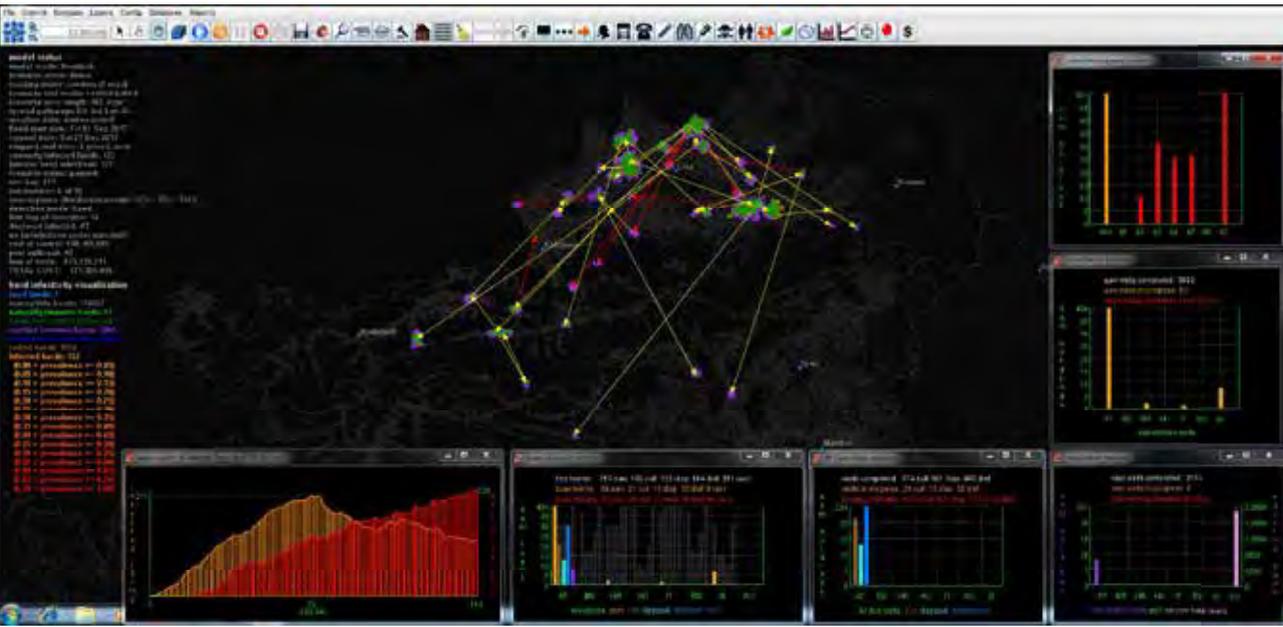
- **Useful to provide economic outputs from the modelling, as understanding the economic impacts and being able to compare costs of different control strategies is very important to decision-makers.**
- **Keeping it simple. Model will track:**
 - Animal values (for compensation)
 - Cost of managing outbreak including operational activities (surveillance, culling, vaccination, running disease control centres, etc.)
 - Trade losses
 - Post-outbreak management costs (surveillance, vaccinated animals)
- **Relative versus absolute costs/impacts**
- **Adequate for comparing policies**








Model Display



The screenshot shows a complex software interface for a disease model. The central part of the screen features a network graph with nodes and connecting lines, representing the spread of a disease. To the left, there is a console window displaying text logs. On the right and bottom, there are several data visualization windows, including bar charts and line graphs, which likely represent the model's output regarding costs and economic impacts over time.

Model Reporting

Run	Surveillance	Culling	Disposal	Disinfect	Compens	Vaccinatic	Total cont	Control D	Control ce	Total cost	Post-mgm
1	1007031	17787	87918	1343676	1393700	25392	3875503	0	639240	4514743	0
2	3689846	124567	1193028	13889637	15138108	313214	34348400	110	941480	35289880	0
3	5285905	210370	1832567	20319390	24065627	428585	52142443	75	1534540	53676983	0
4	1101087	9006	79877	1174471	1024434	44411	3433236	87	391500	3824736	0
5	815662	6320	47888	875877	637491	22335	2405573	93	569758	2975331	0
6	3175303	115871	884063	9783956	12077041	195747	26232182	74	598500	26830682	0
7	926217	28878	80915	1079917	1723995	13302	3853830	75	324000	4177830	0
8	97714	2041	5862	119438	123026	725	348805	79	162000	510805	0
9	2214087	37815	338926	3896661	4375945	107716	10971150	73	943482	11914632	0
10	201911	2229	16363	338406	223177	5685	787770	75	193500	981270	0

Workshop & EuFMDiS open day

Budapest, Hungary – 10-13 July 2018

European Foot and Mouth Disease Spread Model (EuFMDiS)
Pilot project 2nd Workshop

Participants have indicated the potential applications of the model

- For training purposes: raising awareness among veterinarians, stakeholders - easy tool for visualization;
- Resources planning: how many teams for culling, surveillance, etc.
- Estimation of costs - total costs, Trade loss, compensation costs;
- Support for decision making: in long term - support for decision making (vaccination Y/N, when to do it, preventive culling, comparing the costs, etc.)
- Defining high risk areas based on the outputs of the model;
- Carry out risk assessments, for example if there is an outbreak of FMD in other MS;

EuFMDiS Future Development Plans

1.2.1.5 European, multi-country animal disease spread model

1. Retrieve outstanding data from participating countries
2. Software development and model finalisation
 - Version 1.3: Incorporation of more data
 - Version 1.4: More flexibility in operational activities
 - Version 1.5: More country specific vaccination options
3. Independent model testing and validation
4. Establish collaboration with EFSA SIGMA initiative
5. Establish EuFMDiS Steering Group
6. Incorporate wild life component into the EuFMDiS model
7. Incorporate additional countries into the modelling project: Spain-Portugal, Benelux, Nordic-Baltic Veterinary Contingency Group
8. Ongoing support for the central European modelling initiative
9. Demo model to OIE, DG SANTE, COPA-COGECA, UECEBV, Health for Animals, ...

EuFMDiS Future Development Plans

1.2.1.1 Contingency planning network

=> Use EuFMDiS to test contingency plans

1.2.1.2 Modelling network

=> Demonstrate EuFMDiS

1.2.1.3 Emergency Vaccination network

=> Use EuFMDiS to test emergency vaccination strategies

EuFMDiS Future Development Plans

1.2.2.1 Economic impact calculator

=> EuFMDiS calculates economic costs and losses

1.2.2.2 Support to development of diagnostic banks

1.2.2.3 Support to emergency access to vaccine banks

1.2.2.4 Support to sharing critical human resources

=> EuFMDiS can provide requirements assessments

1.2.2.5 Other decision support tools

> EuFMDiS is a decision support tool

⇒ European Transnational Contingency Planning workshop
before July 2019

European Transnational Contingency Planning workshop

Objectives:

- Investigate biosecurity criteria that guarantee safe trade during outbreaks

Organising Committee:

- Eu FMD standing committee
- DG Santé
- EFSA
- COPA-COGECA
- UECBV

Format:

- Evaluate biosecurity scenarios with EUFMDiS model

Participants:

- PPP

Dates and Venue

- 2019 Q2, venue: Romania?

Budget:



EUROPEAN UNION FUND FOR THE DEVELOPMENT OF RURAL AREAS













http://www.eaap.org/wp-content/uploads/2015/11/Sustainable_livestock_A4_AW_261015_LoRes.pdf

Private sector engagement in emergency preparedness



EUROPEAN UNION FUND FOR THE DEVELOPMENT OF RURAL AREAS



EUROPEAN UNION FUND FOR THE DEVELOPMENT OF RURAL AREAS











Public vs. Private Engagement

- **FMD control is considered as public good with top-down regulation:**
 - International bodies -> National Government
 - -> Veterinary Services -> Livestock Industry
 - Public investments and responsibilities
- **Livestock industry faces constrains:**
 - Insufficient protection
 - Loss of business
 - Welfare issues
 - Insufficient control measures
- **Equal situation in FMD-free as FMD-endemic areas**

Public Private Partnership

- **Private Engagement in contingency planning and preparedness**
 - Preparedness and control in line with current livestock production practices
 - Invest in outbreak control measures
 - Develop industry contingency plans
- **Private engagement in biosecurity protocols**
 - Prevent disease incursion
 - Protect against wildlife-livestock interaction
 - Guarantee safe trade during outbreaks

Public Private Partnership

1.2.2.6 Private Sector involvement in Emergency Preparedness and management

⇒ **Private sector engagement and investment in FMD control**

⇒ **Needs and expectations assessment**

- Private stakeholders consultation
- Public stakeholders consultation
- Consultation to develop resource materials to MSs
- PPP conference
- Open the discussion to other diseases?

Appendix 8
Item 4 Pillar I
Training programme

 **EuFMD**
EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE







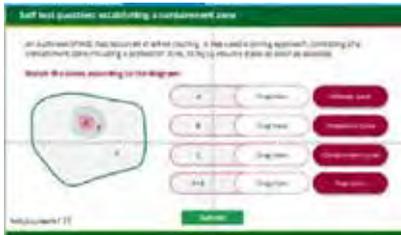




EuFMD Training Programme







Report to EuFMD Executive Committee September 2018

Jenny Maud and Rodrigo Nova Chavez

 **EuFMD**
EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE











Pillar I Past training

On-line: FMD Emergency Preparation Course (FEPC)

A number of FEPC have been run during the last six months. All of them with excellent feedback from the participants.

FEPC Spain:

- 15 May – 15 June 2018
- 'I think this course was excellent!!!!' (*El curso me ha parecido excelente!!!!!!*).

FEPC Serbia:

- 28 June – 26 July 2018
- *The whole course is phenomenal, I apply for each one you organize in advance. (Čitav kurs je fenomenalan, unapred se prijavljujem za svaki koji vi organizujete).*

FEPC in English:

- 31 May – 6 July 2018
- Bulgaria, Croatia, Finland, Georgia, Germany, Greece, Iceland and Italy
- *'Excellent, not too easy, you have to study. Interesting discussions and lessons. Very interesting to hear also about ASF and AI. Thank you very much !'*

FEPC in France:

- 24 May – 29 June 2018
- *I liked your availability to answer questions, then the participants who asked many interesting questions (even if it took time to read everything), the answers, the theoretical contributions and links to additional information resources. (Ce que j'ai apprécié votre disponibilité pour répondre aux questions, ensuite les participants qui posaient beaucoup de questions intéressantes (même si ça prenait du temps de tout lire), les réponses, les apports théoriques et les liens vers des ressources complémentaires d'information).*

Workshop: Wildlife Surveillance

Participants:

Bulgaria, Croatia, Czech Republic, Germany, Norway, Romania, Serbia, Hungary, Israel, Turkey and France.

Objective:

The workshop run in Sofia, Bulgaria from 8-11 May 2018. It included theory and practical activities aiming to provide participants with a better understanding of FMD surveillance in wildlife, particularly by using non-invasive methods

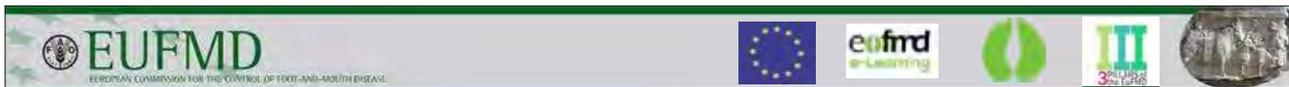
Topics covered:

- Contingency planning for Foot-and-Mouth Disease and measures in case of confirmation in wild animals;
- Wildlife health and management;
- The role of wild boar in FMD disease epidemiology at the wildlife interface with domestic livestock;
- Wild boar ecology and disease;
- Non-invasive sampling of wild boar for FMD and other contagious diseases;
- Trapping as an alternative method to eradicate FMD in wild boar and other contagious diseases.

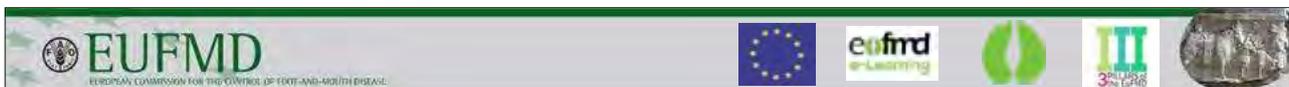
Practical training:

- Distribution of baits for non-invasive surveillance at salt licks and feeding locations of wild boars and collection of the baits;
- Biosafety and biosecurity during the game processing;
- Clinical examination and sampling of wild boar for animal contagious diseases.





Upcoming training



Workshop: Simulation exercise

Participants:

- Bosnia & Herzegovina, Croatia, Czech Republic, France, F.Y.R. of Macedonia, Iceland, Ireland, Malta, Montenegro, The Netherlands, Norway, Serbia, Slovak Republic and Turkey.

Trainers:

- Hans Bruhn (Danish Emergency Management Agency), Iain Bell (Animal and Plant Health Agency (APHA), UK) and Sally Gaynor (Department of Agriculture, Food and the Marine, Ireland).

Objective:

- The activity will run in Athens, Greece (26-29 November 2018). The experts will cover key concepts of simulation exercise, such as selection, execution and evaluation.

Outcomes:

- The skills acquired through this workshop should allowed participants to be able to design, implement and assess the most appropriate simulation exercises for their individual circumstances/needs.

Regional approach: Portugal-Spain

Joint simulation exercise.

- **Aim:** To build capacity and harmonize communication strategies.
- **Tentative dates:** 5-7 March 2019.
- **Venue:** Badajoz, Spain.
- **EuFMD support:**
 - Logistics;
 - Trainers:
 - Pia Sainz: APHA, UK. Expert in simulation exercise.
 - Maria de la Puente: EuFMD, BTSF.
- **Participants:** 25 veterinarians from Portugal and 35 from Spain.
- **EuFMDis:** The workshop may include the use of EuFMDis for running the scenarios.

Workshop: Emergency vaccination

Background:

- Second version of workshop originally run at Grange, Ireland on 13- 16 March 2017.

Date and venue:

- TBC (first half 2019).

Participants:

- Albania, Austria, Belgium, Georgia, Germany, Israel, Italy, Latvia, Malta, Serbia and Turkey.

Objective:

- The workshop will focus on the practical aspects of an emergency vaccination (e.g. legal background to the use of FMD emergency vaccination). Activities will involve e-learning and guided discussions and exercises to aid the understanding of the different concepts.

On-line: FMD Emergency Preparation Course (FEPC)

- **FEPC English: 13 November - 11 December 2018**
(Eight countries: Austria, Denmark, Georgia, Israel, Norway, Portugal, Romania and Sweden);
- **FEPC Hungarian: 5th March 2019 - 2 April 2019;**
- **FEPC Polish: TBC (2019);**
- **FEPC Turkish Cypriot community: TBC (2019).**
 - Process lead by Ankica Labrovic, Programme Manager - Rural development & Livestock and Food Safety. Cyprus Settlement Support.

Field training: Real time training in Uganda

Course:

The Real Time training course is a unique course in that it allows you to see field cases of FMD, and to investigate an outbreak in “real time”. It will cover foot-and-mouth disease pathogenesis, clinical diagnosis, laboratory testing, epidemiology, outbreak investigation and biosecurity.

Logistics:

It will take place in **Uganda**, from the **18th-22nd February 2019**.

Participants:

Albania, Czech Republic, Finland, F.Y.R. of Macedonia, Greece, Malta, The Netherlands, Slovakia, Slovenia, Sweden.





Evaluation of training



Evaluation of training

Last July, EuFMD published a call of expression of interest for experts in education to visit EuFMD at FAO headquarters in order to evaluate the processes of the training offered.

The process will include:

- Two days visit (3-4 December 2018);
- Written report (15 January 2018).

A team of three academics from institutions accredited by The European Association of Establishments for Veterinary Education (EAEVE) were selected and invited.

Visitors:

Dr Wendela Wapennar

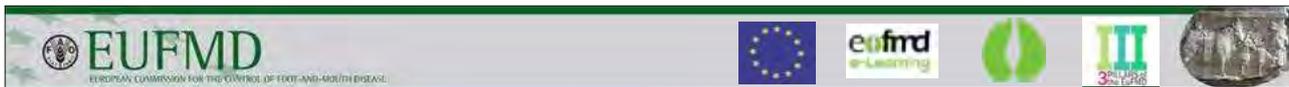
- School of Veterinary Medicine and Science, University of Nottingham (UK).
- Clinical Associate Professor in Cattle Health and Epidemiology. She has worked in The Netherlands, Canada, New Zealand and the UK. Robust experience in visitations (e.g. Spain and Turkey).

Dr Daniele De Meneghi

- Department of Veterinary Science at the University of Torino in Italy.
- Extensive veterinary work in sub-Saharan African countries.

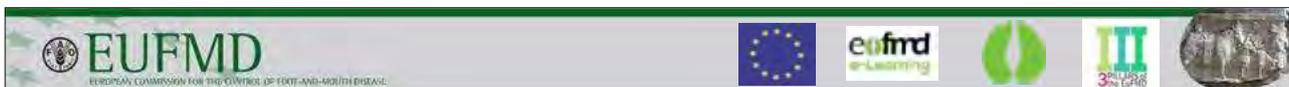
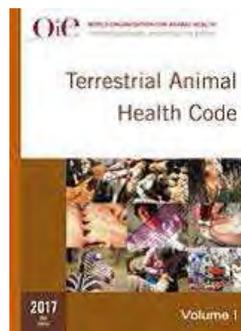
Dr Geraldine Boseret

- Faculty of Veterinary Medicine, University of Liège, Belgium.
- Lecturer on epidemiology and risk analysis applied to veterinary.



Partnership with the OIE

***Better use of the OIE Terrestrial Code for safer trade:
Training on the use of the OIE Code***



Safe Trade and FMD Control Workshop: Istanbul: April 2018

4 days workshop (with field trip on zoning-based control) preceded by **newly developed e-learning**);

Topics covered in the workshop:

- Day 1.** Impact of FMD on trade. Market access negotiations, veterinary certification.
- Day 2.** Mechanisms for safer trade between countries with different economic status
- Day 3.** Field trip on understanding of “real-life” transmission risks
- Day 4.** Applying risk mitigation measures to manage trade risks

Trainers:

Melissa McLaws, Dinara Imanbayeva
Gillian





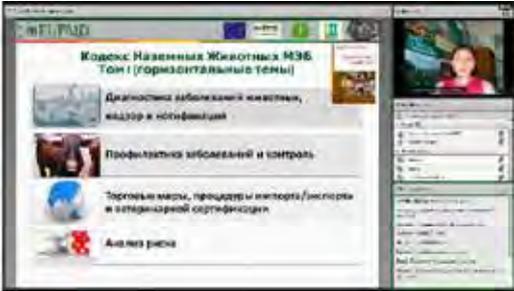





Safe Trade and FMD Control Workshop: Istanbul: April 2018

Participants selected by competitive selection:
(Algeria, Azerbaijan, Georgia, Jordan, Kyrgyzstan, Lebanon, Libya, Morocco, Palestine, Tunisia, Turkey)

Follow up webinar in Russian language:







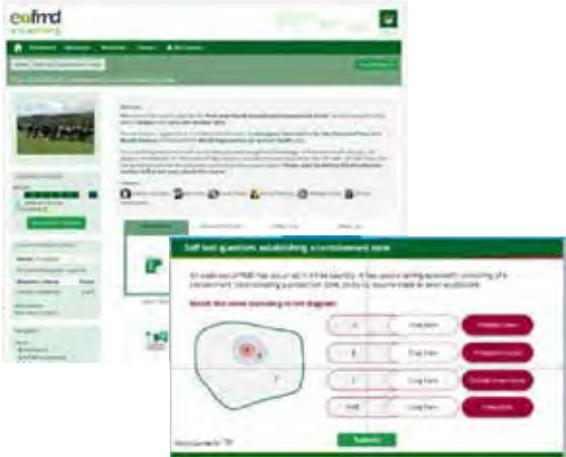







Training in partnership with the OIE: Containment Zones

Building on the partnership developed during the first workshop on FMD and Safer Trade...






New e-learning modules on zoning and containment zones have been developed

Workshop **next week** in Serbia, including field visit and practical case study approach

Containment Zone Workshop

Participants:

- Belarus, Denmark FYR of Macedonia, Georgia, Kazakhstan, Russia, Serbia, Turkey and Ukraine.

Objective:

- The activity will run in Belgrade, Serbia (1-4 October 2018). This workshop brings together international experts, officials responsible for international trade and those developing contingency plans and disease control strategies to enhance understanding about the use of containment zones as part of an FMD outbreak response. The training will combine theory and practical application in order to ensure a comprehensive and useful learning experience for the participants.

Outcomes:

- Interpret the requirements to establish a containment zone according to the OIE Terrestrial Code;
- Appraise their national situation and preparedness for an FMD emergency;
- Decide the feasibility of implementing a containment zone.

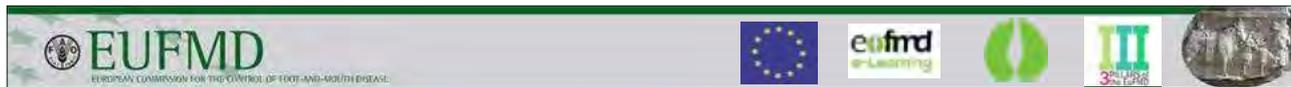
Trainers:

EuFMD: Melissa McLaws, David Paton, Rodrigo Nova, Dinara Imanbayeva

OIE: Min Park, Marija Popovic (Laure Weber Vintzel was involved in development of e-learning and workshop)



Evaluation of training



Evaluation of training

A team of three academics will visit EuFMD at FAO headquarters to evaluate the training programme offered.

The process includes:

- Two days visit (8-9 October 2018);
- Written report (14 December 2018).

Visitors:

Dr Wendela Wapennar

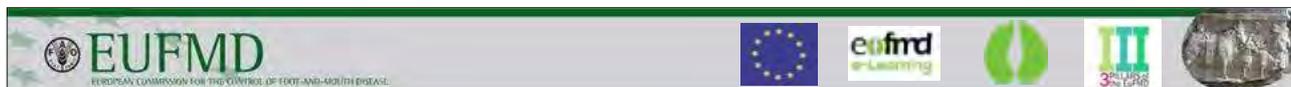
- School of Veterinary Medicine and Science, University of Nottingham (UK).
- Clinical Associate Professor in Cattle Health and Epidemiology. She has worked in The Netherlands, Canada, New Zealand and the UK. Robust experience in visitations (e.g. Spain and Turkey).

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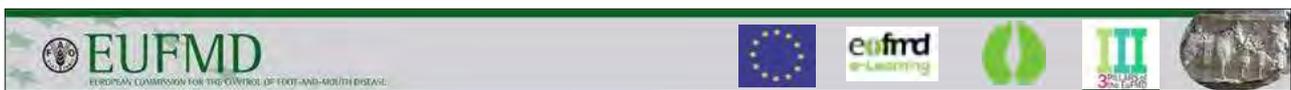
Dr Geraldine Boseret

- Faculty of Veterinary Medicine, University of Liège, Belgium.
- Lecturer on epidemiology and risk analysis applied to veterinary.



Training in Pillars II and III



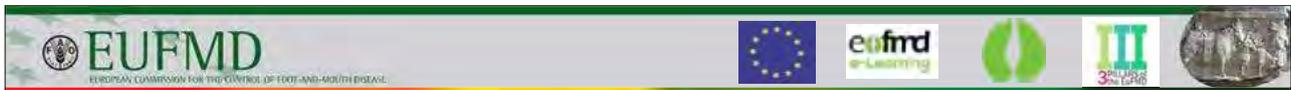
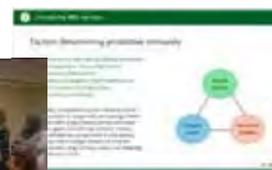


Pillar II: Update on the last six months



In-depth e-learning: Post vaccination monitoring

- All Pillar II countries
- Innovative approach where in-depth e-learning was followed by **regional face to face workshops**



Pillar II: Update on the last six months



FMD Investigation Training Course in French

- Combined with W and C Africa



FMD Investigation Training Course in Turkish

- Partnership with GDFC
- 150 enrolled

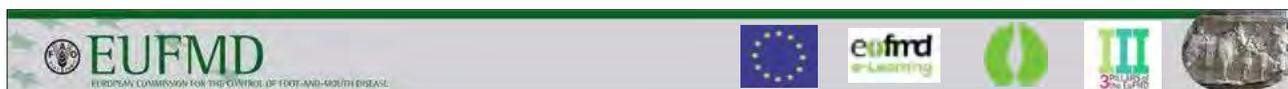




Pillar II: Plans for the next six months

Focus on **translated versions** of previously developed courses and further development of open access e-learning :

- **French language** socio-economic impact analysis (CIRAD partnership)
- **Russian language e-learning** (pending identification of suitable partners for delivery)
- **Arabic repeat FMD Investigation Training course**
- **Open access:** Risk-Based Strategic Plans and extracts of content developed with the OIE on Safer Trade and Zoning



Pillar III: Update on the last six months



Online in depth Risk Analysis Along the Value Chain

- All South Asian countries plus
- 17 countries developed series of assignments directly applicable to development of Risk Based Strategic Plan

Online FMD Investigation Training Course in French

- N, W and C Africa: **300** Participants
- 14 countries
- **Use of Whatsapp™ and social media to enhance participation**
- Enthusiastic communication



FMD Investigation Training course for South Asia 2

- 190 nominated participants



Pillar III: Plans for the next six months

South Asia



- New STP: Mostafa Anower, Bangladesh
- Partnership with Indian Council Agricultural Research. Tailoring FMD Investigation Training Course to Indian situation, **first national e-learning course planned November**
- Support to regional **epidemiology and laboratory networks** through webinars
- Regional courses (FMD Investigation Training, Socioeconomics)
- **Broadening participation** in training: tools for training of paravets, widening participation in courses, social media

Pillar III: Plans for the next six months

West and Central Africa



- New STPs: Jean Claude Udahemuka, Willington Besong Ojong
- Ongoing assessment of training needs and methodology
- Online FMD Investigation Training Courses in English and French including **social media and mobile phone technology**
- Online Socio-economic impact assessment in French
- **Broadening participation** in training: tools for training of paravets, widening participation in courses, social media

Pillar III: Plans for the next six months Outside South Asia and W/C Africa



- Places available on in-depth e-learning courses to countries prioritised by FMD WG
- English language FMD Investigation Training Course for **East Africa** as follow up to roadmap meeting
- **FMD Laboratory Investigation Training Course** in partnership with Pirbright

Training funded by non Member States



Australia and New Zealand funded training:

- Two Real Time Training courses planned for November/December
- Online FMD Emergency Preparation course for Australia planned for November

Canadian Food Inspection Agency

- Request for tailored bilingual online FMD Emergency Preparation Course, full costs to be covered by CFIA (approx. USD 20,000).
- Participation/interest by US



Interest from PPR Secretariat in partnership in development of PPR self assessment tool.

Where next for EuFMD Training?



Strategic questions for the Executive Committee

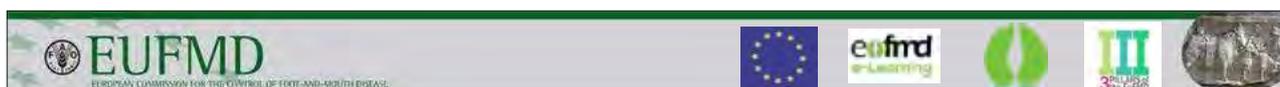
Pillar I: Training Credits

Each country is currently allocated 10 training credits per two years.



Should we alter the approach to allocation of training credits?

- **Risk-based approach:** preferential allocation of credits to those countries at higher risk or with specific capacity gaps.
- **Scaled approach:** allocation of credits scaled according to a metric indicative of the “size” of the country (livestock population, MS contribution etc).



Pillar I: Cross-cutting methodologies, skills and competencies

The training methodology and some of the skills and competencies developed in EuFMD courses are highly relevant beyond only FMD:

Training methodology:

- Needs-based training menu: tailor training to a country's requirements
- Innovative e-learning
- Field based, practical courses

Competencies:

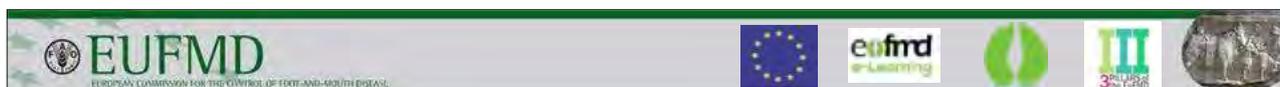
- Contingency planning, simulation exercises, emergency management
- Wildlife surveillance
- Modelling as a decision support tool
- Training on the OIE code

Transferable skills:

- Communication, leadership, interpersonal skills, ethics, how to provide training



Beyond these cross-cutting elements, is there a need to work with recognized experts to develop training which addresses specific aspects of other diseases?



Pillars II and III Approaches to Progressive Control

- EuFMD has developed a range of courses to support the development and implementation of **risk-based FMD control strategies**. As with Pillar I, many of these competencies and methodologies are **cross-cutting and applicable to control of a range of TADs**.
- EuFMD has developed methods to **understand training needs** and assure **development of quality e-learning courses** in a cost-effective manner.
- E-learning has been demonstrated to have the **potential** to deliver these courses widely, in appropriate languages and communicating through new channels. We recognize **strong needs** for such training.



Can EuFMD's training approaches be applied to development of disease specific materials for risk-based control of other priority TADs

FMD/TADS in wildlife: training in investigation methods



- Previous courses (2) in Bulgaria lead by trainers with **expertise in wildlife investigation** for FMD and ASF
- EuFMD could run further courses subject to demand (and partial cost-recovery)
- Funding allows for initial **5 places** (EuFMD) with additional places on following cost basis
 - 600€ per additional trainee (VS nominated trainee, Member States)
 - 800€ per additional trainee from non-Member States and private sector

Appendix 9

Item 4 Pillar II



Pillar II

Reduced FMD risk to EUFMD Members from European neighbourhood

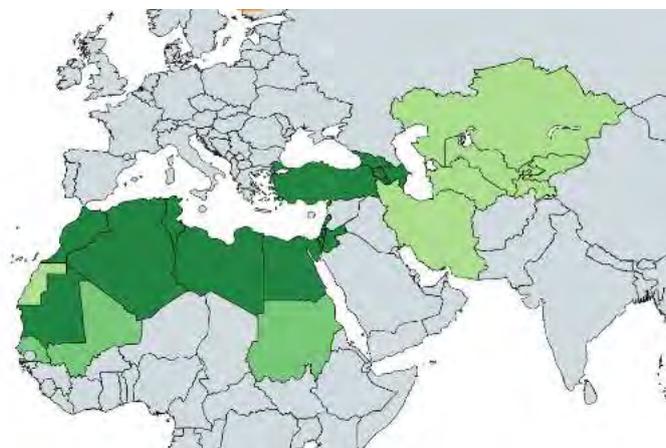
UPDATE March 2018 – September 2018
and
Perspective on co-ordinated surveillance programmes in the European neighbourhood

96th Executive Committee meeting
 26-27 September 2018



Pillar II

Reduced FMD risk to Members from European neighbourhood



Targets across the pillar

- ➔ 1. Progression along PCP
- ➔ 2. Improve assessment of risk
- ➔ 3. Implementation of risk based strategies
- ➔ 4. Improved national capacity for FMD management





Partnerships – activities for Pillar II countries

Improving the capacity of veterinary services of Algeria, Chad, Mauritania, Morocco, Senegal, and Tunisia (+ Libya, Egypt, Sudan) on **development of risk information and mapping tools** and **update surveillance protocols**

IZSLT

Improving country capacity to **design and implement** Risk Based Strategic Plan for FMD control and **monitor and evaluate** the implementation of control activities under stages 2 and 3 of the Progressive Control Pathway (PCP);



Development of courses (e.g. **Safer trade and FMD control , Containment zone**) with the objectives to the understand the FMD impact on international trade, and applying the principles and requirements of the relevant chapters of the OIE Terrestrial Code



1. Progression along the PCP

PCP	0	1	2	3	4	
Tureky (Thrace)						
Turkey						
Georgia						
Armenia						
Azerbaijan						
Lebanon		provisional				
Jordan		provisional				
Palestine						
Egypt						
Sudan		provisional				
Libia						
Mauritania						not official stage
Algeria						
Tunisia						
Morocco						

Activities recently carried out:

- **GEORGIA:** Mission to assist the progression to PCP stage 3 (Racha-Lechhumi region)
- **LEBANON:** workshop for development RBSP (Lebanon and Syria)
- **SUDAN:** workshop for development of RBSP
- **EGYPT:** mission for defining assistance for implementation and monitoring/evaluation RBSP



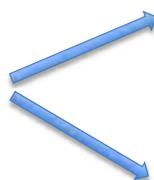
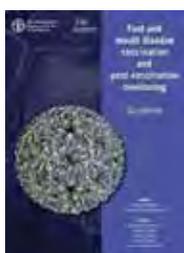


1. Progression along the PCP

Sub-regional technical meetings on **FMD surveillance and Post Vaccination Monitoring** (Jordan, 6-11 May 2018) for building the capacity for selecting vaccine, assessing the quality of vaccine and evaluating the effectiveness of vaccination in place

E-learning induction course on FMD Post Vaccination Monitoring

March/April 2018 – All EU neighbouring countries



FMD surveillance and Post Vaccination Monitoring sub-regional meeting

6-11 May 2018, Amman (Jordan)



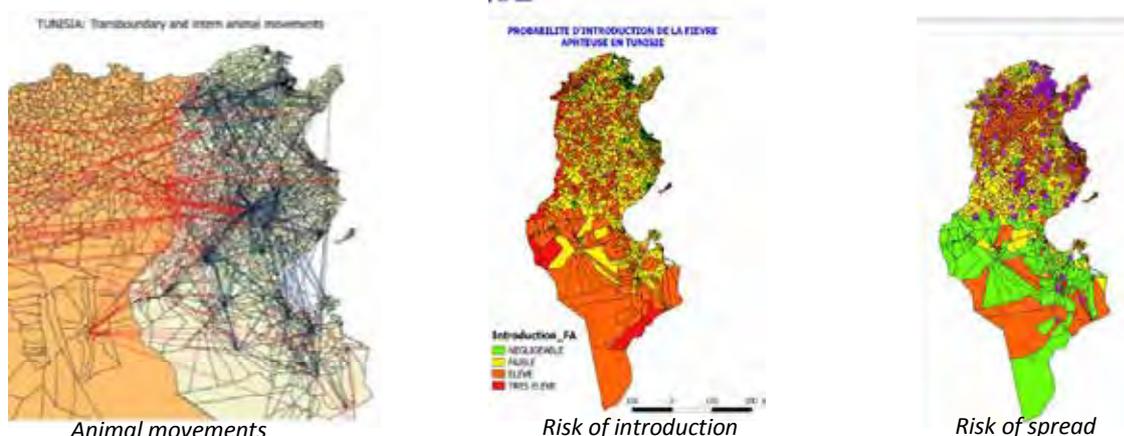
FMD Surveillance and Post-Vaccination Monitoring sub-regional meeting

14-17 May 2018, Ankara (Turkey)



2. Improve assessment of risk

“Qualitative and cartographic analysis of risks” for the optimization of surveillance of Foot and Mouth Disease (FMD) and other transboundary animal diseases (France, 23-27 April 2018)



The main objective was to develop country-specific risk maps connected to animal movements and define risk-based surveillance protocols for Maghreb and Sahel countries. 12 participants from 6 countries (Senegal, Morocco, Algeria, Mauritania, Chad and Tunisia).



2. Improve assessment of risk (risk information)

Statement of Intensions – Turkey , TCC and neighbourhood

Improved system for immediate and monthly reporting of the FMD outbreaks



E.g. Outbreaks 01.01.2017- 01.09.2018



2. Improve assessment of risk (risk information)

Statement of Intensions – Turkey , TCC and neighbourhood

Monthly reporting of the level of implementation of the vaccination programmes

Context		Planning phase			
		Estimated vaccine doses		Estimated indicators	
Initial estimated number of animals present ⁽¹⁾	Estimated number of animals in the target population ⁽²⁾	Estimated number of vaccine doses required for the campaign ⁽³⁾	Estimated number of animals present (MAP)	Success rate (SR)	Success rate (SR)
LR	SR	LR	SR	LR	SR
Success rates		Implementation phase			
		Indicators		Indicators	
Calculated number of vaccine doses progressively injected ⁽⁴⁾	Success rate (SR)	Success rate (SR)	Success rate (SR)	Success rate (SR)	Success rate (SR)
LR	SR	LR	SR	LR	SR
Animals		Indicators			
Number of animals vaccinated during first visit	Total number of animals found to be present during first visit	Success rate (SR)	Success rate (SR)	Success rate (SR)	Success rate (SR)
LR	SR	LR	SR	LR	SR



Armenia, Azerbaijan, Georgia and Turkey: information shared in agreed format and frequency through the system

Russian Federation: information shared every 6 months with excel tables

I.R. of Iran: information not regularly shared with excel tables



FMD vaccine and vaccination details of TCC countries, Turkey and Iran

Country	Vaccination Program	Vaccine Schedule	Vaccine Manufacturer	Vaccine Strains for Cattle	Vaccine Strains for SR
ARMENIA	<ul style="list-style-type: none"> Cattle are vaccinated twice a year (in spring and autumn) Calves are vaccinated 3 times every 3 months up to 18 months of age SR are planned to vaccinate once in the risks zones 	<ul style="list-style-type: none"> March-July (Start of the campaign depends on the tender procedure, the weather of the year and the regional location. In some regions animal movements starts early, vaccination starts 1 February) Early Autumn or August-at the end of year 	FGBI "ARRIAH", Vladimir, RF	<ul style="list-style-type: none"> A-Iran05 A-G VII O-Panasia II Asia-1-Sindh08 	<ul style="list-style-type: none"> A-Iran05 A-G VII O-Panasia II Asia-1-Sindh08
AZERBAIJAN	<ul style="list-style-type: none"> Cattle are vaccinated twice a year Calves are vaccinated 3 times every 3 months up to 18 months of age 	<ul style="list-style-type: none"> March-May At the end of September-November Revaccination of calves 	Shchelkovo Biokombinat, Russia	<ul style="list-style-type: none"> A (GVII/SAU2015, Turkey 2014) O (Panasia II) Asia-1 (Turkey 2015) 	<ul style="list-style-type: none"> A/Turkey/2015 O Panasia II
GEORGIA	<ul style="list-style-type: none"> Cattle are vaccinated twice a year Calves are vaccinated 3 times every 3 months up to 18 months of age 	<ul style="list-style-type: none"> February-end of June July-November Revaccination of calves Break between the campaigns is from December to February 	Shchelkovo Biocombinat, Russia	<ul style="list-style-type: none"> A-Iran05 A-G VII O-Panasia II Asia-1-Shamir 	<ul style="list-style-type: none"> A-Iran05 A-G VII O-Panasia II Asia-1-Shamir
IRAN	<ul style="list-style-type: none"> Every 4 months 	<ul style="list-style-type: none"> Cattle vaccination started in April which is lasted one month Booster vaccination performed in industrial dairy farms 			
TURKEY	<ul style="list-style-type: none"> Cattle are vaccinated twice a year (in spring and autumn) SR are vaccinated once in Thrace region 	<ul style="list-style-type: none"> 15th of February-30th of April 3th of September-31th of October 	ŞAP Inst	<ul style="list-style-type: none"> O Tur07(panasiall) A TUR 15/GVII A SAM16 Asia1TUR14-SINDH08 	<ul style="list-style-type: none"> O Tur07(panasiall) A TUR 15/GVII A SAM16 Asia1TUR14-SINDH08

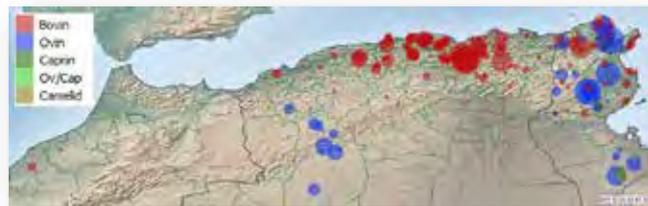


3. Implementation of risk based strategies (surveillance/control)

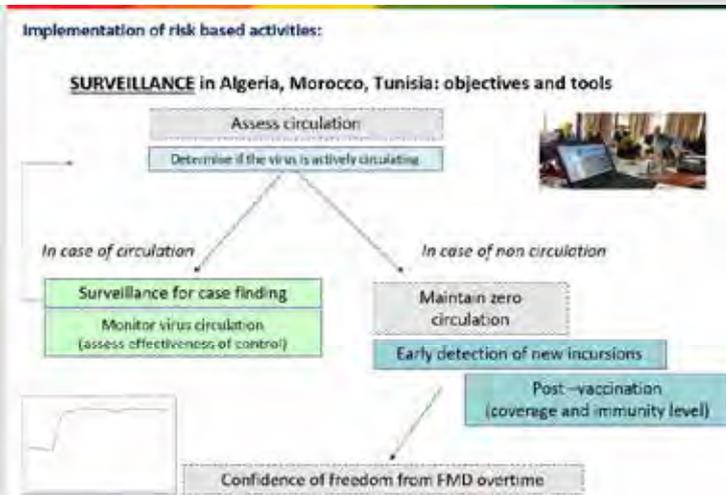
Fièvre Aphteuse – surveillance pour la détection précoce et quantification de la confiance d’être indemne

(EuFMD/Decc/Alp – component 1.1)

 7th - 9th Mars 2016, Rabat, Maroc



Epidemic 2014-2015



Risk based surveillance to evaluate presence of FMDV circulation

Target: small ruminants (6-12 months)

Risk factors considered:

- areas with previous outbreaks
- animal density
- animal movement
- markets



3. Implementation of risk based strategies (surveillance/control)

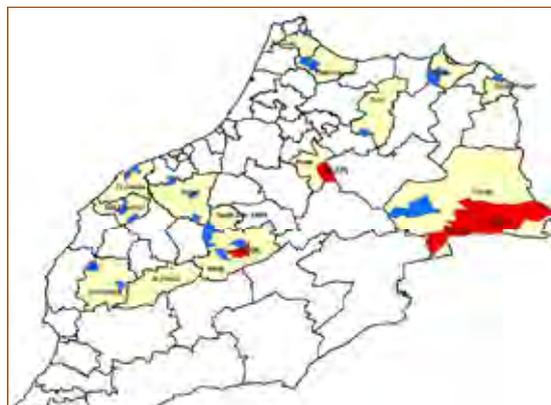
Algeria - Serosurv for FMDV circulation (October 2017)



n. 1537 SR tested in 111 herds and 43 wilayas:

n.15 herds pos in 14 wilayas (13%)
41 samples NSP positive: n.18 (O), n.3(A), n.1(O,A),
n.16 O,A neg (?), 3 not SP tested

Morocco - Serosurv for FMDV circulation (April-May 2017)



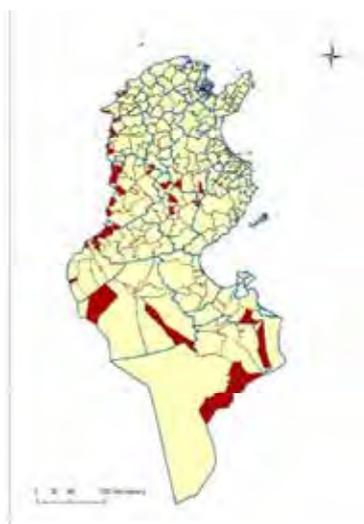
Sample n.739 SR from 78 herds in 14 provinces
n.33 positive from 8 herds in 3 provinces (Ifrane, Figuig
et Azilal)
Prevalence 4,47% with variation in provinces 0 - 23.33%.
In some cases intra-herd positivity of 80%

Current situation



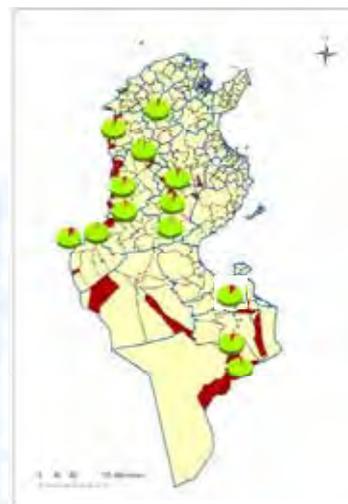
Implementation of risk based strategies (surveillance/control)

Morocco - Serosurv for FMDV circulation (January 2018)



Résultats

Gouvernorat	Douteux	Negatif	Positif	%
Jendouba	0	24	0	0,00
Le kef	0	114	0	0,00
Kairouan	0	51	1	1,92
Kasserine	0	187	2	1,06
Tetaouine	1	86	3	3,33
Gafsa	0	51	0	0,00
Tozeur	0	116	4	3,33
Kebili	0	50	0	0,00
Sidi Bouzid	2	352	5	1,39
Medenine	2	20	3	12,00
Total	5	1061	18	1,66



n. 1.084 small ruminants
tested in 108 herds

Prevalence 1,66% with variation in provinces 0 - 12%.



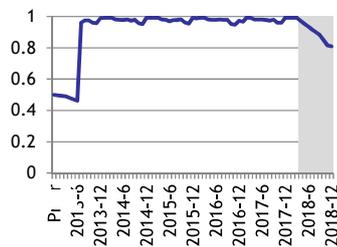
THRACE programme for FMD and other TADs (PPR, SGP LSD)

Objectives of surveillance:

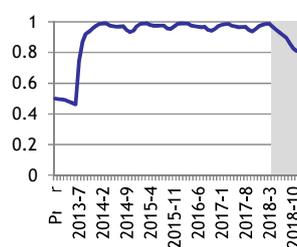
- increase confidence of freedom
- increase the likelihood of early detection of incursion

Activities

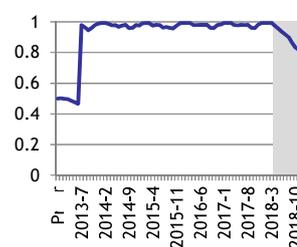
- Clinical examinations on a monthly basis
 - Serological surveillance every 3 months
- + Evaluation of passive surveillance reporting system



Greece



Bulgaria



Turkey



4. Capacity building

Safe Trade and FMD Control Workshop

(Turkey, 23-26 April 2018) The workshop was attended by 15 participants from 12 countries (Armenia, Azerbaijan, Georgia, Turkey, Kyrgyzstan, Jordan, Lebanon, Algeria, Morocco, Palestine, Sudan, Libya)



Workshop on “Qualitative and cartographic analysis of risks”

(France, 23-27 April 2018) 12 participants from 6 countries (Senegal, Morocco, Algeria, Mauritania, Chad and Tunisia).



E-learning

Induction course on Safe Trade and FMD control

In-depth course on FMD Post-Vaccination Monitoring

(April 2018). The course was delivered to 85 participants from 19 countries (Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Tajikistan, Turkmenistan, Turkey, Uzbekistan, Iraq, Egypt, Lebanon, Jordan, Palestine, Sudan, Libya, Morocco, Tunisia, and Algeria)

FMD Investigation Training course in FRENCH

(June-July 2018). The course is delivered to 150 participants nominated from 17 countries of North (Algeria, Morocco, Tunisia), Central and West Africa

FMD Investigation Training course in TURKISH

(March-April 2018). The course was delivered to 162 participants nominated from Turkey and Azerbaijan



Perspective on co-ordinated surveillance programmes in the European neighbourhood



Looking atWhat has been developed and implemented?
ConsideringWhat are the needs and priorities?
DefineWhat an How we can use, adapt and improve it?



Perspective on co-ordinated surveillance programmes in the European neighbourhood



Looking atWhat has been developed and implemented?
ConsideringWhat are the needs and priorities?
DefineWhat and how we can use, adapt and improve it?



Coordination & information sharing

Risk based surveillance

National progressive control pathway

Training

Appendix 10
Item 7 Further directions

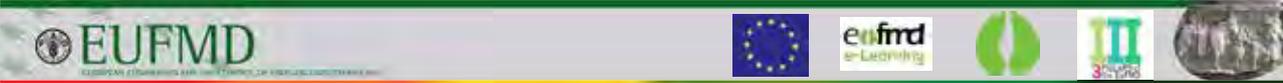


EuFMD: Quo Vadis?

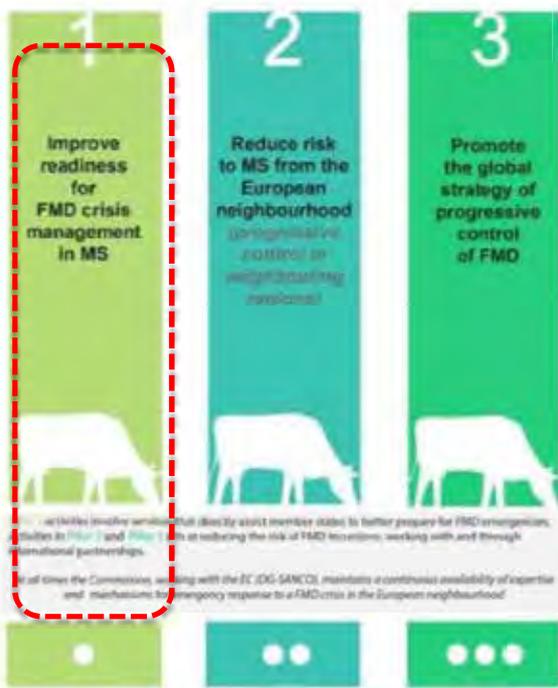
The future beyond the General Session 2019

Using our capacities and core strengths as part of reinforced partnerships
for disease prevention, preparedness and response

Considerations for the revision of the EuFMD Strategy, 2019-2023



EuFMD workplan 2015-2019



1
Improve readiness for FMD crisis management in MS

2
Reduce risk to MS from the European neighbourhood

3
Promote the global strategy of progressive control of FMD

Components

- 1.1 – **Training** for Member States
- 1.2 – Improved **Contingency Planning**
- 1.3 - Improved surveillance and management in **Thrace**
- 1.4 - improve emergency management capacity for FMD in the **Balkan region**
- 1.5 - FAR - **Fund for Applied Research**
- 1.6 - Emergency technical responses
- 1.7 - **Proficiency test** scheme
- 1.8 - **Risk Analysis** and Communication










- 1) Real Time Training
- 2) Online FMD Emergency Preparation Course: for multiple Member States in English
- 3) Online FMD Emergency Preparation Course: Tailored National Course Online course in national language,
- 4) Online FMD Emergency Preparation Course: subsequent national course
- 5) Workshop: "Managing a crisis"
- 6) Workshop: "FMD Simulation exercises"
- 7) Workshop: "Putting vaccination into practice"
- 8) Workshop: "FMD Wildlife surveillance"
- 9) Workshop: "Veterinary Ethics"
- 10) In-country support on FMD modelling
- 11) Laboratory Training Course
- 12) Regional event: Biorisk Training in collaboration with TPI

Training for Member States

Training opportunities:
 Training is selected based on the EuFMD Training Menu and NTFP allocations;
 388 Training Credits available to MSs

The **EuFMD e-Learning** Virtual Learning Environment (VLE) now has over **7300 users**, with 1600 new users added in the last six months.

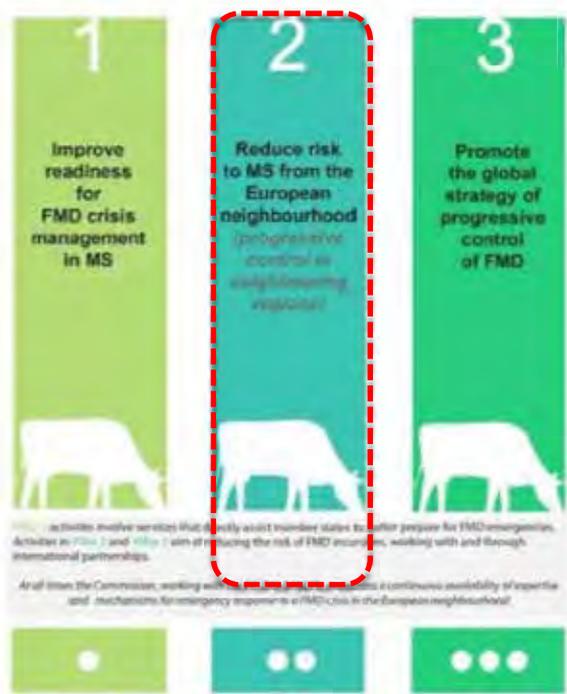
The **online EuFMD Knowledge Bank** is a searchable database of FMD related resources. And now contains over 450 resources and over 80 webinar recordings








EuFMD workplan 2015-2019



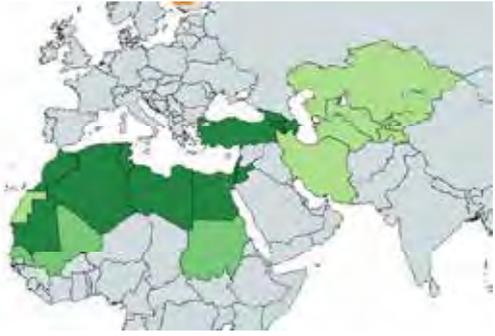
1
Improve readiness for FMD crisis management in MS

2
Reduce risk to MS from the European neighbourhood (progressive control in neighbouring countries)

3
Promote the global strategy of progressive control of FMD

Components

- 2.1 – South East Europe
- 2.2 - South East Mediterranean
- 2.3 - Support to **REMESA**
- 2.4 -**Training** development and coordination










Pillar II: *Reduced FMD risk to Members from European neighbourhood*

Targets across the pillar

- ➔ 1. Progression along PCP
- ➔ 2. Improve assessment of risk *
- ➔ 3. Implementation of risk based strategies (surveillance, vaccination, ...)
- ➔ 4. Improved national capacity for FMD management (capacity building)
















RECENT COURSES DEVELOPED

- ❖ FMD surveillance and Post Vaccination Monitoring





- ❖ Training on Safe Trade and FMD control



- ❖ Training on Containment zones

In progress








EuFMD workplan 2015-2019

1

Improve readiness for FMD crisis management in MS



2

Reduce risk to MS from the European neighbourhood (progressive control in neighbouring regions)



3

Promote the global strategy of progressive control of FMD



Components

- 3.1 - Improved system for monitoring and evaluation of **progress of regional programmes** on FMD control
- 3.2 – Support to **Global Progress Monitoring** of FMD Control programmes
- 3.3 - **Laboratory support**
- 3.4 – Global access to **PCP-FMD training resources**








PCP Support Officers

New initiative **to support countries** in PCP stage advancement and maintain momentum between roadmap meetings

Work with national PCP focal points and relevant regional FAO and OIE offices to provide guidance on PCP progression

Initial focus on countries in **provisional PCP stages** (currently 25)

System has been **agreed by the FAO-OIE** working group




Global issues - affecting prospects of progress

Increasing Global security in the supply of effective FMD vaccines; can we really manage the risks and achieve progressive FMD control without it?"

eufmd | OPEN SESSION 29-30-31 October 2018 Borgo Egnazia - Puglia, Italy

The EuFMD role – beyond 2019

1 Improve readiness for FMD crisis management in MS

2 Reduce risk to MS from the European neighbourhood (with government, academia, industry, NGOs, international partners)

3 Promote the global strategy of progressive control of FMD

Considerations

- Unique capacities and core strengths
- The 3 Pillars : a question of balance?
- Scope : considering additional priority TADS
- Risks/Gaps not served by FAO and OIE or others

Unique capacities and core strengths



Considerations

- Secretariat: technical and key operational team supported by the Administrative Fund (MS)
 - Experienced senior staff
 - Responsive to changing demands/ExCom directions (compared to EC program/ contracts)
 - Highly cost-efficient operational team for delivery across multiple countries
- Highly efficient delivery operation:
 - Contracted programmes (EC Phase IV) pay for who is needed on daily rates, maximum 11 months, from a wide EuFMD wide consultant roster
 - Low cost base - competitive rates and Short Term placements (STP system), highly cost -efficient
- Core strengths
 1. Combination of experience - and innovation
 2. Capacity to work outside EU in difficult settings (neighbourhood countries)
 3. Continual presence of staff and consultants in the field – Europe gains from up to date knowledge of field situation in multiple regions
 4. Capacity and flexibility to deliver quickly (autonomous budget authority and operation team)

The Three Pillars : a matter of balance



Considerations

- Balance: ~50% of resources go to support Pillar 1, member states
 - Pillar 1 training: should allocations be “risk based”, not same for all MS?
- Pillar 2: neighbourhood
 - Complex, 3 sub-regions
 - Multiple countries need serious support - national strategy work
 - Should intensity of effort be more “risk based” ?
 - Potential for “early warning hubs” “multi-TADS surveillance
 - Balance between supporting surveillance -and promoting control?
- Pillar 3: global support (to global GF-TADS)
 - Balance of global surveillance (WRL-FMD support) and support to FMD-WG
 - Requests growing from WG: good relationship, progress
 - Heavy demand for PCP expertise to guide countries and FAO and OIE officers in regions
 - Online training: cost effective, assists FAO and OIE in regional work between Roadmaps








EuFMD workplan 2019-?



Considerations

- **Scope : inclusion of additional priority TADS?**
 - PPR: already included in the scope of the THRACE component but not under REMESA
 - Sheep /Goat Pox: e.g Turkey, North Africa
 - LSD: covered enough by SGE, or need to support this group /activities
 - Bovine ephemeral fever (BEF): *risks to EU from presence in mid-East. Earlier warning needed? Include in THRACE programme? Vaccines?*
 - Bluetongue: already covered well by lab-networks ?
- **Given changing situation**
 - Need close co-ordination and clear roles (relation to DG-SANTE, OIE and EU-RLs)
 - Need flexibility to shift priorities, resources, activities
 - Make efficient use of THRACE model and sentinel areas for early detection and warning of change
 - Make efficient use of neighbourhood expertise, use EuFMD expertise in online training








Scope: support we might provide on other TADs



Considerations

- Key tools and capacity can adapt to support MS /neighborhood for other (ruminant/swine) TADS
- Early warning/surveillance support : experience in THRACE
- Next wave TADS: capacity to add in RVF, BEF with partners in Israel/Mid-East
- capacity for new online courses (using expertise in EU-RLs and OIE/FAO-Ref Centres)
- Global Programmes Support (complementary needs PPR to FMD)
- Resource issues: e.g. supporting EW surveillance programmes

- **EuFMD as delivery agency (no change in mandate?)**
- **Co-ordination with key partners: 6 monthly and annual workplans**
- **ExCom role : endorse plans, respond with flexibility**
- **resources**



EuFMD activities relevant to risks of other exotic TADS




1. Adapt online training: Regional and national preferred languages
2. European TADS spread modelling :
 - Potential for risk based decisions on programme
 - Wider role for EuFMDis (+ wildlife component)
3. Emergency Reserves
 - AESOP and PPP to meet emergency needs
 - Diagnostic banks
4. FMD Applied Research Fund (FAR), for European needs – prioritise tools which have multiple TADSs application?



Strategy Review Task Force (proposal)

Draft Terms of Reference

Outcome expected:

- Guidance paper for the Executive Committee (97th Session, January) on updating the EuFMD Strategic Plan for proposal to the 2019 General Session

TOR

After consideration of the current EuFMD programme, and the outcomes of the recent Conference of the OIE Regional Commission for Europe, and through a process of consultation with senior officers of GF-TADS (Europe, Global MC), OIE, FAO, DG-SANTE, EFSA, REMESA presidents, members of the Executive of EuFMD and others,

1. Provide guidance on updating the 3 Pillars Strategy, suggesting changes as needed to bring it better into line with the priority needs of the MS and Europe as a whole;
2. Provide guidance on the role that EuFMD could play in relation to other exotic TADS, as a contractor or as part of its (Constitutional) functions, and provide guidance on how this can be best co-ordinated with the contracting authority and GF-TADS partners, and the implications for the role of the Executive Committee;
3. Provide guidance on the advisability and practicability of “risk-based allocation” of future efforts, in Pillars 1, 2 and 3, in place of current flat-rate to support to MS on training (Pillar 1) , and the relatively even allocation to each subregion of the neighbourhood in Pillar 2.

Note: TOR2 covers the question of advisability of change to the Constitution








Time-table for strategy and work planning




1. ExCom 96: September
2. Commission "Strategy Task Force" (STF)
 1. STF interim report (January 2nd)
 - 2. STF report to the 97th ExCom: January**
3. Liase with DG-SANTE
4. Circulate Strategy Paper to MS – February
5. Develop associated workplan, 2019-2021
- 6. Present Proposal and draft workplan - General Session , April 2019**
7. Develop detailed workplans (2 or 4 years time frame)
8. Finalisation and Negotiation with DG-SANTE (May –August 2019)
- 9. Endorsement of workplans (biennium) – Excom98 (Sept 2019)**
10. Closure of Phase IV (30th September 2019)
11. Contingency funding: use of (reserve) Administrative Funds as bridging if negotiation delayed or prolonged

Appendix 11
Item 7 Presentation
by Georgia



საქს
საქართველოს
საჯანდაცოლო
სამსახური



EUFMD = more than FMD

Lasha Avaliani

Georgia



საქს
საქართველოს
საჯანდაცოლო
სამსახური

EUFMD primary goal

- EUFMD > EU without FMD
- Some countries infected or at the risk
- No common regulation
- No proper contingency plan
- No unified vaccine bank
- No proper control of FMD in neighboring countries
- No reference organization for addressing issues





საქართველოს
ეროვნული
სააგენტო

EUFMD achievements

- EU is without FMD !!!
- Common regulation (contingency plan)
- Unified vaccine bank
- Support of neighboring countries for better control of FMD (Georgia)
- Reference organization for addressing issues



საქართველოს
ეროვნული
სააგენტო

Why need of “expanded” EUFMD

- FMD is not only disease threats animal health
 - Some TADs have same scale and importance (PPR, LSD, Bluetongue)
 - Several disease concerns only some countries in the region (Brucellosis, rabies)
-
- Nowadays it is sad to use this resources and experience to be spend only for FMD



საქართველოს
ეროვნული
სააგენტო

What can EUFMD offer

- Team with big experience (EU and none EU member countries)
 - Approaches used for FMD could be used for other diseases
 - Already established net of experts (Epinet, Labnet)
 - Training sessions on the field as well as online (webinar)
 - Already established tools (web portal, knowledge bank etc.)
-
- Less time consumable
 - Cost-benefit



საქართველოს
ეროვნული
სააგენტო

Name suggestion from my side

E U	F M D	➔	E U	F M D
	O O I			O O I
	O U S			R R S
	D T E			E E
	H A S			A S E
	E			S E S

Appendix 12
Item 9 Financial reports

Update from GF-TADs

Juan Lubroth (FAO)
and Neo Mapitse (OIE)

Brussels, September 2018



Food and Agriculture
Organization of the
United Nations



GF-TADs
GLOBAL FRAMEWORK FOR THE
TRANSNATIONAL ACTION OF
DISEASES



WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

Contents



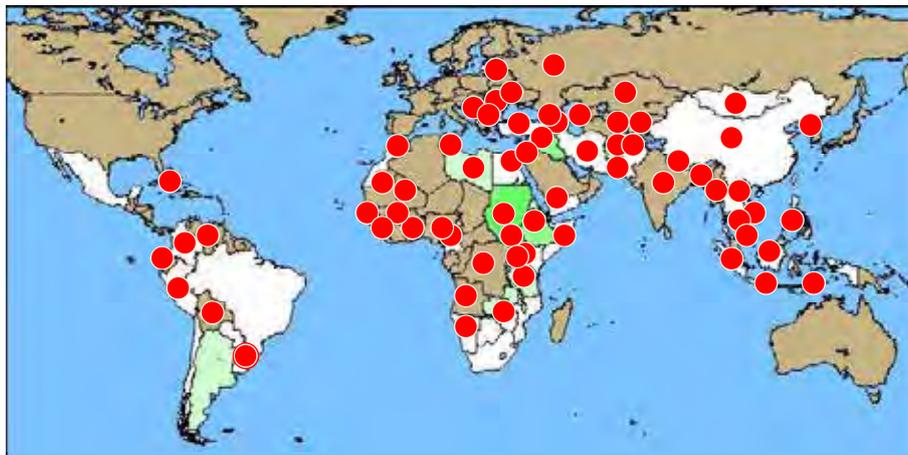
- FAO support to Members States and Regional Efforts
- Global FMD Control Strategy – where we are
- Roadmap meetings and PCP FMD status
- FMD WG: priorities and plan for 2019-2020
- OIE activities relevant to FMD at the Global level
- Areas of collaboration with EuFMD

Foot and Mouth Disease		
TCP/MON/3701 (NTE: 2019-08-19 00:00:00, LTU: AGAH) - Emergency assistance for the control of Foot and Mouth Disease in central and western regions of Mongolia		\$ 300,000
TCP/NAM/3606 (NTE: 2018-12-31 00:00:00, LTU: AGAH) - Feasibility study of proposed Foot and Mouth Disease Vaccine production in Namibia		\$ 98,000
TCP/SSD/3602 (NTE: 2018-12-30 00:00:00, LTU: SFEMD) - Support to implementation of the Foot and Mouth Disease (FMD) Progressive Control Pathway (PCP) in South Sudan		\$ 451,000
TF		
MTF /INT/003/EEC (NTE: 2019-09-30 00:00:00, LTU: AGAH) - EU Funded Activities (Phase IV: 2015 - 2019) carried out by the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD)		\$ 8,948,524
MTF /INT/004/MUL (NTE: 2019-12-31 00:00:00, LTU: AGAH) - Foot and Mouth Disease - Emergency Aid Programme		\$ 2,720,141
MTF /INT/011/MUL (NTE: 2019-12-31 00:00:00, LTU: AGAH) - European Commission for Control of Foot-And-Mouth Disease		\$ 13,784,108
OSRO/AFG/402/JPN (NTE: 2018-11-30 00:00:00, LTU: AGAH) - Building resilience and self-reliance of livestock keepers by improving control of Foot-and-Mouth Disease (FMD) and other Transboundary Animal Diseases (TADs)		\$ 16,754,787
OSRO/PAK/801/JPN (NTE: 2021-02-26 00:00:00, LTU: AGAH) - The Project for Enhancement of Foot-and-Mouth Disease Control in Pakistan		\$ 2,648,276
TF/LITE		

Component 2 and 3 (Pillar III)		
TCP/LES/3604 (NTE: 2018-12-31 00:00:00, LTU: AGAH) - Strengthening animal disease surveillance in Lesotho		\$ 371,000
TCP/RER/3602/C1 (NTE: 2018-11-30 00:00:00, LTU: REUTD) - TCPF: Improving the understanding, awareness, prevention and control of lumpy skin disease in the Balkans		\$ 99,000
TCP/RER/3605 (NTE: 2019-07-31 00:00:00, LTU: AGAHD) - Strengthening the regional preparedness, prevention and response against lumpy skin disease in Belarus, Moldova and Ukraine		\$ 300,000
TCP/SOM/3701 (NTE: 2019-08-31 00:00:00, LTU: AGAH) - Improving the coordination and capacity of Ministry of Livestock, Forestry and Range and other Somali institutions to control trade limiting livestock diseases		\$ 364,000
TCP/UGA/3604/C2 (NTE: 2018-09-30 00:00:00, LTU: AGAH) - TCPF: Technical Assessment of the animal Health Challenges posed by Ticks and Tick borne Diseases		\$ 69,000
TF		
MTF /RAS/299/SGT (NTE: 2018-10-15 00:00:00, LTU: AGAH) - Building up South Asia Disease Surveillance Network		\$ 180,000
OSRO/GLO/102/AUL BABY04 (NTE: 2017-12-31 00:00:00, LTU: AGAH) - Zoonotic diseases Component 4		\$ 186,824
OSRO/GLO/502/JPN (NTE: 2020-11-30 00:00:00, LTU: AGAH) - Strengthening International Responses to Transboundary Animal Diseases		\$ 2,491,960
OSRO/GLO/503/ROK (NTE: 2019-11-30 00:00:00, LTU: AGAH) - Support to address avian influenza and other high impact animal diseases in South Asia, Southeast Asia and Sub-Saharan Africa		\$ 2,495,838
OSRO/GLO/503/ROK BABY01 (NTE: 2019-11-30 00:00:00, LTU: AGAH) - Support to Address the Avian Influenza and Other High Impact Animal Diseases in Asia		\$ 1,996,671
OSRO/GLO/503/ROK BABY02 (NTE: 2019-11-30 00:00:00, LTU: AGAH) - Support to Address the Avian Influenza and Other High Impact Animal Diseases in Sub Saharan Africa		\$ 499,168
OSRO/GLO/504/USA (NTE: 2019-09-30 00:00:00, LTU: AGAH) - Global Stockpile of Emergency Animal Disease		\$ 4,500,000
OSRO/GLO/507/USA (NTE: 2019-09-30 00:00:00, LTU: AGAH) - Supporting the Global Health Security Agenda (GHS) to address Zoonotic Disease and Animal Health in Africa		\$ 49,950,000
OSRO/INT/901/NET (NTE: 2018-10-31 00:00:00, LTU: AGAH) - 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/PAK/801/JPN (NTE: 2021-02-26 00:00:00, LTU: AGAH) - The Project for Enhancement of Foot-and-Mouth Disease Control in Pakistan		\$ 2,648,276
OSRO/SSD/802/JPN (NTE: 2019-03-01 00:00:00, LTU: AGPM) - Support to livestock sector policy development and livestock disease surveillance system in S. Sudan		\$ 500,000
TF/GCP		
GCP /GLO/340/ITA (NTE: 2018-12-31 00:00:00, LTU: AGAH) - Global Framework for the Progressive Control of Transboundary Animal Diseases		\$ 887,519
GCP /GLO/340/ITA BABY01 (NTE: 2018-12-31 00:00:00, LTU: AGAHD) - Support to Global Framework for Progressive Control of Transboundary Animal Diseases - Baby 1		\$ 13,625

Tools and Capacity Building of Veterinary Systems		
TCP		
TCP/ARM/3603/C2 (NTE: 2019-02-28 00:00:00, LTU: REUTD) - TCPF - Provide assistance to the State Service for Food Safety of the Ministry of Agriculture of Armenia with risk assessment methodology and system in the fields of food safety, veterinary services and phytosanitary.		\$ 94,000
TCP/MON/3607 (NTE: 2018-12-31 00:00:00, LTU: AGAH) - Mongolia Animal Health and Veterinary Services Support		\$ 100,000
TF		
OSRO/BGD/505/USA (NTE: 2019-04-30 00:00:00, LTU: AGA) - Improving food security and public health through strengthened veterinary services in Bangladesh		\$ 8,874,142
TF/APOs		
GCPA/INT/347/CPR (NTE: 2020-08-31 00:00:00, LTU: AGAH) - Ms YU, Lina, Associate Professional Officer, Veterinary Information System and Tracking		\$ 302,604
TF/GCP		
GCP /GLO/798/CAN BABY05 (NTE: 2019-12-31 00:00:00, LTU: AGFF) - JECFA - risk management recommendation for residues of veterinary drugs in foods from unintended carry-over of veterinary drugs in feeds		\$ 46,546
GCP /GLO/798/USA (NTE: 2019-09-17 00:00:00, LTU: AGAH) - Strengthening Global Veterinary Epidemiology Capabilities and Rapid Regional Disease Surveillance		\$ 1,743,523
GCP /TAJ/013/EC (NTE: 2019-12-31 00:00:00, LTU: REUTD) - Strengthening Institutions and Capacity of the Ministry of Agriculture & State Veterinary Inspection Service for Policy Formulation		

Tools and Component 3		
TF		
MTF /INT/005/MUL (NTE: 2018-12-31 00:00:00, LTU: RAPG) - Animal Production and Health Commission Asia, F.East, S.W.Pacific APHCA		\$ 2,839,519
MTE /SOI/003/STF (NTE: 2020-05-31 00:00:00, LTU: AGFFD) - Strengthening the capacity of the National Public Health Laboratory to provide services in support of market access for Solomon Islands fish exporters		\$ 355,408
OSRO/GLO/102/AUL (NTE: 2019-12-31 00:00:00, LTU: AGAH) - Partnership on global animal health and biosecurity initiatives		\$ 2,054,207
OSRO/GLO/102/AUL BABY01 (NTE: 2017-12-31 00:00:00, LTU: AGAH) - Crisis Management Centre - Animal Health (CMC-AH) - Component 1		\$ 528,459
OSRO/GLO/102/AUL BABY06 (NTE: 2017-12-31 00:00:00, LTU: AGAH) - Partnership on global animal health		\$ 167,014
OSRO/GLO/407/USA (NTE: 2018-09-30 00:00:00, LTU: AGAH) - Global Health Security in Africa and Asia		\$ 3,311,000
OSRO/GLO/407/USA BABY01 (NTE: 2019-06-27 00:00:00, LTU: AGAH) - Provision of technical support for the One Health platform in Rwanda		\$ 561,000
OSRO/GLO/507/USA (NTE: 2019-09-30 00:00:00, LTU: AGAH) - Supporting the Global Health Security Agenda (GHS) to address Zoonotic Disease and Animal Health in Africa		\$ 49,950,000
OSRO/GLO/604/IRE (NTE: 2018-12-31 00:00:00, LTU: AGAH) - Support to FAOs One Health initiative: Rift Valley Fever Preparedness in West Africa		\$ 79,618
OSRO/GLO/706/USA (NTE: 2019-08-31 00:00:00, LTU: AGAH) - Development and Piloting of an Animal Health-Emergency Operations Center (AH-EOC) Framework		\$ 1,133,244
OSRO/INT/901/NET (NTE: 2018-10-31 00:00:00, LTU: AGAH) - 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/IRO/701/CHA (NTE: 2018-06-30 00:00:00, LTU: AGAH) - Support to small herders and vulnerable IDPs by safeguarding animal survival, health and production		\$ 2,005,678
OSRO/SOM/715/UK (NTE: 2018-06-30 00:00:00, LTU: AGA) - Integrated food security, nutrition, health, WASH and livelihoods response to the drought in Somalia		\$ 7,800,149
OSRO/VIE/402/USA (NTE: 2019-09-30 00:00:00, LTU: AGAH) - Risk Mitigation and Management of Human Health Threats Along Animal Value Chain		\$ 8,200,000
TF/GCP		
GCP /ETH/083/EC (NTE: 2018-11-25 00:00:00, LTU: NRC) - Pursuing Pastoral Resilience (PPR) through improved animal health service delivery in pastoral areas of Ethiopia		\$ 11,502,378
GCP /GLO/496/USA (NTE: 2018-03-31 00:00:00, LTU: AGAH) - Support of Cooperation on Global Rinderpest Post-Eradication, Disease Surveillance and Associated Animal Health Capacity Building		\$ 2,003,039
GCP /GLO/710/UK (NTE: 2019-03-31 00:00:00, LTU: AGFF) - Engaging the food and agriculture sectors in sub-Saharan Africa and South and South-east Asia in the global effort to combat antimicrobial resistance using a One Health approach		\$ 7,201,591
GCP /SLM/001/MEX BABY01 (NTE: 2019-08-31 00:00:00, LTU: ESA) - Componente Belice: Mesoamerica Without Hunger -		

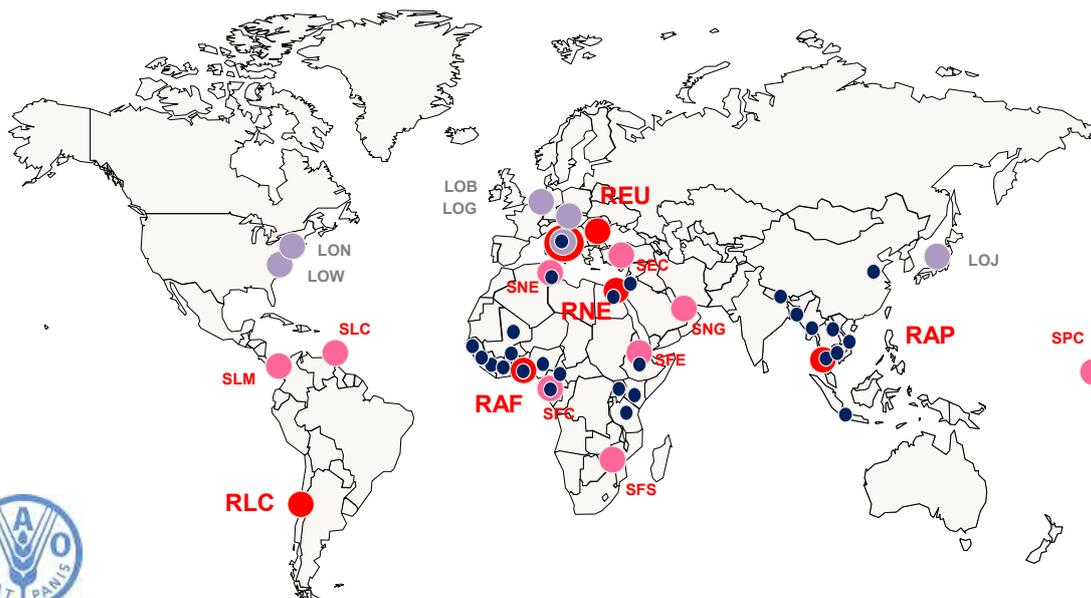


AGAH - Animal Health Service 2012-2018

Information systems, vaccine production, diagnostic equipment, health and production, legislation and legislative reviews, workshops, study tours, strategy development, contingency planning, risk analysis, ...



FAO HQ, Decentralised Offices - ECTAD Teams (2016 - 2018)



Jan 2018



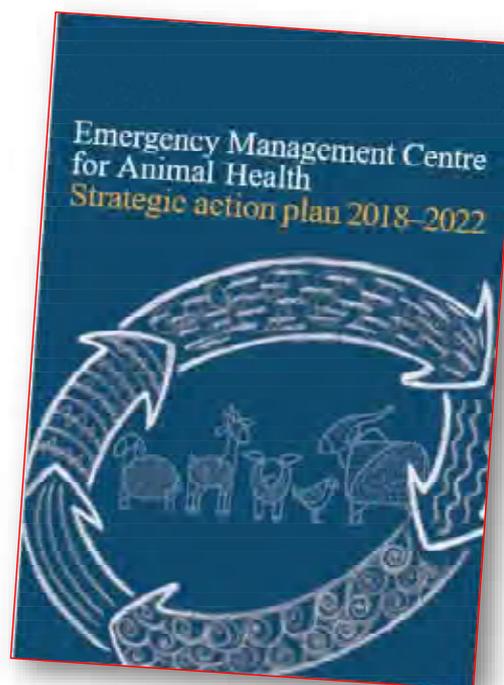
Modernized and Rebranded

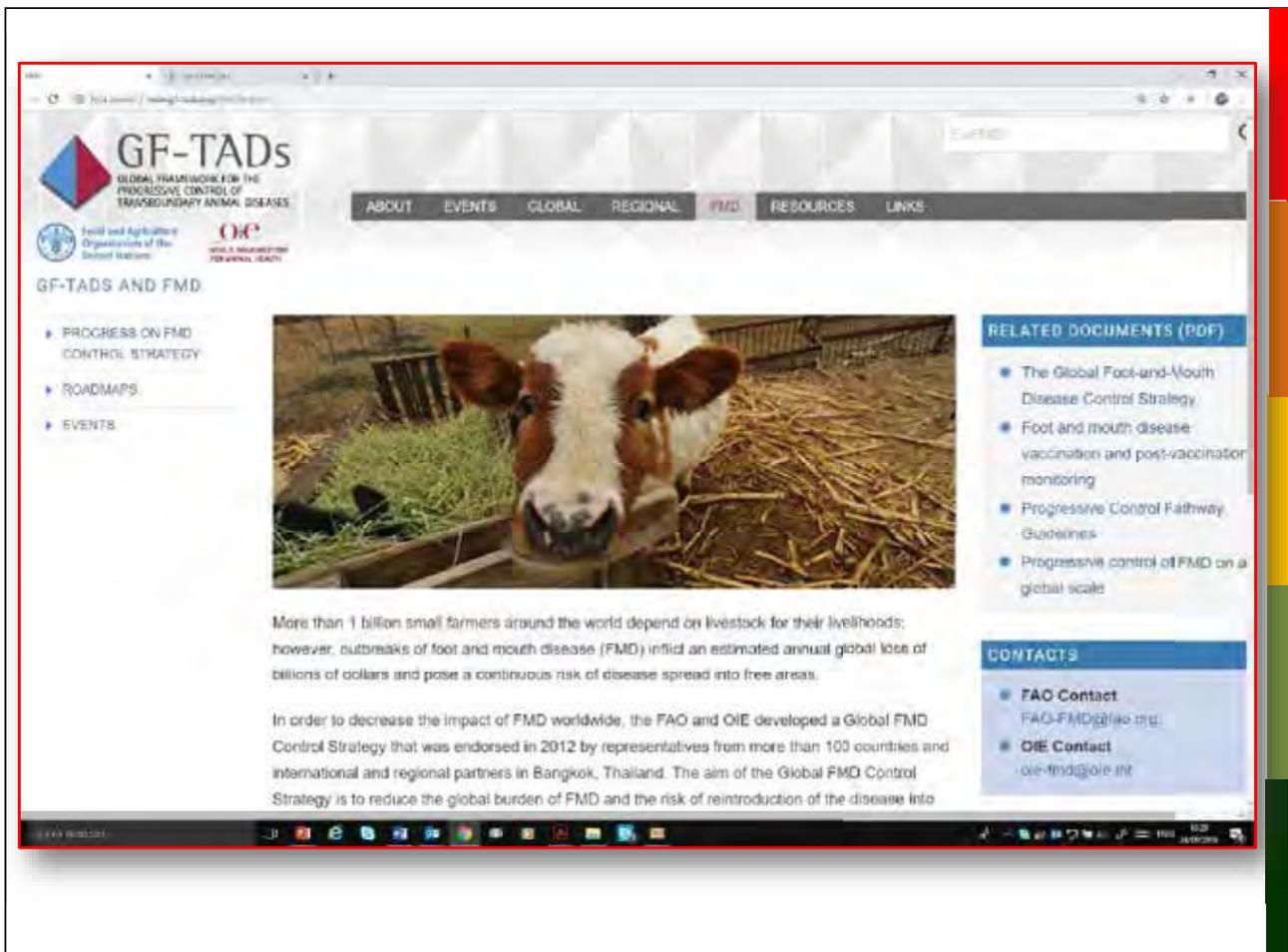
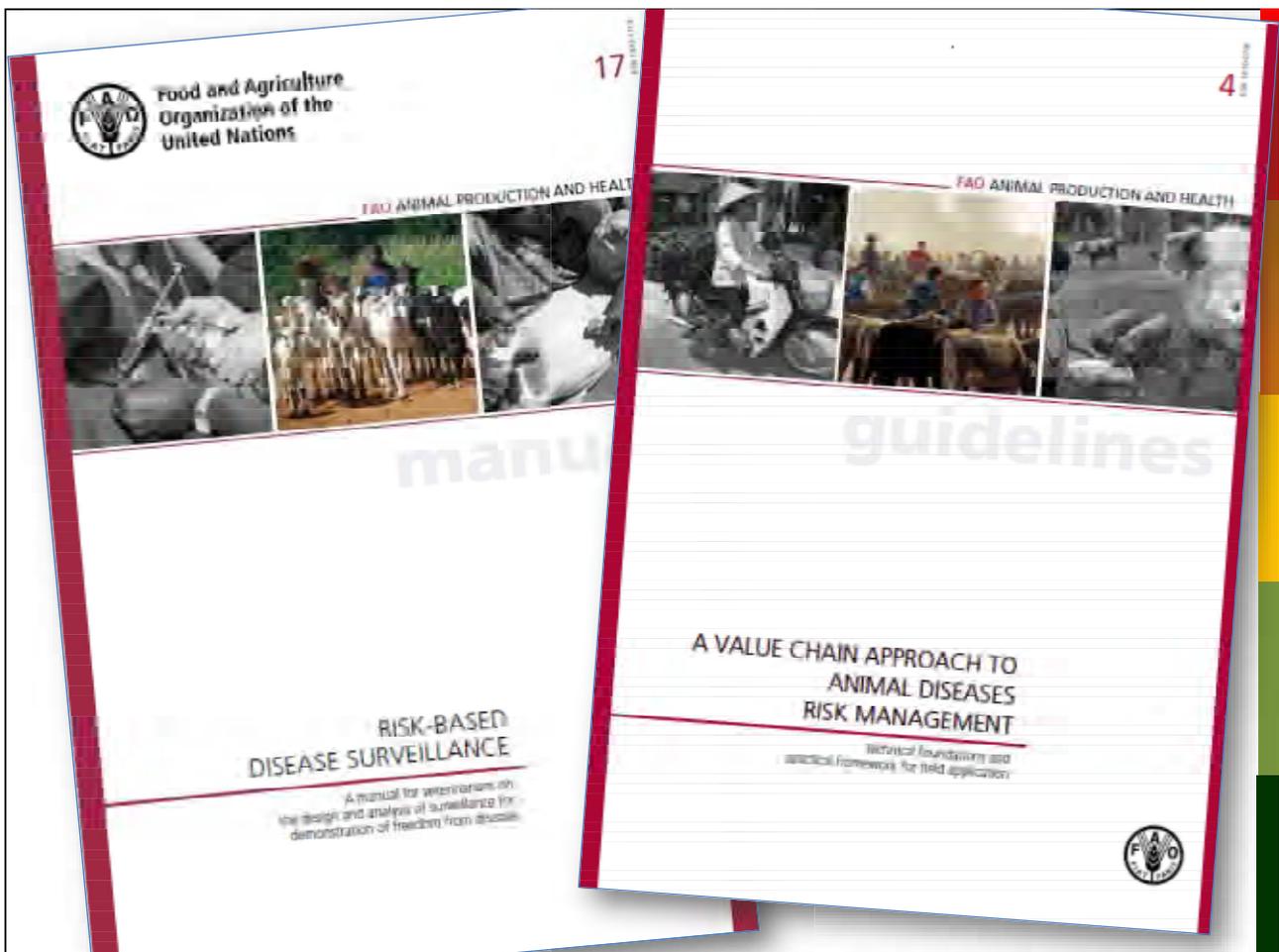
Vision:

A world prepared to manage high impact animal health emergencies

Purpose:

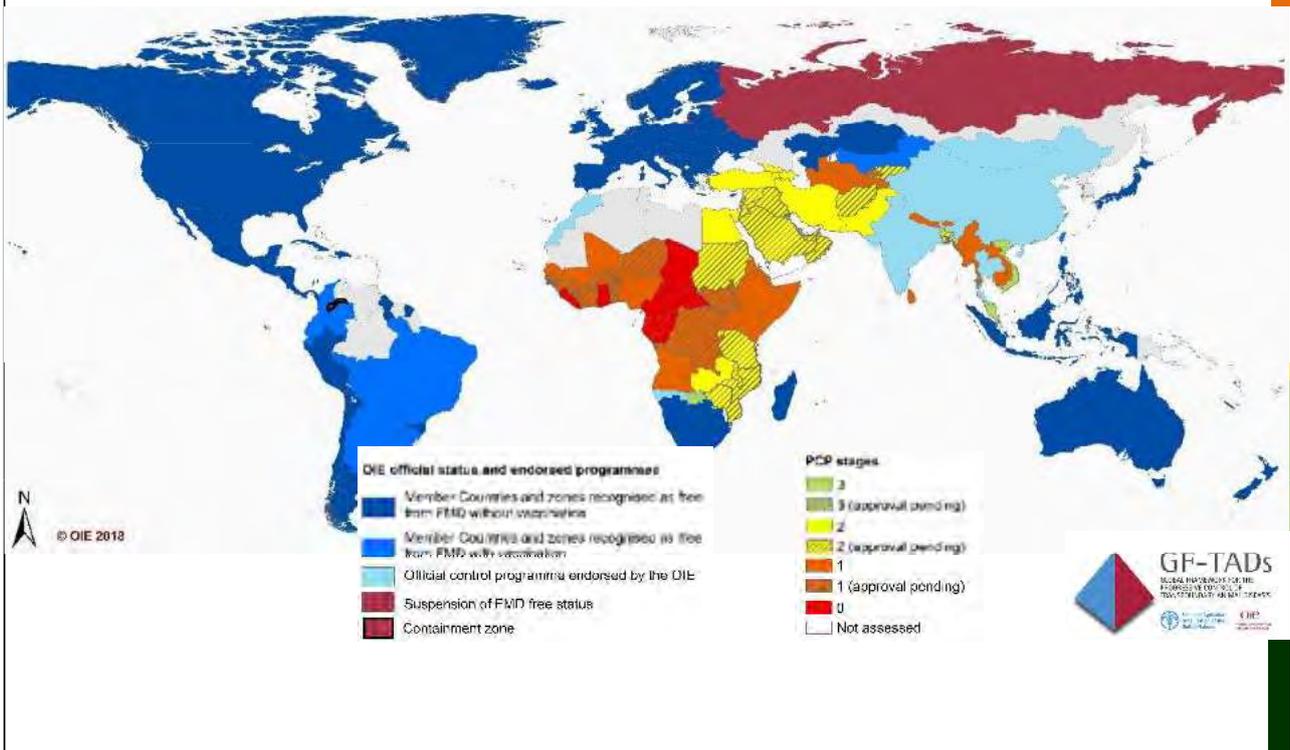
To enhance country, regional and international capacity to be better prepared to respond to animal health emergencies.





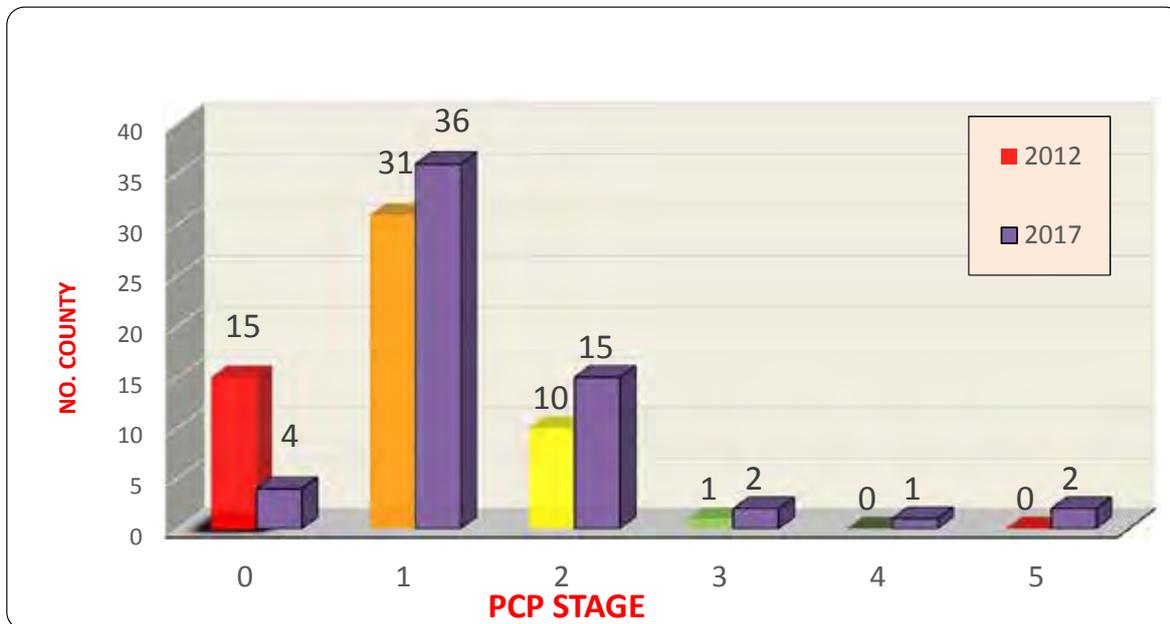
GLOBAL FMD CONTROL STRATEGY

April 2018 global FMD situation

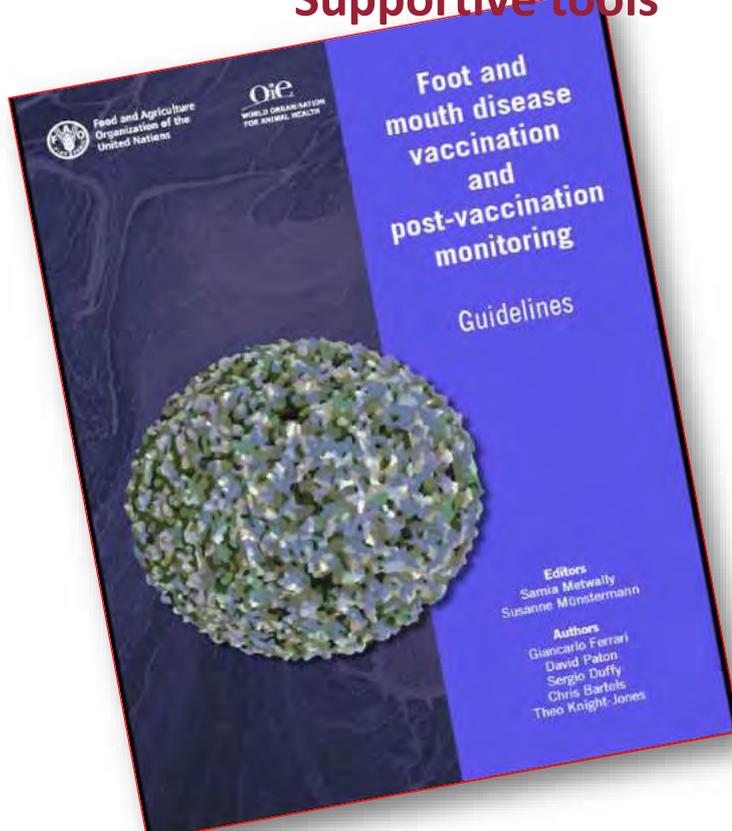




PCP-FMD Country Status (Total= 57)



GF-TADs achievements for FMD Supportive tools



GF-TADs achievements for FMD Supportive tools

VERSION HISTORY

Version #	Implemented By	Approval Date	Approval By	Expiration Date	Revision
1.0

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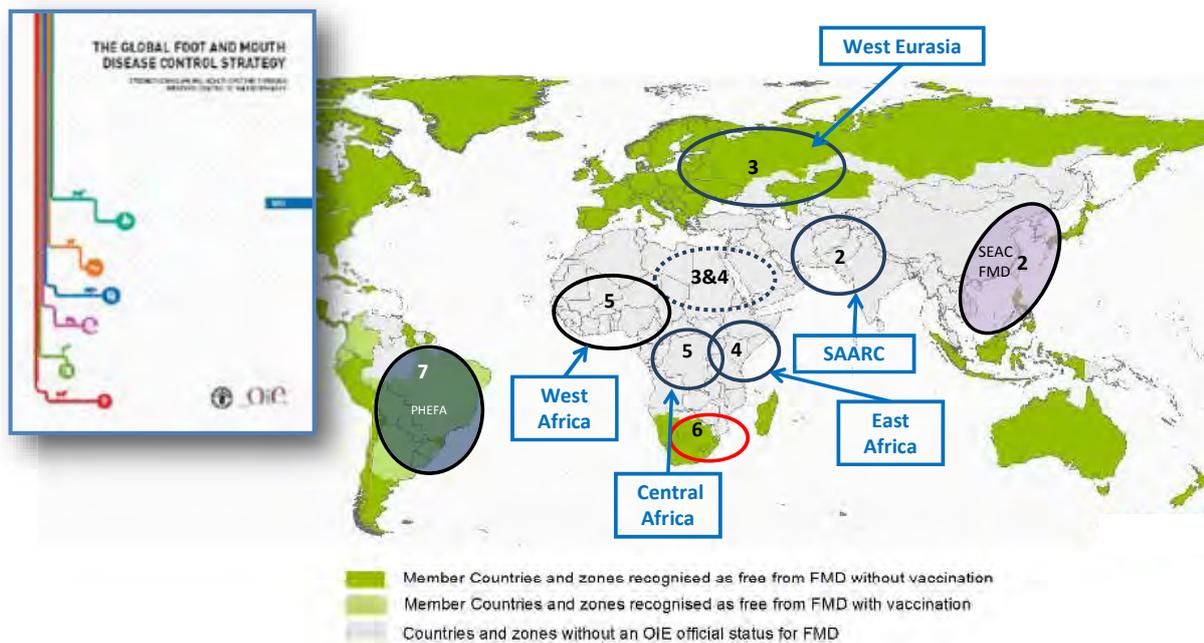
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FMD Regional Roadmaps Conducted since 2016



Working Group workplan 2019-2020



Strategy	Activity	2017		2018		Priority	Institution	Champion	Comments
		1st Semester	2nd semester	1st Semester	2nd semester				
	Collection of list of contacts (PCP, lab, etc.)					1-10	FAO	FAO/WHO	
1.2	PCP framework: FDS/SC, animal health and socio-economic					1-10	FAO	FAO/WHO	
1.2.1	Guidelines on socio-economic					2-10	FAO/WHO	FAO/WHO	Develop follow-up meeting
1.2.1.1	Expertise to support development and implementation of PCP resources to be available					2-10	FAO/WHO	FAO/WHO	with further request - EU/FAO or OIE but budget needed
1.2.1.2	Expertise to support development and implementation of PCP resources to be available					2-10	FAO/WHO	FAO/WHO	with further request - EU/FAO or OIE but budget needed
1.4	Creation regional networks in each FAO region (TAP)					2-10	FAO/WHO	FAO/WHO	Final phase needed in the region
1.4.1	Creation of a Global E-portal					3-10	FAO	FAO	
1.4.2	Receipt of PCP guidelines					1-10	FAO	FAO	
1.4.3	Finalize guidelines (FAO)					1-10	FAO	FAO	
1.4.4	Ordering PCP samples					1-10	FAO	FAO	
1.4.5	Review of FAO guidelines					1-10	FAO	FAO	
1.4.6	Template for Member Countries report (part 1)					1-10	FAO	FAO	including implementation (2.1)
1.4.7	Template for Member Countries report (part 2)					1-10	FAO	FAO	
1.4.8	Check lab network in each region (lead nomination)					2-10	FAO	FAO/WHO	Considering for inclusion of the OIE TADs Network
1.4.9	Phase 1: online meeting of the network					2-10	FAO	FAO	
1.4.10	Specific lab training through lab network					2-10	FAO/WHO	FAO/WHO	depending on region
1.4.11	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	depending on region
1.4.12	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	depending on region
1.4.13	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.14	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.15	Phase 2: online meeting of the network					2-10	FAO/WHO	FAO/WHO	depending on region
1.4.16	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.17	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.18	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.19	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.20	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.21	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.22	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.23	Phase 3: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.24	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.25	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.26	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.27	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.28	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.29	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.30	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.31	Phase 4: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.32	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.33	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.34	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.35	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.36	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.37	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.38	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.39	Phase 5: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.40	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.41	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.42	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.43	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.44	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.45	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.46	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.47	Phase 6: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.48	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.49	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.50	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.51	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.52	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.53	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.54	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.55	Phase 7: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.56	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.57	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.58	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.59	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.60	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.61	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.62	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.63	Phase 8: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.64	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.65	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.66	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.67	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.68	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.69	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.70	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.71	Phase 9: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.72	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.73	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.74	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.75	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.76	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.77	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.78	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.79	Phase 10: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.80	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.81	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.82	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.83	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.84	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.85	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.86	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.87	Phase 11: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.88	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.89	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.90	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.91	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.92	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	
1.4.93	Specific lab training through lab network (FAO)					2-10	FAO	FAO	
1.4.94	Check lab network in each region (lead nomination)					2-10	FAO	FAO	
1.4.95	Phase 12: online meeting of the network					2-10	FAO/WHO	FAO/WHO	
1.4.96	Develop regional animal movement (FAO)					2-10	FAO/WHO	FAO/WHO	
1.4.97	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.98	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)					2-10	FAO/WHO	FAO/WHO	
1.4.99	Develop policies for the network					2-10	FAO/WHO	FAO/WHO	
1.4.100	Facilitate the development of a policy					2-10	FAO/WHO	FAO/WHO	

Action plan to mitigate the challenge



- At least one roadmap meeting for all sub-regions
- Socio-economic guidelines
- Support from Reference Laboratories
- Strengthening of the existing lab and epi networks
- Coordination of regional efforts
- Engagement of key stakeholders, donors and decision makers
- PCP support officer system
- Resource mobilization

Strategy	Activity	1st Semester	2nd semester
1	Collection of list of contacts (PCP, lab, etc.)		
1.1	Guidelines on socio-economic		
1.1.1	Expertise to support development and implementation of PCP resources to be available		
1.1.1.1	Expertise to support development and implementation of PCP resources to be available		
1.1.1.2	Expertise to support development and implementation of PCP resources to be available		
1.1.2	Creation regional networks in each FAO region (TAP)		
1.1.2.1	Creation of a Global E-portal		
1.1.2.2	Receipt of PCP guidelines		
1.1.2.3	Finalize guidelines (FAO)		
1.1.2.4	Ordering PCP samples		
1.1.2.5	Review of FAO guidelines		
1.1.2.6	Template for Member Countries report (part 1)		
1.1.2.7	Template for Member Countries report (part 2)		
1.1.2.8	Check lab network in each region (lead nomination)		
1.1.2.9	Phase 1: online meeting of the network		
1.1.2.10	Specific lab training through lab network		
1.1.2.11	Develop policies for the network		
1.1.2.12	Facilitate the development of a policy		
1.1.2.13	Specific lab training through lab network (FAO)		
1.1.2.14	Check lab network in each region (lead nomination)		
1.1.2.15	Phase 2: online meeting of the network		
1.1.2.16	Develop regional animal movement (FAO)		
1.1.2.17	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.18	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.19	Develop policies for the network		
1.1.2.20	Facilitate the development of a policy		
1.1.2.21	Specific lab training through lab network (FAO)		
1.1.2.22	Check lab network in each region (lead nomination)		
1.1.2.23	Phase 3: online meeting of the network		
1.1.2.24	Develop regional animal movement (FAO)		
1.1.2.25	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.26	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.27	Develop policies for the network		
1.1.2.28	Facilitate the development of a policy		
1.1.2.29	Specific lab training through lab network (FAO)		
1.1.2.30	Check lab network in each region (lead nomination)		
1.1.2.31	Phase 4: online meeting of the network		
1.1.2.32	Develop regional animal movement (FAO)		
1.1.2.33	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.34	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		
1.1.2.35	Develop policies for the network		
1.1.2.36	Facilitate the development of a policy		
1.1.2.37	Specific lab training through lab network (FAO)		
1.1.2.38	Check lab network in each region (lead nomination)		
1.1.2.39	Phase 5: online meeting of the network		
1.1.2.40	Develop regional animal movement (FAO)		
1.1.2.41	Facilitate online nomination of lab (FAO/WHO/FAO/WHO)		



Areas for collaboration with EuFMD 2019 - 2020

- E-learning / webinar*:
 - before roadmaps and in-between roadmaps
 - on PCP and socio-economic (once the guidelines are finalized)
 - 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)



Areas for collaboration with EuFMD 2019 - 2020

- Continued participation of Executive Secretary to GF-TADs FMD WG Support and participate in Roadmap meetings & network meetings
- Support the development of specific guidelines (socio-economic guidelines, template for the National Control Plans)
- Support procurement of diagnostic reagents and sample submission
- Investments into proficiency panels

OIE ACTIVITIES OF INTEREST TO EUFMD

Official recognition of FMD free status



- **Peru** as a free country where vaccination is not practised
- **Suriname** as a free country where vaccination is not practised
- **Taiwan POC / Chinese Taipei** : Kinmen county as free zone where vaccination is practised
- **Brazil** (extended zone of), including the states of Amapá, Amazonas, Roraima and parts of the state of Pará and merged with the two zones already officially recognised as free from FMD, be recognised as a single FMD free zone where vaccination is practised

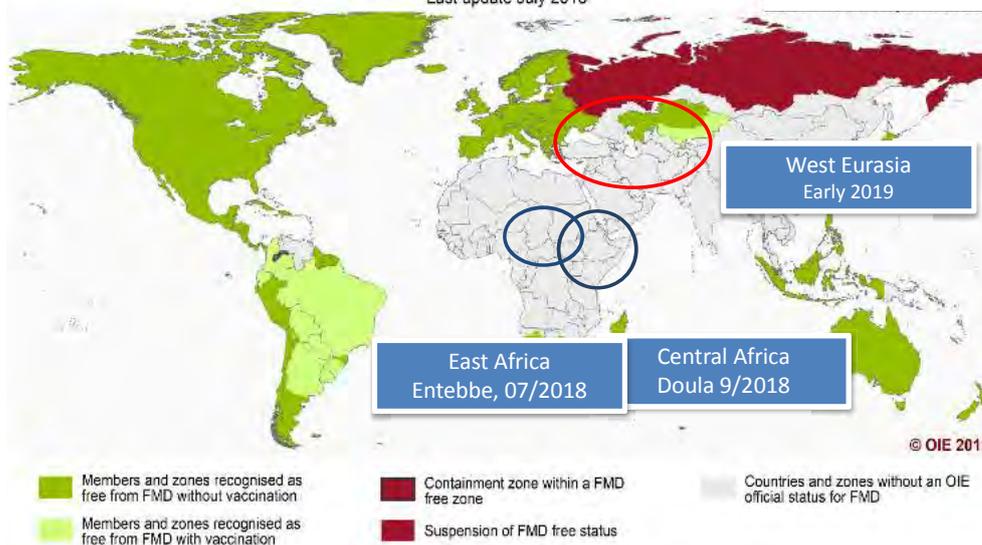
Regional Roadmap Meetings Convened in 2018 and planned 2019



OIE
WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

OIE Members' official FMD status map

Last update July 2018



PCP and Regional Roadmaps



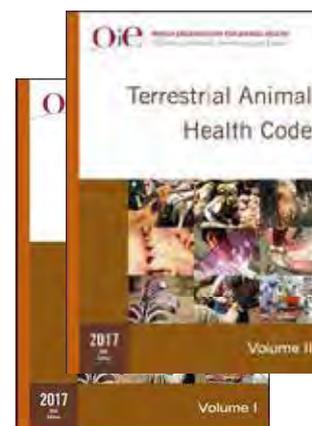
Oie

- The finalisation of the 2nd version of the PCP guidelines
 - Revision of PVS critical competencies, assessment process and integration of OIE official status recognition etc.
 - The revision of the PCP checklist questionnaire for self assessment.
- Accessibility and communication on roadmaps
 - the material collected from all roadmaps be available on line.
 - page dedicated to FMD on the GF-TADs webpage



Revision of the FMD chapter of the *Terrestrial Code*

- Surveillance methods for shorter recovery period
 - (*Ad hoc* Group met in June 2017 and August 2018)
- Temporary protection zone. To manage risk while minimising impact on disease status (*e.g.* Preventive vaccination)



OIE activities for Component 2. Enabling environment



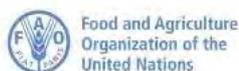
The proposed new approach reflects the desire to engage countries in a virtuous circle of continuous improvement of their capabilities.



Work completed (with EuFMD)

- Revision of the Risk Based Strategic Plan template
- Revision of the PCP tool, including Components 2 and 3 of the Global Strategy
- Development of a template for the Assessment Plan
- Translation into different languages (Arabic, French, Russian)
- FMD WG coordination:
 - 2019-2020 FMD WG action plan
 - Physical bi-annual meetings (Nov 2018, Rome)
 - Monthly teleconference
- Revision of the check-lists (to be implemented)

**Thank you for your attention
and support**





www.fao.org/eufmd.html