



# GF-TADs

GLOBAL FRAMEWORK FOR THE  
PROGRESSIVE CONTROL OF  
TRANSBOUNDARY ANIMAL DISEASES



Food and Agriculture  
Organization of the  
United Nations

**OIE**  
WORLD ORGANISATION  
FOR ANIMAL HEALTH

7TH REGIONAL FMD WEST EURASIA  
ROADMAP MEETING  
BISHKEK, KYRGYZSTAN,  
6-8 APRIL 2016

7-ОЕ РЕГИОНАЛЬНОЕ СОВЕЩАНИЕ  
В РАМКАХ ДОРОЖНОЙ КАРТЫ ПО ЯЩУРУ  
ДЛЯ СТРАН ЗАПАДНОЙ ЕВРАЗИИ,  
БИШКЕК, КЫРГЫЗСТАН,  
6-8 АПРЕЛЯ 2016

## Final Report

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## **Vision for the West Asia Roadmap for FMD Control**

Regional cooperation among Eurasian countries for the progressive control of FMD leading towards freedom of clinical disease by 2025 for regional economic development, food security, and poverty alleviation.

## **Видение Дорожной карты по контролю ящура в Западной Евразии**

Региональная кооперация между Евразийскими странами в целях прогрессивного контроля ящура ведет к свободе от клинического проявления болезни к 2025 г. для экономического развития и снижения уровня бедности.

# Acknowledgements

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*FAO and OIE express their sincere thanks to the Government of Kyrgyzstan, and their Veterinary Services for the important logistical and financial support which contributed to the success of the 7<sup>th</sup> FMD Roadmap meeting in 2016.*

*FAO and OIE also acknowledge with much gratitude the valuable and continuous technical support of EuFMD experts before, during and in-between meetings, and thereby the financial contribution of the European Commission.*

*Finally, FAO and OIE would like to express their deep appreciation to all countries of the West Eurasia FMD Roadmap for their commitment and contributions over the years.*

# Abbreviations

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<b>ADB</b>	Asian Development Bank
<b>CVO</b>	Chief Veterinary Officer
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>EC</b>	European Commission
<b>EPINET</b>	West Eurasia Epidemiology network
<b>EuFMD</b>	European Commission for the Control of Foot-And-Mouth Disease (an Inter-Governmental Commission based in the FAO)
<b>FAO</b>	Food And Agriculture Organisation of the United Nations
<b>FMD</b>	Foot and mouth disease
<b>GF-TADs</b>	Global Framework for the Progressive Control of Transboundary Animal Diseases
<b>GIS</b>	Geographical information system
<b>IDB</b>	Inter-American Development Bank
<b>LMDP</b>	Livestock and Market Development Project
<b>LR</b>	Large ruminants
<b>MoU</b>	Memorandum of understanding
<b>NSP</b>	Nonstructural proteins
<b>OIE</b>	World Organisation for Animal Health
<b>PCP</b>	Progressive Control Pathway
<b>PVS</b>	Performance of Veterinary Services
<b>RAG</b>	Regional Advisory Group
<b>RLL</b>	Regional Leading Laboratory
<b>RBSP</b>	Risk-based Strategic Plan
<b>SAT2</b>	Southern African Territories 2
<b>SP</b>	Structural proteins
<b>SR</b>	Small ruminants
<b>TCP</b>	Technical cooperation program (FAO)
<b>UTF Project</b>	Unilateral Trust Fund (FAO)
<b>WELNET</b>	West Eurasia Laboratory Network
<b>WG</b>	GF-TADs FMD Working Group = GF-TADs FMD WG
<b>WRLFMD</b>	The World Reference Laboratory for Foot and Mouth Disease







# Summary



## Introduction - storyline

1. The 7th FMD roadmap meeting for FMD control in West Eurasia, held in Bishkek (Kyrgyzstan) from 6th to 8th April 2016, was organized under the umbrella of the FAO/OIE GF-TADs, in collaboration with EuFMD. The 'founding' meeting was organized in 2008 in Shiraz (Iran), to develop a roadmap for the progressive control of FMD in West Eurasia. It was followed by 6 FMD roadmap meetings: Istanbul, Turkey (2009, 2010, 2012), Baku, Azerbaijan (2013), Astana, Kazakhstan (2014) and Almaty, Kazakhstan (2015).
2. The State Inspectorate on Veterinary and Phytosanitary Security under the Government of the Kyrgyz Republic hosted the meeting, co-funded by FAO and OIE with the generous support from Defense Threat Reduction Agency (DTRA), EuFMD and the Government of Kazakhstan.
3. Following the recommendations of the 6<sup>th</sup> FMD roadmap meeting, the Sub-regional office in Astana was considered as the Secretariat of the West Eurasia FMD Roadmap and provided logistical support for the meeting, with the support of the Veterinary Services of Kyrgyzstan. The GF-TADs FMD Working Group (WG) and EuFMD contributed with the technical aspects, prior to and during the meeting.
4. Chief Veterinary Officers / OIE Delegates of 14 countries and national PCP-FMD/epidemiology/laboratory experts were invited. This meeting was attended by 72 participants from Armenia, Azerbaijan, Georgia, Iran, Iraq, Kazakhstan, Kyrgyzstan, Pakistan, Syria Tajikistan, Turkey and Turkmenistan. Representatives from Afghanistan and Uzbekistan could not attend.

Members of the WG, as well as representatives from FAO Regional Representatives (Ankara and Budapest), OIE (RR/SRS in Moscow, Brussels, Astana, Beirut and Bangkok), Pirbright Institute and EuFMD attended the meeting. Representatives from Russia, ARRIAH and Merial attended as observers. The list of participants is provided in [Annex 1](#).

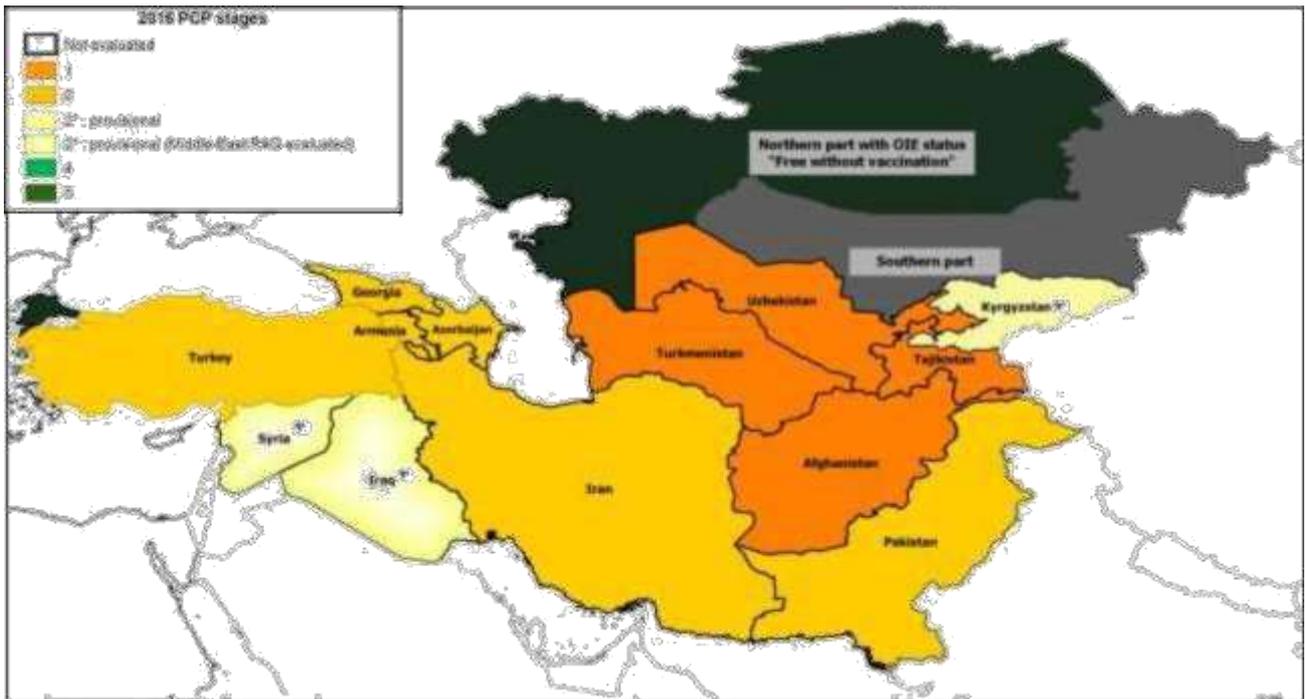
5. The objectives of the meeting were to:
  - a. share information on FMD virus circulation within the region;
  - b. review progress made in, and difficulties faced by each country since the last FMD roadmap meeting held in 2015, and the outcomes of the ongoing control activities;
  - c. build capacity on the needs identified in previous Roadmap meetings to progress towards FMD control.
6. Following the five-step PCP process, the 2016 assessment of the PCP-FMD stages was carried out for the participating countries, within the regional vision on 'West Eurasia region free of clinical FMD by 2025'. This assessment, as in previous years, was based on: **(i)** the results of questionnaires and supporting evidence sent by the countries prior to the meeting, preliminary assessment by the WG, with the support from EuFMD experts; **(ii)** presentations of the country's report in plenary session; **(iii)** country interviews during the meeting, conducted jointly by the WG with the assistance of PCP-FMD experts; **(iv)** recommendations by the West Eurasia Roadmap Regional Advisory Group (RAG) ; **(v)** final assignments proposed by the RAG and agreed in plenary session
7. Dr Mikhail Sokhadze (Georgia) was elected as a new member of the RAG, replacing Prof. Irfan Erol (Turkey). Other members of the RAG remained unchanged (Dr Samat Tyulegenov - Delegate of Kazakhstan, Dr Tamilla Aliyeva -representing the Delegate of Azerbaijan, Dr Zurab Rukhadze - Head of Epidemiology network, EPINET and Dr Abdulnaci Bulut - Head of Laboratory network, WELNET).
8. The progress on the implementation of the recommendations of the 6<sup>th</sup> West Eurasia roadmap in Almaty in 2015 was presented.
9. The roadmap has been revised for the 12 attending countries, among which 10 had submitted their assessment questionnaires to the WG in preparation of the meeting (see report of session 9).



## Outcomes

10. It was found that 15% of the recommendations from the 2015 Almaty meeting had been implemented and 65% of them were either currently in the phase of implementation or planned to be implemented.
11. Countries that remained in stage 1 (Afghanistan, Tajikistan and Turkmenistan) should be supported and encouraged to progress to stage 2 to reduce the risk of jeopardizing the situation in neighbouring countries by: **(i)** clearly identify their needs to progress along the PCP and **(ii)** seek the appropriate targeted support from the WG to complete their PCP-FMD Stage 1 activities.
12. Three countries (Azerbaijan, Armenia and Kyrgyzstan), assessed in provisional stage 2 in 2015, met the deadline to provide their risk-based strategic plan (RBSP) by November 2015, as requested during the 6<sup>th</sup> FMD roadmap meeting. This demonstrates that countries are fully committed to advance in their FMD control.
13. Armenia and Azerbaijan advanced to confirmed PCP stage 2. Kyrgyzstan remained in provisional Stage 2 and was requested **to submit its national RBSP by November 2016** to the WG. In the event the RBSP is either unsatisfactory or not timely submitted, the country will revert back to Stage 1. Chapters on the progressive reinforcement of the Veterinary Services capacity and the emphasis on addressing other diseases, together with FMD, will be included as part of the template for the RBSP plan by the WG.
14. The progression of 12 participating countries is summarized below.

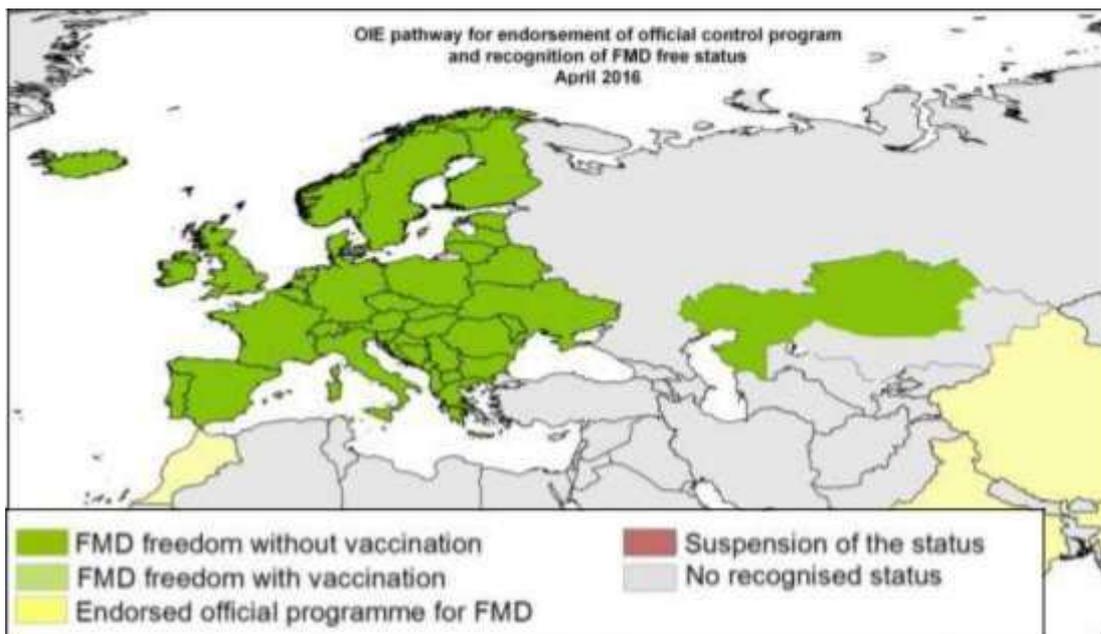
	<b>a. Four countries remained in Stage 1:</b> Afghanistan, Tajikistan, Turkmenistan, Uzbekistan	These four countries are encouraged to advance in their FMD control activities as they may potentially jeopardize efforts made by neighbouring countries
<b>b. One</b>	<b>country remained in provisional Stage 2:</b> ★ Kyrgyzstan	The country has been given a new opportunity to provide evidence of a robust RBSP by November 2016 to confirm its PCP Stage 2; otherwise its status will revert into Stage 1.
	<b>c. Two countries moved to Stage 2:</b> Armenia, Azerbaijan	These countries have provided excellent RBSP.
	<b>d. Four countries remain in Stage 2:</b> Georgia, Iran, Pakistan, Turkey (Anatolia); <b>e. Syria was interviewed but not assessed</b>	These countries continue their progression within Stage 2.
		As Syria did not participate in 2015 Middle East Roadmap meeting, discussions took place between Syria and the WG in Bishkek. However the formal assessment will be conducted by the Middle East RAG during the next Middle-East Roadmap.
		Iraq was interviewed and assessed by the Middle East RAG
	<b>f. Iraq was not interviewed, nor assessed</b> <b>g. Kazakhstan was interviewed but not assessed</b>	As in 2015, Kazakhstan did not participate in PCP assessment since the country was in the process of having its official control programme for FMD endorsed by the OIE in May 2016.



**Figure 1 - PCP-FMD Stages granted during the 2016 Bishkek meeting**

15. Three countries within the region reported FMD outbreaks of the new A/Asia/G-VII lineage since 6<sup>th</sup> meeting (Turkey, 11/2015 - Armenia, 01/2016 - Iran, 01/2016).
16. The state of play for endorsement of official control program and recognition of FMD free status is shown below, for the region.

During the 83<sup>rd</sup> General Session of OIE in May 2015, 9 of the 14 regions of Kazakhstan, in the North of the country, have been recognized as free FMD status without vaccination. This recognition highlights the important efforts made by Kazakhstan to protect its livestock from FMD.



17. Armenia and Turkey described their experiences with the recent incursion of the new FMD A/Asia/genotype VII strain, which continues to pose a threat to the whole region due to the dynamics of animal movements across the borders and limited access to an effective vaccine outside of Turkey and Iran. During the meeting, countries agreed on the need for regional coordination to combat the spread of this virus. Additionally, Iran announced the current circulation of a new serotype O strain that was being characterized. Close monitoring of the epidemiological situation, and immediate notification of outbreaks to the neighbours countries and OIE were recommended, should these virus strains continue to spread.
18. When assessing the RBSP, RAG only gets a summary feedback of the FMD Roadmap situation of the countries under consideration. The participants agreed with the principle of sharing their FMD RBSP with the members of the RAG. However, each country submitting a RBSP will be formally requested to confirm this statement.
19. During the meeting, the participants discussed essential subjects for the region, including **(i)** risk-based approach and the RBSP, **(ii)** regional leading laboratory, **(iii)** cross-border coordination, **(iv)** training needs and **(v)** funding.
20. A particular attention should be given to the four countries remaining in stage 1 since 2009 (Afghanistan Tajikistan and Uzbekistan) and 2012 (Turkmenistan), as well as to Kyrgyzstan, in provisional stage 2 pending the submission of a well-designed RBSP by the end of November 2016. **A specific request for help to prepare their RBSP was expressed** by the three attending countries (Tajikistan, Turkmenistan and Kyrgyzstan). It was agreed that priority support should be given to Kyrgyzstan and Tajikistan as they are in the risk pathway for FMD incursion from neighbouring region.
21. **Cross border coordination for the implementation of vaccine strategy and movement control** has been recognized as one of the most important factors of the FMD control in the region.
22. EuFMD will explore the **possibility of providing specific in-country support** (under request) for countries in PCP-FMD Stage 1 of their on-going Work Plan. The OIE Sub-regional office in Astana, as Secretariat of the FMD Roadmap for West Eurasia, in close collaboration with the FAO regional office, will provide appropriate support as needed.  
  
In addition, countries with experience in drafting RBSP (e.g., Azerbaijan and Georgia) offered their support to those countries that remain in stage 1.  
  
The EuFMD support to regional networking and training through **webinars and e-learning** has been considered as a good opportunity to enhance the coordination and to better use the limited available resources.
23. The regional laboratory and epidemiology networks (EPINET and WELNET) should develop an annual work plan based on the discussions held at this meeting. Financial support for an annual regional workshop once a year should be explored. International organizations, donors, EuFMD and/or a leading country in the region should assist in securing funds for the implementation of the work plans.
24. A set of Recommendations ('Bishkek 2016 Recommendations') was adopted at the end of the meeting. To ensure their implementation, the Roadmap Secretariat, with the support of the WG, will develop an implementation plan, with appropriate timelines.

# Recommendations of the meeting



## **Considering:**

- The adoption of the FAO-OIE Global Strategy for the control of FMD (Bangkok, June 2012) with its 3 inter-related Components respectively on the control of FMD, the reinforcement of Veterinary Services and the combined control of FMD with other animal diseases;
- The importance of controlling FMD at regional level and the results of previous FMD regional Roadmap meetings since 2008 (Shiraz/2009; Istanbul/2010; Istanbul/2012; Baku/2013; Astana/2014; Almaty/2015);
- The importance of having a Regional Advisory Group (RAG) for West Eurasia composed of three CVOs and leaders of the Regional Epi and laboratory networks to analyse and present the results of the assessments to the participating countries;
- That the majority of the countries of the region are in Stage 1 or 2 of the PCP-FMD and that, for moving into Stage 2 requires to present a comprehensive risk-based strategic plan;
- Three FMDV serotypes (O, A and Asia1) continue to circulate in the region;
- The new incursion of A/Asia/G-VII lineage (from virus pool 2) in Turkey and Armenia and the possible incursion of a new strain of serotype O announced by Iran requires a robust surveillance and preparedness for early detection and immediate response especially in those countries at risk;
- The need to adapt the vaccine selection to the new circulated strains;
- the need to remain vigilant from the threats from virus from South East Asia, South Asia and Middle East;
- The recent adoption of the FAO-OIE Global strategy for the control and eradication of Peste des petits ruminants (Ivory Coast, March 2015);
- The establishment of the OIE sub-regional FMD Coordination Unit in Astana / Kazakhstan, and its role in the implementation of the recommendations of the West Eurasia FMD control roadmap, in collaboration with FAO;
- The fact that countries must be assessed by one Regional Advisory Group (RAG) only;
- The electronic consultation of the 2015 RAG on the PCP-FMD Stage for the 3 countries that had been granted with provisional Stages during the 6<sup>th</sup> Roadmap meeting (Almaty, 2015).

**The 12 countries attended: Armenia; Azerbaijan; Georgia; Kazakhstan; Kyrgyzstan; Tajikistan; Iran; Iraq; Pakistan; Syria; Turkey and Turkmenistan, agree:**

- a. To elect the CVO/Delegate of Georgia as a new member of the West Eurasia Regional Advisory Group, for a 3-year period, in replacement of the CVO/Delegate of Turkey;
- b. To validate the conclusions of the 2015 West Eurasia Regional Advisory Group (2015 RAG)<sup>1</sup> conducted by electronic consultation as follows:

	2015 RAG e-consultation conclusions
Armenia	PCP-FMD Stage 2
Azerbaijan***	PCP-FMD Stage 2

- c. to validate the conclusions of the 2016 RAG West Eurasia Advisory Group (2016 RAG)<sup>2</sup> as follows:

	2016 RAG conclusions*
Tajikistan	PCP-FMD Stage 1
Turkmenistan	PCP-FMD Stage 1
Kyrgyzstan**	PCP-FMD Provisional Stage 2

This year, two countries granted acceptance to advance to PCP-FMD stage 2, while the rest of the countries maintained their 2015 PCP-FMD Stage.

- \*\* Kyrgyzstan should provide its revised risk-based strategic plan (RBSP) within 6 months (by 30<sup>th</sup> November 2016) to move to Stage 2, otherwise it has to be downgraded to Stage 1
- \*\*\* RAG considers that Georgia and Azerbaijan must provide results of their sero-monitoring in 2015 and early 2016, within 3 months (31<sup>st</sup> July 2016)

- d. To use the assessments of 7<sup>th</sup> regional FMD Roadmap Meeting (Bishkek/2016) as a basis to update the Roadmap Table for the West Eurasian countries.

<sup>1</sup>**The 2015 RAG was composed of: Voting members**

- CVOs: Dr Irfan Erol, CVO/Delegate of Turkey (Chairperson); Dr Samat Tyulegenov, Delegate of Kazakhstan; Dr Tamilla Aliyeva, acting director of the Azerbaijan Veterinary Scientific Research Institute
- Dr Zurab Rukhadze (Epidemiology network) and Dr Abdalnaci Bulut (Laboratory network)
- GF-TADs FMD Working Group: Dr Joseph Domenech (OIE), Dr Nadège Leboucq (OIE), Dr Samia Metwally (FAO), Dr Julio Pinto (FAO), Dr Laure Weber-Vintzel (OIE)
- PCP experts: Dr Christianus Bartels; Dr Melissa McLaws; Dr Keith Sumption

<sup>2</sup>**The 2016 RAG was composed of: Voting members**

- CVOs (or their representatives): Dr Samat Tyulegenov, Delegate of Kazakhstan (Chairperson); Dr Mikheil Sokhadze, CVO/Delegate of Georgia; Dr Tamilla Aliyeva, acting director of the Azerbaijan Veterinary Scientific Research Institute
- Dr Zurab Rukhadze (Epidemiology network) and Dr Abdalnaci Bulut (Laboratory network)
- GF-TADs FMD Working Group: Drs Laure Weber-Vintzel (OIE, co-chair), Samia Metwally (FAO, co-chair), Gregorio Torres (OIE), Nadège Leboucq (OIE), Silvia Kreindel (FAO) and Eran Raizman (FAO)
- PCP experts: Dr Keith Sumption; Dr Gunel Ismayilova
- Dr AbdulBaqi Mehraban (FAO), De Andriy Rozstalnyy (FAO)

## **The countries recommend, for a better implementation of the Global FMD Control Strategy at regional level:**



### **General**

1. To continue the Roadmap process for West Eurasian countries to work towards the vision of freedom from clinical FMD in West Eurasia by 2025, with an annual survey (based on the self-assessment questionnaires) and a regional meeting to monitor progress (if funding available); the next meeting is proposed to be held in April 2017 considering the proposals from Georgia, Turkmenistan and Iran as a host country;
2. Countries consider nominating the three FMD Points of Contact as PCP-FMD, epidemiology and laboratory experts;
3. EuFMD explores the possibility of providing specific support for countries in PCP-FMD Stage 1 under their on-going Work plan, with the support of the OIE Astana in its capacity as Secretariat of the FMD Roadmap for West Eurasia, in close coordination with the FAO country and regional offices;



### **Cross border coordination for the implementation of vaccination strategies and movement control**

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4. Countries consider carrying out 'pre-movement vaccination' to prevent the circulation of virus across the borders;
5. Sub-regional FMD meetings be organised among neighbouring countries under the GF-TADs umbrella to ensure **(i)** the harmonisation objectives and modalities of vaccination strategies; **(ii)** improve information sharing, notably with regards to epidemiological events occurring at the borders. It is of particular importance that Iran, Turkey, Iraq and Syria hold these meetings to gain a clear understanding of FMD situation in this sub-region, in particular in the Kurdistan region;
6. Consider inviting China as an observer in the next FMD West Eurasia Roadmap meeting to enhance cross-border cooperation with China;



### **Diagnostic capacity, networks and regional leading laboratory**

7. The process of selection of a Regional Leading Laboratory, according to the GF-TADs Terms of Reference, be pursued and consider Iran and Turkey as the main two candidates for the region;
  8. In addition, Iran and Turkey laboratories are encourage to maintain their laboratory support to the region;
  9. ARRIAH and WRL, as OIE/FAO Reference Laboratory, continue to provide support in accordance to the agreed areas of collaboration to countries in the region;
  10. Proficiency panels be provided by WRLFMD/ARRIAH for the fourteen countries in 2016-2017;
  11. The EuFMD support to regional networking and training through virtual conferencing and e-learning be continued and increased, and the regional laboratory and epidemiology networks develop an annual work plan based on the discussions at this meeting. The international organizations, donors, EuFMD and/or a leading country in the region assist in securing funds for the implementation of the work plan. Support for one regional workshop a year should be conveyed.
- **Monitoring and Surveillance for early detection of epidemics**
12. That the importance of active regular monitoring for changes in disease patterns or presence of new strain be recognised as fundamental to disease management in all stages, and essential within Stages 2 and above. Serological surveys for FMDV remain essential where risk is high and disease is not reported in spite of presence of clinical cases;
  13. To build capacity among stakeholders on clinical disease recognition in the as essential component for early detection;
  14. Outbreak investigation protocols be developed, as a systematic procedure to better understand the disease in the field and to identify the source of the disease with a view to control and prevent spread;

- Countries experiences with the development and implementation of their RBSP

15. FAO and OIE finalize the RBSP Template including Components 2 and 3 and make it available to countries as soon as possible. In particular, for Component 3, FAO and OIE provide further guidance on the simultaneous vaccination with FMD and other diseases in the near future;
16. Countries update their plans after changes in the performance or results of their implemented control measures, or where financial or other reasons make the original plan no longer valid;
17. That countries which have implemented their RBSP share their expertise and experience in development and implementation with countries in the region or elsewhere;
18. Countries consider requesting an OIE PVS initial evaluation or OIE PVS follow up mission (if the initial PVS evaluation was carried out before 2012) to have an updated understanding of their Veterinary Services capacity and build component 2 of their RBSP;

### Vaccine recommendations, based on FMD virus lineages circulating in the region

OIE/FAO Reference Labs and WELNET recommend that Veterinary Services ensure that the vaccines used are appropriate for the viruses circulating in the region. Vaccine selection should carefully consider the following FMDV lineages that are circulating in the region: O/ME-SA/PanAsia-2, A/ASIA/Iran-05, A/ASIA/G-VII, Asia-1/Sindh-08. Other FMDV lineages that are circulating in the neighbourhood should also be considered as threats for the region that may warrant vaccine coverage. These include: O/ME-SA/Ind2001 (sporadically in the Gulf States), A/ASIA/Sea-97 (via East Asia), O/ME-SA/PanAsia (via East Asia and recently in Israel and the Palestinian Autonomous Terr.) and SAT 2 (sporadically in the Gulf States).

The most appropriate vaccines for current risks in the region and recommended for use in 2016 are:

- For Serotype O

**O TUR/5/2009** (or equivalents such as **O TUR/2007** from local suppliers), or equivalent, or **O 3039** (in combination with **O1 Manisa**) for O/ME-SA/PanAsia-2

Notes:

- [1] Vaccine matching data suggest that some circulating strains have poor match with O1 Manisa
- [2] Where tested, these vaccines have also been recommended for use against the O/ME-SA/Ind2001 lineage from the Indian sub-continent that has caused recent outbreaks in the Middle East and North Africa
- [3] For countries bordering China, it is advisable to consider addition vaccine strains that cover O/ME-SA/PanAsia and O/SEA/Mya-98 in the vaccine formulation

- For Serotype A

**A TUR/06** (or equivalent from local suppliers) or **A Iran 05** for A/ASIA/Iran-05

Notes:

- [1] Vaccine matching data suggest that some circulating A/ASIA/Iran-05 field strains have poor match with these vaccines.

#### **Emerging A/ASIA/G-VII lineage**

Notes:

- [2] Many established vaccines are not expected to provide protection against the A/ASIA/G-VII lineage. An autogenous vaccine strain, **A/ASIA/G-VII-TUR15**, for this emerging lineage have become recently available from a local supplier (Turkey) and similar products are anticipated shortly from other manufacturers. Field vaccine evaluation of these products is pending.
- [3] For countries bordering China, it is advisable to consider addition vaccine strains that cover A/ASIA/SEA-97 in the vaccine formulation

- For serotype Asia 1

**Asia 1 (Sindh-08)** or closely related strains or **Asia 1 Shamir** at high potency.

Notes:

- [1] Asia 1 Shamir only has poor in-vitro antigenic match against the current circulating Sindh-08 lineage. However, in-vivo experiments indicate that poor antigenic match can be compensated by high potency formulations (>6PD<sub>50</sub>).

# Report of the meeting by session



## PCP-FMD refresher training (voluntary)

Link to the presentations: Agenda in [Annex 2](#)

[GuneI ISMAYLOVA/EuFMD]

In this short one-hour training, the FAO/OIE PCP-FMD was identified as an important component of the Global Strategy for FMD Control. The objective of the presentation was to improve awareness of the trainees, and to increase appropriate application of the PCP-FMD tool. The main features of the PCP-FMD, and the key activities occurring at each of its stages were overviewed. The main topics covered by the training included activities related to the progress along the PCP-FMD pathway, the self-assessment of the PCP stage and the procedures for acceptance into the different stages at a regional roadmap meeting.



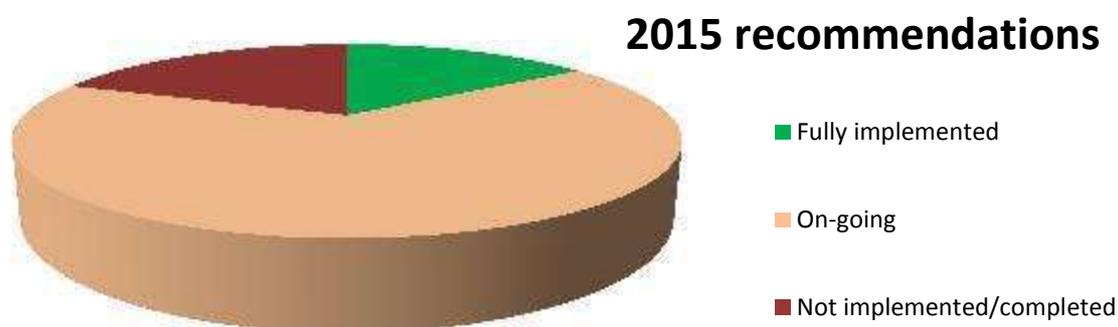
## Session 1: Regional FMD control governance

Link to the presentations: Agenda in [Annex 2](#)

### ➤ **Summary of the 6<sup>th</sup> West-Eurasia Roadmap meeting and assessment of the level of implementation of the recommendations**

[Djahne MONTABORD/OIE]

The presentation showed the twenty-six recommendations agreed upon during the 2015's Roadmap meeting in Almaty (Kazakhstan). They have served as guidelines to further progress towards achieving the regional Vision of FMD elimination by 2025 in the West Eurasia region. The WG has been in charge of monitoring the correct implementation of these recommendations. The [annex 3](#) shows the detailed implementation of the recommendations.



- Among the countries of the West Eurasia roadmap, two are beyond stage 3 and can consider organising a FMD simulation exercise. Kazakhstan is working on it and will notify to OIE and inform its neighbouring countries.

➤ **Update on the implementation of the global strategy**

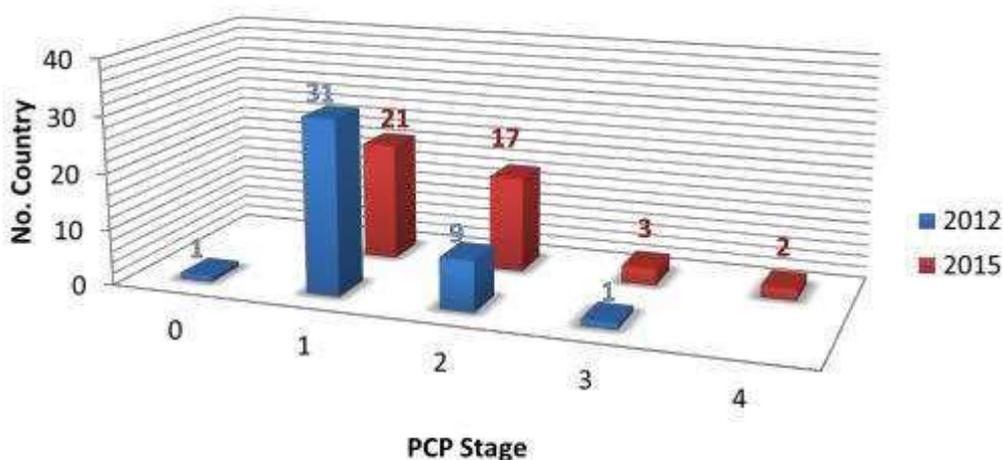
[Samia METWALLY/FAO]

Since the Global FMD Control Strategy was adopted, several initiatives have been made in order to establish an enabling environment to make FMD control a feasible option, particularly for countries that are affected the most by this disease.

Out of 87 FMD-endemic countries worldwide, at least 42 nations are currently engaged, at various levels, in the implementation of PCP-FMD in the quest to reduce or eliminate FMD virus circulation by 2020-2025. Some regions are making progress in FMD control, such as South America and South East Asia. However, in a number of countries in Asia, Middle East and Africa, FMD remains endemic, or shows typical sporadic patterns. Since 2012, the WG has provided on-going coordination in the evaluation of their PCP Stages, revising FMD control plans for countries moving from one PCP stage to another, and monitoring the progress on the uptake and implementation of PCP-FMD by the FMD affected countries. Ten regional roadmap meetings of East Africa, Middle East, SAARC and West Eurasia were successfully coordinated. Trainings on PCP-FMD principles were delivered to FAO headquarters and field staff in Africa and the Middle East.

Technical guidelines on socio-economic studies principles, post vaccination monitoring, sero-surveillance, field investigation and risk-based control approach were developed. Profiles for the FMD global expert groups were developed and data was collected in order to produce the FMD Global report.

**Progress of Countries along the PCP-FMD stages:**



Between 2012 and 2015, countries advanced in PCP stages with clear shift to have more countries in PCP stages 1 and 2 in 2015 compared to 2012. A few countries progressively advanced to stages 3 and 4 by 2015. The trend was particularly visible for the West Eurasia, East Africa and Middle East regions, showing how effective has been the implementation of the Global Strategy for those countries.

After the presentation, further information was requested regarding FAO approach towards FMD. Countries were informed that FAO was supporting risk based sub-regional FMD control programme for South Caucasus countries. Other alternatives of support can be found on private-public funding initiatives. Countries were also reminded that upon request by the Veterinary Services, regional technical Cooperation Programme (TCP) could be organised to support countries efforts toward FMD control.

➤ **Introduction to the RAG role and responsibilities**

[Laure WEBER-VINTZEL/OIE]

The objective of this presentation was to provide the participants with the relevant information on the role and duties of the Regional Advisory Group (RAG) and on the procedure for election before processing with the election itself. The Terms of Reference, including the composition and modus operandi of the RAG, were provided by written and presented with emphasis on the role of the RAG as a link between the region and the international organizations, during and in-between roadmap meetings.

The RAG is composed of five voting-members (3 elected CVOs from the region and the two leaders of EPINET and WELNET) supported by non-voting members (FAO and OIE staff from the WG, regional/sub-regional representations, and PCP and PVS experts and regional organizations as appropriate).

➤ **RAG partial election**

[Plenary]

The composition of the RAG is detailed in the [recommendations](#).



**Session 2: FMD situation at global and regional level**

Link to the presentations: Agenda in [Annex 2](#)

➤ **Overview of global and regional FMD Situation**

[Anna LUDI/WRLFMD]

Submissions to WRLFMD (The Pirbright Institute) show a similar pattern to past years where serotype A and O are the dominant serotypes worldwide. No FMD outbreak has been reported in South America for more than 4 years. Serotype C has not been detected in over 12 years (since 2004), and the OIE/FAO FMD Laboratory Network has recently made recommendations about (i) proactive field surveillance and (ii) limiting the use of this serotype in animal experiments and in-vitro studies worldwide.

This presentation highlights the latest epidemiological situation in the West Eurasia, particularly focussing on three emerging viral lineages that are now circulating in the region or in the neighbourhood: O/ME-SA/Ind2001, SAT 2 and A/Asia/G-VII.

The latest series of outbreaks due to O/ME-SA/Ind2001 first occurred in 2013 in Libya and Saudi Arabia. Subsequent cases have occurred in UAE, Bahrain, Tunisia and Algeria (in 2014) and in 2015 this lineage travelled further west to Morocco. Moreover, during 2015 this lineage has also spread east into Laos and Vietnam. In-vitro testing indicates that O/TUR/5/2009 and O-3039 are matched against representative field isolates from this lineage, while results for O1 Manisa are more variable. Recent results of a potency test, using O1 Manisa and O/ALG/2014 as the challenge virus, generated a heterologous PD50 of approximately 3. During 2015, SAT 2 outbreak was seen in Oman and this is from the Alx-12 sub-lineage, which is closely related to viruses from previous outbreaks in Egypt. The latest challenge, is A/ASIA/G-VII which is now present in the Middle East and has emerged recently from the Indian sub-continent. Vaccine matching carried out at WRLFMD indicates a poor antigenic match, although there is some evidence that A-Sau/95 may provide protection. An in-vivo challenge study is currently underway to assess the performance of a vaccine containing A-Sau/95 and will be reported shortly.

There have been new submissions from West Eurasia. However, it is still difficult to determine whether these samples represent the true picture of FMD epidemiology in West Eurasia, or whether these results are biased by under sampling in the region. In-vitro vaccine matching for the established O/ME-SA/PanAsia-2 and A/ASIA/Iran-05 lineages do not show a great difference from past years.

A new tool will be published later this year to help countries determine what vaccines they may need in their respective vaccine banks. It is hoped that this will replace the current list of vaccine virus recommendations. The WRLFMD is also developing lineage specific rRT-PCR which methods are available as method brochures. The websites are currently being updated and will hopefully make it easier to find relevant information.

➤ **Focus on new Strain A incursion**

[Armenia, Turkey]

As described in the previous presentation, A/ASIA/G-VII is now present in the Middle East and has emerged recently from the Indian sub-continent. Vaccine matching carried out at WRLFMD indicates a poor antigenic match, although there is some evidence that A-Sau/95 may provide protection. An in-vivo challenge study is currently underway to assess the performance of a vaccine containing A-Sau/95 and will be reported shortly.

➤ **Circulation of A/ASIA/VII (18) strain in Middle East**

[Nicolas DENORMANDIE/MERIAL]

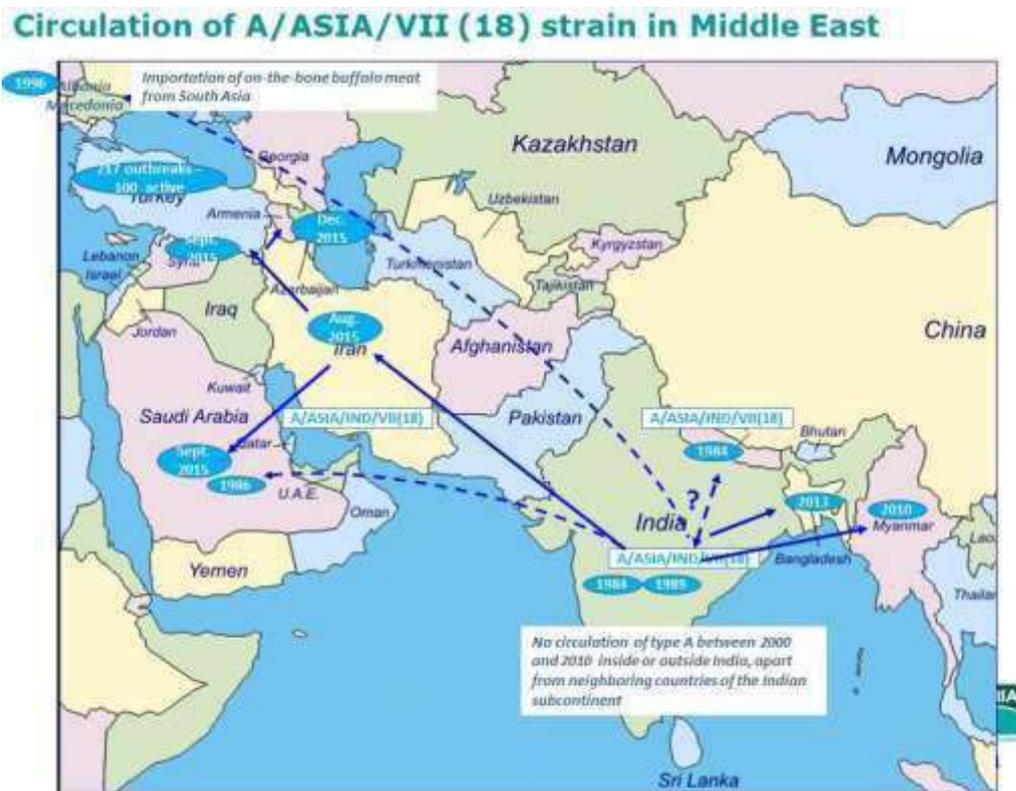
The strain named A/Asia/G-VII (18) should be read: Serotype A / Topotype (therefore geographical) Asia / Genotype G-VII (based on nucleotide differences on the RNA encoding the VP1 capsid protein of FMD virus).

An Indian publication detailed the origin of this strain in India or Nepal in 1984. In 1986, the virus would have "escaped" from South Asia to Saudi Arabia. Additionally, in 1996, outbreaks would have appeared in Macedonia and Albania, linked to importation of buffalo on-the-bone meat from South Asia.

Subsequently, between 2000 and 2010, the virus wouldn't have left the Indian territory, except to some neighbouring countries. Outbreaks occurred in 2010 in Myanmar, and in 2013 in Bangladesh.

It is only in August 2015 that a new virus further spread from South Asia and caused the recent outbreaks in Iran, then in September in Saudi Arabia and in Turkey (having started near Lake Van, near the border with Armenia); and finally in December 2015 in Armenia.

The cases related in Iran could have found their origin in an outbreak near the border with Turkey (not far from the index case, near Lake Van). In Turkey, several hundred outbreaks have spread from the Eastern Anatolia to Western Anatolia close to the Thrace region.



**Session 3: Country reports**

Link to the presentations: Agenda in [Annex 2](#)

In order to have an updated state of play of the countries situation regarding FMD, the representatives of each country have been requested to present a short report describing the FMD situation in their country, in accordance with a template provided before the meeting. Each country had a 10-15 minutes time slot, followed by a 5 minutes question-and-answer session.

Summaries of the country information are presented in [Annex 4](#), also including the outcomes of the self-assessment questionnaires.

## ➤ **Regional training and technical support needs**

[GuneI ISMAYLOVA/EuFMD]

Training needs assessment, regularly carried out by EuFMD for its Member States, have been extended for the first time to countries of North Africa, Middle East and West Eurasia. This assessment intends to help understanding which training approach will be most beneficial in improving FMD control capacity of the assessed countries. A questionnaire sent to nine countries in West Eurasia (Azerbaijan, Armenia, Georgia, Iran, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey and Turkmenistan) was aimed to define needs for training on different levels and tackled different groups involved in FMD control. The preliminary results of the assessment were presented to launch the discussion on regional training and technical support needs.

Compiling the results, the assessment identified the following points:

- There is a need of improvement and training at all levels: Central veterinary authority, regional veterinary authorities, central and local laboratories, field veterinarians, private veterinarians and farmers
- The subjects that currently have the lowest level of competencies are:
  - assessing risks of FMD transmission along the value-chain of different production systems
  - applying biosecurity measures at farm and village level
  - conducting socio-economic analysis, including impact assessment of clinical FMD and cost-benefit analysis of FMD control interventions
  - carrying out vaccine matching tests
  - interpreting and responding to vaccine tender specifications
  - managing post-vaccination surveillance

Some of these training needs will be addressed by EuFMD within the current working plan through, either already available, or newly developed face-to-face courses, webinar series, job aids and e-learning courses.

Representatives of Tajikistan, Turkmenistan and Kyrgyzstan emphasized the necessity in the trainings to raise knowledge capacity of veterinary services and improve FMD control in their countries.



## **Session 4: Cross border coordination for the implementation of vaccination strategies and the movement control**

Link to the presentations: Agenda in [Annex 2](#)

## ➤ **Introduction and report of the results of the vaccination questionnaire**

[GuneI ISMAYLOVA/EuFMD]

The vaccination survey demonstrated high variability of vaccination strategies practiced in West Eurasia (see [annex 5](#)). As per previous years most of the surveyed countries reported vaccination of both small and large ruminants. Pakistan and Iran included also other species to their vaccination campaign, such as buffalo and deer. In most countries, vaccination is performed and paid for by the state, although some countries practice cost sharing with animal owners. The reported vaccination coverage in large ruminants ranged from approximately 3% up to 100%, in small ruminants from 36% to 80%. The vaccine strains used were coherent with the recommendations from the 2015 Roadmap meeting in Almaty. Some countries, in response to the recent incursion of a new serotype A/Asia/G-VII in the region, vaccinated or planning to vaccinate with the vaccine containing A/Asia/G-VII, currently developed by two producers-ARRIAH (Russian Federation) and Sap Institute (Turkey).

### **Group Discussion: Cross border coordination for the implementation of vaccination strategies and the movement control**

During this session Iran, Iraq and Syria expressed the need for better information sharing and coordination that would include Kurdish autonomous areas of Iraq.

The Central Asian countries (Kazakhstan, Kyrgyzstan, Turkmenistan and Tajikistan) highlighted the lack of transparency and reminded that the tools exist to share more information but were not used. The countries identified the OIE office of Astana as the legitimate facilitator to progress on that topic.



## **Session 5: Diagnostic capacity, Networks and Regional leading laboratory**

Link to the presentations: Agenda in [Annex 2](#)

### **➤ Introduction**

[Samia METWALLY/FAO]

This region is not directly covered by a reference centre as the ARRIAH laboratory geographically belong to another region but it continues to provide diagnostic services to some countries in the region. Per the FAO-OIE global strategy, this situation can be temporary overcome by establishing regional leading laboratory(ies) (RLL) with the intention to apply to become FAO/OIE reference centre in the future. The responsibilities and the procedures for selection of RLL were prepared by the WG and discussed at the meeting.

### **Group Discussion: Diagnostic capacity, Networks and Regional leading laboratory**

Summary of the discussion of the breakout groups:

- countries recognise the role of Iran and Turkey and unanimously agreed to nominate their laboratories as the regional leading laboratories. Turkey and Iran concurred to continue supporting the region;
- despite ARRIAH is not part of the region, countries recognise their critical function as an FAO-OIE Reference centre in conducting diagnostic analysis as well as a vaccine producer;
- it was agreed that the ARRIAH and WRLFMD will coordinate sending proficiency panels to the countries in 2016-2017;
- the nomination for the regional leading laboratories should be supported by the countries' CVOs.



## **Session 6: Surveillance for early detection and outbreak investigation**

Link to the presentations: Agenda in [Annex 1](#)

### **➤ Introduction**

[Gregorio TORRES/OIE]

Regular monitoring and surveillance based on clinical sign and serological survey are the foundation of any given disease control program.<sup>3</sup>

The OIE Terrestrial Animal health Code (Terrestrial Code) defines monitoring as *“the intermittent performance and analysis of routine measurements and observations, aimed at detecting changes in the environment or health status of a population”*. Surveillance is defined as *“Systematic ongoing collection, collation and analysis of information related to animal health and the timely dissemination of information so action can be taken”*.<sup>4</sup>

The design of an FMD control programme based on epidemiological evidence generated through monitoring and serological studies for changes in disease patterns or presence of new strain is the main goal in the early stages of the PCP-FMD. Serological surveys for FMD virus remain essential where risk

<sup>3</sup> Guide to Terrestrial Animal health Surveillance. OIE 2014

<sup>4</sup> [http://www.oie.int/fileadmin/Home/eng/Health\\_standards/tahm/0.04\\_GLOSSARY.pdf](http://www.oie.int/fileadmin/Home/eng/Health_standards/tahm/0.04_GLOSSARY.pdf)

is high and disease is not reported based on clinical signs. To achieve this goal it is necessary to strengthen the national epidemiological capacities including the capacity to design appropriate epidemiological studies and to establish a close cooperation between the national and regional epidemiology and laboratory networks.

To progress in the control of FMD it would be required effective epidemiological surveillance including an early detection system and an effective reporting mechanism. Surveillance for early detection comprises the collection, analysis and reporting of health-related information so prompt actions can be taken. Outbreak investigation should be part of the surveillance system and envisages gaining understanding of the disease situation in the field. It comprises not only the confirmation of the presence of the disease, but also the identification of the source of infection and its potential spread.

The final aim of the disease early detection and outbreak investigation procedure is to reduce the spread and consequently to mitigate the disease impact.

### **Group Discussion:**

The participating countries in the 7th West Eurasia Roadmap meeting recognised the important role of stakeholders in the disease early detection. Countries identified the need to build capacity among the stakeholders to ensure good understanding of FMD epidemiology and clinical recognition. Adequate laboratory capacity to analyse samples of the serosurveys but also as part of the outbreak investigation procedure was considered a key component of the monitoring and surveillance system throughout all stages of the PCP.

The epidemiology and laboratory network of the West Eurasia Roadmap should play an active role in providing technical support to all countries in the region. Countries in early stages of PCP are required to regularly monitor the occurrence of disease events with the aim of gaining better understanding of the epidemiology of FMD in their territories.



## **Session 7: Countries experiences with the design of the assessment plans and the risk based strategic plans**

Link to the presentations: Agenda in [Annex 2](#)



### **General presentation (Template presentation)**

[Nadège LÉBOUCQ/OIE, GUNEL ISMAYILOVA (EuFMD)]

#### **Component 1 (FMD) and 2 (linked to the reinforcement of VS) of the RBSP**

According to the FAO-OIE-EuFMD PCP-FMD Guidelines, countries are requested to elaborate a RBSP to move from PCP-FMD Stage 1 to Stage 2. This Plan is crucial to ensure that countries will implement relevant control measures in line with the findings of their PCP-FMD Stage 1. To help countries with this task, a RBSP template has been elaborated by EuFMD a few years ago. This template however addresses FMD aspects only, while the Global Strategy for the control of FMD adopted in June 2012 in Bangkok / Thailand, which serves a reference document, advocates for three inter-related and mutually reinforcing components, namely on **(1) FMD**, **(2) the reinforcement of national Veterinary Services** also regarded as 'the enabling environment' and **(3) the combined control of FMD and other diseases of major importance**. The FMD GF-TADs Group therefore decided to incorporate elements related to Components 2 and 3 in the existing RBSP Template.

Dr G. Ismayilova presented a part of the RBSP template related to the Component 1 of the Global Strategy, including (1) Situation analysis, (2) Benefits of FMD Control; (3) Risk-based Control strategy for FMD control; (4) Monitoring and Evaluation; (5) Operational plan; and (6) Technical Assistance. Key elements of the plan, details and explanations on what is expected for each chapter, as well as recommendations related to the writing of the plan were provided.

Dr N. Leboucq presented the elements linked to Component 2 that will form Chapter 4 of the revised RBSP Template. These elements relate to the Critical Competences (CCs) of the OIE PVS evaluation tool. Ten of these CCS are particularly relevant to create the enabling environment for the FMD specific activities prescribed in PCP-FMD Stage 2. Therefore, countries are encouraged to refer to their last OIE PVS Report and to look at the level of advancement for these 10 CCs. Countries should design and implement a set of dedicated activities for all CCs whose level is below 3. To this end, they can use the recommendations provided in the OIE PVS Report and/or some of the activities suggested in the Gap Analysis Report when conducted. These activities should become an integral part of the RBSP aimed at controlling FMD at national level. The Regional Advisory Group will look at the robustness of the 'enabling environment' when validating the RBSP and considering the country's progression to PCP-FMD Stage 2.

All 14 countries part of the FMD West Eurasia Roadmap had an OIE PVS evaluation except Iraq. However, most of these evaluations were conducted more than 5 years ago and hence, some results could no longer be valid. Therefore, these countries are encouraged to request an OIE PVS Follow Up mission to acquire a better understanding of their current Veterinary Services capacity.

***Group Discussion: Countries experiences with the design of the assessment plans and the risk based strategic plans***

Countries which have developed their RBSPs recently (Georgia, Armenia, Azerbaijan) recognised the value of having RBSP in place. Countries noted some difficulties faced during the drafting process and recognised the support of EuFMD experts in drafting their plan. Therefore, they advised for an expert support for those countries currently in the Stage 1 and expressed their availability to share their experience in development of the RBSP. Countries in stage 1 (Tajikistan, Turkmenistan) and provisional Stage 2 (Kyrgyzstan) expressed their need for an external assistance from the international organisations (OIE, FAO), EuFMD and from countries with experience in the development of the RBSP.



## **Session 8: Roadmap conclusion**

Link to the presentations: Agenda in [Annex 2](#)

➤ **Presentation of roadmap based on post-assessment by the Regional Advisory Group**  
[Abdulnaci Bulut/RAG]

The RAG presented in plenary its conclusions on the countries progression after assessing the information provided by the countries during their presentations, the answers to the questionnaires, and the advice from the WG after conducting the countries interviews with the support of PCP experts.

After the discussion the RAG proposed countries PCP stages for the 7<sup>th</sup> Regional Roadmap meeting. Summary of the RAG's conclusions is presented in [Annex 6](#).



## **Session 9: Final Discussions and Report**

Link to the presentations: Agenda in [Annex 2](#)



➤ **Presentation of roadmap based on the assessment by the Regional Advisory Group**

## Seventh FMD Roadmap meeting for West Eurasia

6 - 8 April 2016, Bishkek, Kyrgyzstan

### Presentation of provisional roadmap for 2008-2025, based on self-assessment questionnaires

Countries	Validated Stages									Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Afghanistan</b> <i>(absent in Bishkek)</i>	0	1	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	4
<b>Armenia</b>	2	2	2	2	2	2	2*	2*	2	2	3	3	3	3	4	4	5	5
<b>Azerbaijan</b>	2	2	2	2	2	2	2*	2*	2	2	3	3	3	3	3	3	4	4
<b>Georgia</b>	2	1	1	1	1	1	2*	2	2	2	3	3	3	3	4	5	5	5
<b>Iran</b>	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	4	4	4
<b>Kazakhstan (9 northern regions)</b>	1	1	1	1	1	1	2*	**	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V
<b>Kazakhstan (5 southern regions)</b>	1	1	1	1	1	1	2*	***	***									
<b>Kyrgyzstan</b>	1	0	0	0	1	1	2*	2*	2*	3	3	3	4	4	5	5	5	5
<b>Pakistan</b>	0	1	1	1	1	1	2*	2	2	2	2	3	3	3	3	3	4	4
<b>Tajikistan</b>	0	1	1	1	1	1	1	1	1	2	3	3	4	4	4	4	4	4
<b>Turkey (Thrace)</b>									FV	FV	FV	FV	FV	FV	FV	FV	FV	FV
<b>Turkey (Anatolia / Marmara-Aegean)</b>									2	3	3	4	4	4	4	4	5	5
<b>Turkey (Remaining Anatolia)</b>	1	2	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	4
<b>Turkmenistan</b>	0	0	0	0	1	1	1	1	1	2	2	2	2	3	3	4	4	5
<b>Uzbekistan</b> <i>(absent in Bishkek)</i>	0	1	1	1	1	1	1	1	1	2	3	3	3	4	4	5	5	5

#### Assessed by RAG Middle-East

<b>Iraq</b>		1	1	1	1	1	2*	2*	2*									
<b>Syria</b>		1	1	1	1	1	2*	2*	2*									

#### PCP-FMD stages of West Eurasia countries as of May 2015

\* provisional status given to the country (countries had six months to provide additional information including Control Plan; if no, they will be downgraded to the previous stage)

\*\* country/zone having entered the OIE pathway for recognition of an FMD free zone without vaccination

\*\*\* country/zone having entered the OIE pathway for recognition of an FMD free zone with vaccination

FV : Free with vaccination F/V : Free without vaccination

## Annex 1 - List of participants

<b>N°</b>	<b>Country</b>	<b>Name Last name</b>
1	Armenia	Satenik KHARATYAN
2	Armenia	Arman GEVORGYAN
3	Azerbaijan	Tamilla ALIYEVA
4	Azerbaijan	Etibar ZEINALOV
5	Georgia	Mikheil SOKHADZE
6	Georgia	Zurab RUKHADZE
7	Georgia	Lasha AVALIANI

N°	Country	Name Last name
8	Iran	Darab ABDOLLAHI- BIRON
9	Iraq	Layth MOHAMMED <b>SALIH</b> ABDULRASOOL
10	Iraq	Hamzah Hadi Obayes ALBUABDALLAH
11	Kazakhstan	Samat TYULEGENOV
12	Kazakhstan	Dinara IMANBAYEVA
13	Kyrgyzstan	Ashirbai ZHUSUPOV
14	Kyrgyzstan	Burulkan OSOKEEVA

N°	Country	Name Last name
15	Pakistan	Khurshid AHMAD
16	Pakistan	Afzal <b>MUHAMMAD</b>
17	Russia	Nikita LEBEDEV
18	Syria	Mazen DIB
19	Syria	Abdou YOUSEF
20	Tajikistan	Mulojon AMIRBEKOV
21	Tajikistan	Orom ZIYOEV

<b>N°</b>	<b>Country</b>	<b>Name Last name</b>
22	Turkey	Naci BULUT
23	Turkmenistan	Orazmyrat YAZYEV
24	Turkmenistan	Annamammet MAMMAYEV

N°	Country	Name Last name
25	OIE Bangkok	Ronello ABILA
26	OIE Brussel GF-TADs FMD WG	Nadège LEBOUCQ
27	OIE Astana	Djahne MONTABORD
28	OIE Astana	Mereke TAITUBAYEV
29	OIE Paris GF-TADs FMD WG	Gregorio TORRES
30	OIE Paris GF-TADs FMD WG	Laure WEBER
31	OIE Beirut	Ghazi YEHIA
32	OIE Astana	Gaukhar AMIROVA

N°	Country	Name Last name
33	EU-FMD	Gunnel ISMAYILOVA
34	EU-FMD	Keith SUMPTION
35	FAO Rome GF-TADs FMD WG	Silvia KREINDEL
36	FAO Ankara	Abdulbaqi MEHRABAN
37	FAO Rome GF-TADs FMD WG	Samia METWALLY
38	FAO Rome GF-TADs FMD WG	Eran RAIZMAN
39	FAO Budapest	Andriy ROZSTALNYY

N°	Country	Name Last name
40	WRL Pirbright	Anna LUDI
41	ARRIAH Russia	Dimitry LOZOVY
42	ARRIAH Russia	Alexey MISHCHENKO
43	MERIAL France	Nicolas DENORMANDIE
44	MERIAL France	Stéphane IMBERT

**List of participants from Kyrgyzstan**

<b>№</b>	<b>Name</b>	<b>Position</b>
<b>Central office of State inspectorate on veterinary and phytosanitary security</b>		
1	Zhumakanov Kalys Turatbekovich	Director of State inspectorate on veterinary and phytosanitary security under Government of the Kyrgyz Republic
2	Abdraev Murat Jusubalievich	The head of Department for animal health control
3	Iskembraeva Mira Asanovna	The chief inspector of Department
<b>Regional division of State inspectorate on veterinary and phytosanitary security</b>		
4	Kubibaev A. B.	Head of Alamydyn area on veterinary and phytosanitary security
5	Ajibekov N. A.	Head of Moscow area on veterinary and phytosanitary security
<b>№</b>	<b>Name</b>	<b>Position</b>
6	Kasymaliev E. M.	Head of Issyk-Ata area on veterinary and phytosanitary security
7	Osmonov K. O.	Head of Bishkek city area on veterinary and phytosanitary security
8	Tashtanov E. M.	Head of Batken area on veterinary and phytosanitary security
9	Askarov Zh. A.	Head of Jalal-Abad area on veterinary and phytosanitary security
10	Abdullaev C. U.	Head of Osh area on veterinary and phytosanitary security
11	Imraimov O. C.	Deputy Head of Osh area on veterinary and phytosanitary security
12	Zhorobekov A. U.	Head of Talas area on veterinary and phytosanitary security
13	Sharapov B. D.	Head of Issik-Kyl area on veterinary and phytosanitary security
14	Asanbaev K. A.	Head of Karakol city area on veterinary and phytosanitary security
15	Musuraliev K. M.	Deputy Head of Naryn area on veterinary and phytosanitary security
16	Ismailov M. A.	Head of Jalal-Abad area on veterinary and phytosanitary security
17	Toroev M. C.	Central Veterinary Laboratory Director
<b>Ministry of Agriculture and melioration</b>		
18	Murataliev B. M.	Deputy Minister of Agriculture and melioration
19	Dadybaev Zh. M.	Specialist of the Ministry of Agriculture agricultural projects
20	Kasymbekov Zh.	Agriculture project realization department specialist at the Ministry of Agriculture and Melioration
21	Duyshev N. A.	Veterinary chamber representative
<b>Universities</b>		
22	Nurgaziev R. Z.	Scryabin Kyrgyz National Agriculture university
23	Zhunushov A. K.	Biotechnology institute Director
24	Krutskaya Ecaterina	Agriculture University specialist
25	Ertan Oruch	Pathologist Kyrgyz Turkish Manas University
26	Orhan Yapygy	Virologist Kyrgyz Turkish Manas University
27	Kydyralieve Nariste	Histologist Kyrgyz Turkish Manas University
<b>Organizations</b>		
28	Kichinebatirova M. K.	FAO representative in KR, consultant, project manager

## Annex 2 - Meeting agenda



### 7<sup>th</sup> Regional FMD West Eurasia Roadmap Meeting

Bishkek, Kyrgyzstan - 6-8 April 2016  
Meeting Venue: Jannat Regency, Bishkek  
**PROGRAM**

#### Day 1 - 6 April 2016

Schedule	Topic	Chair/Facilitators/ Speakers	EN	RU
08:00 - 09:00	Registration	All		
09:00 - 10:00	<b>PCP-FMD refresher training (voluntary)</b>	EuFMD	1-1	1-1
10:00 - 10:30	<i>Coffee-break (offered by EU-FMD)</i>			
10:30 - 11:00	<ul style="list-style-type: none"> <li>▪ <b>Opening/Welcoming Remarks</b> <ul style="list-style-type: none"> <li>- Representative of Republic of Kyrgyzstan</li> <li>- International Organizations (FAO, OIE, EuFMD)</li> </ul> </li> <li>- Objectives and Adoption of Agenda</li> </ul>	Officials Kyrgyzstan A. Mehraban (FAO) M. Taitubayev (OIE) K. Sumption (EuFMD) S. Metwally (FAO)		
11:00 - 12:30	<ul style="list-style-type: none"> <li>▪ <b>Session 1: Regional FMD control governance</b> <ul style="list-style-type: none"> <li>- Summary of the 6<sup>th</sup> West-Eurasia Roadmap meeting and assessment of the level of implementation of the recommendations [30 minutes]</li> <li>- Update on the implementation of the global strategy [30 minutes]</li> <li>- Introduction to the RAG role and responsibilities [15minutes]</li> <li>- RAG election [15 minutes]</li> </ul> </li> </ul>	<b>Chair: Georgia</b> D. Montabord  S. Metwally  L. Weber-Vintzel  Countries	   <a href="#">1-2</a>  <a href="#">1-3</a>	   <a href="#">1-2</a>  <a href="#">1-3</a>
12:30 - 13:30	<i>Lunch</i>			
13:30 - 15:00	<ul style="list-style-type: none"> <li>▪ <b>Session 2: FMD situation at global and regional level</b> <ul style="list-style-type: none"> <li>- Overview of global and regional FMD Situation [30 minutes]</li> <li>- Focus on new Strain A incursion [3x10 minutes]</li> <li>- <b>Group Discussion:</b> How to get prepared for incursion of new strains. Laboratory and control measures challenges [30 minutes]</li> </ul> </li> </ul>	<b>Chair: Kyrgyzstan</b> Anna Ludi (WRL)  India; Armenia; Turkey Plenary (all)	   <a href="#">1-4</a> <a href="#">1-4-1</a>  1-5	   <a href="#">1-4</a> <a href="#">1-4-1</a>  1-5

Schedule	Topic	Chair/Facilitators/ Speakers	EN	RU
15:00 - 15:30	<i>Coffee-break (offered by EU-FMD)</i>			
15:30 - 17:30	<ul style="list-style-type: none"> <li>▪ <b>Session 3: Country reports</b> <ul style="list-style-type: none"> <li>• 15 minutes presentation and 5 minutes question and answers per country</li> <li>• <u>Stage 1: Tajikistan, Turkmenistan, Uzbekistan, Afghanistan</u></li> <li>• <u>Stage 2 (provisional or final): Kyrgyzstan, Pakistan, Syria, Iraq</u></li> </ul> </li> </ul>	Chair: Kazakhstan	<a href="#">1-6_TJK</a> <a href="#">1-7_TKM</a> <a href="#">1-8_KGZ</a> <a href="#">1-9_PAK</a> <a href="#">1-10_SYR</a> <a href="#">1-11_IRQ</a>	<a href="#">1-6_TJK</a> <a href="#">1-7_TKM</a> <a href="#">1-8_KGZ</a> <a href="#">1-9_PAK</a> <a href="#">1-10_SYR</a> <a href="#">1-11_IRQ</a>
17:30 - 18:00	Regional training and technical support needs	EuFMD + All	<a href="#">1-12</a>	<a href="#">1-12</a>
18:00	Closure of day 1			
18:00 - 19:30	<ul style="list-style-type: none"> <li>▪ <b>Closed sessions:</b> interviews with countries to review their PCP-FMD questionnaires and control activities (Kyrgyzstan, Turkmenistan, Afghanistan; 30 min per country)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Closed sessions:</b> interviews with countries to review their PCP-FMD questionnaires and control activities (Tajikistan, Uzbekistan, Pakistan; 30 min per country)</li> </ul>		

### Day 2 - 7 April 2016

Schedule	Topic	Chair/Facilitators/ Speakers	EN	RU
9:00 - 11:00	<ul style="list-style-type: none"> <li>▪ <b>Session 4: Cross border coordination for the implementation of vaccination strategies and the movement control</b> <ul style="list-style-type: none"> <li>- Introduction and report of the results of the vaccination questionnaire [30 minutes]</li> <li>- <b>Group discussion</b> [60 minutes] <ul style="list-style-type: none"> <li>○ <u>Group 1: Turkey, Armenia, Azerbaijan, Georgia, Iran, Pakistan, Afghanistan, Iraq, Syria</u></li> <li>○ <u>Group 2: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</u></li> </ul> </li> <li>- Group reports (15 min per group) [30 minutes]</li> </ul> </li> </ul>	Chair: Syria  EuFMD   Rapporteurs	<a href="#">2-1</a>	<a href="#">2-1</a>
11:00 - 11:30	<i>Coffee-break (offered by EU-FMD)</i>			
11:30 - 13:00	<ul style="list-style-type: none"> <li>▪ <b>Session 5: Diagnostic capacity, Networks and Regional leading laboratory</b> <ul style="list-style-type: none"> <li>- Introduction [20 minutes]</li> <li>- <b>Group discussion</b> [40 minutes] <ul style="list-style-type: none"> <li>○ <u>Group 1: Turkey, Armenia, Azerbaijan, Georgia, Iran, Pakistan, Afghanistan, Iraq and Syria</u></li> <li>○ <u>Group 2: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</u></li> </ul> </li> <li>- Group reports (15 min per group) [30 minutes]</li> </ul> </li> </ul>	Chair: Armenia S. Metwally   Rapporteurs	<a href="#">2-2</a>	<a href="#">2-2</a>
13:00 - 14:00	<i>Lunch</i>			
14:00 - 16:20	<ul style="list-style-type: none"> <li>▪ <b>Session 3 (cont'd): Country reports</b> <ul style="list-style-type: none"> <li>15 minutes presentation and 5 minutes question and answers per country (justify PCP Stage assessment, as per template provided) <ul style="list-style-type: none"> <li>• <u>Armenia, Azerbaijan, Georgia, Turkey, Iran (Stage 2); Kazakhstan, Russia</u></li> </ul> </li> </ul> </li> </ul>	Chair: Turkmenistan	<a href="#">2-3_ARM</a> <a href="#">2-5_GEO</a> <a href="#">2-6_TUR</a> <a href="#">2-7_IRN</a> <a href="#">2-8_KAZ</a>	<a href="#">2-3_ARM</a> <a href="#">2-4_AZE</a> <a href="#">2-5_GEO</a> <a href="#">2-6_TUR</a> <a href="#">2-7_IRN</a> <a href="#">2-8_KAZ</a> <a href="#">2-9_RUS</a>

Schedule	Topic	Chair/Facilitators/ Speaker	EN	RU
16:20 - 16:40	<i>Coffee-Break (offered by EU-FMD)</i>			
16:40 - 18:00	<ul style="list-style-type: none"> <li>▪ <b>Session 6: Surveillance for early detection and outbreak investigation</b></li> <li>- Introduction [20 minutes]</li> <li>- <b>Group discussion</b> [30 minutes] <ul style="list-style-type: none"> <li>○ <u>Group 1: Turkey, Armenia, Azerbaijan, Georgia, Iran, Afghanistan, Pakistan</u></li> <li>○ <u>Group 2: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan</u></li> </ul> </li> <li>- Group reports (15 min per group) [30 minutes]</li> </ul>	<p>Chair: Pakistan</p> <p>G. Torres</p> <p>Rapporteurs</p>	<a href="#">2-10</a>	<a href="#">2-10</a>
18:00	Closure of day 2			
18:00 - 19:30	<ul style="list-style-type: none"> <li>▪ <b>Closed sessions:</b> interviews with countries to review their PCP-FMD questionnaires and control activities (Armenia, Georgia, Kazakhstan; 30 min per country)</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Closed sessions:</b> interviews with countries to review their PCP-FMD questionnaires and control activities (Azerbaijan, Turkey, Iran; 30 min per country)</li> </ul>		

### Day 3 - 8 April 2016

Schedule	Topic	Chair/Facilitators/ Speaker	EN	RU
8.30 - 9:30	▪ <i>Closed Meeting WG – RAG</i>			
9:30 - 10:50	<ul style="list-style-type: none"> <li>▪ <b>Session 7: Group Discussion: Countries experiences with the design of the assessment plans and the risk based strategic plans</b></li> <li>- General presentation (Template presentation) [20 minutes]</li> <li>- <b>Group discussion</b> [30 minutes] <ul style="list-style-type: none"> <li>○ <u>Group 1: (countries in PCP Stage 1 and provisional Stage 2)</u></li> <li>○ <u>Group 2: (countries in PCP Stage 2)</u></li> </ul> </li> <li>- Reports from breakout groups (15 min per group) [30 minutes]</li> </ul>	<p>Chair: Azerbaijan</p> <p>EuFMD + N. Leboucq</p> <p>Rapporteurs</p>	<a href="#">3-1</a> <a href="#">3-2</a>	<a href="#">3-1</a> <a href="#">3-2</a>
10:50 - 11:10	<i>Coffee-break (offered by EU-FMD)</i>			
11:10 - 11:30	<ul style="list-style-type: none"> <li>▪ <b>Session 8: Roadmap conclusion</b></li> <li>- Presentation of roadmap based on post-assessment by the Regional Advisory Group</li> <li>- Roundtable discussion: Topic to be included in the 2017 Roadmap meeting</li> </ul>	<p>Chair: A. Mehraban</p> <p>Regional Advisory Group</p> <p>All participants</p>	<a href="#">3-3</a> <a href="#">3-4</a>	<a href="#">3-3</a> <a href="#">3-4</a>
11:30 - 12:30	<ul style="list-style-type: none"> <li>▪ <b>Session 9: Final Discussions and Report</b></li> <li>- Recommendations of the 7<sup>th</sup> Roadmap meeting</li> <li>- Round table discussion and conclusion</li> </ul>	<p>Chairs: S. Metwally and L. Weber-Vintzel</p> <p>A. Rozstalnyy, Plenary (all)</p>		
12:30	<b>Closure of meeting</b>	<b>FAO + OIE + Kyrgyzstan</b>		

## Annex 3 - State of implementation of the 2015/ Almaty recommendations

**The countries recommend, for a better implementation of the Global FMD Control Strategy at regional level:**

Completed
  On-going
  Not completed

6 <sup>th</sup> meeting recommendations (2015)	Status	
<b>General</b>		
1. To continue the Roadmap process for West Eurasia countries to work towards the vision of freedom from clinical FMD in West Eurasia by 2025, with an annual survey (based on the self-assessment questionnaires) and a regional meeting to monitor progress (if funding available); the <b>next meeting is proposed to be held in April 2016</b> recognizing the <b>proposals from Kyrgyzstan and Iran</b> (to be confirmed);		Kyrgyzstan chosen
2. That the <b>possibility to hold the 7 West-Eurasia FMD roadmap meeting back to back with the first West-Eurasia PPR roadmap meeting</b> be explored, to save efforts and funding;		Not feasible for the moment To be explored for future meetings
3. That the OIE sub-regional Office for FMD control in <b>Astana be considered as the current Secretariat of the West Eurasia FMD Roadmap</b> to prepare the 7 regional FMD West Eurasia roadmap meeting, the follow up of the Almaty recommendations and to support countries for moving along their PCP-Stages, in close collaboration with FAO and EuFMD;		OIE Astana recognized as such with support of FAO and EuFMD
<b>West Eurasia countries</b>		
4. That <b>countries</b> which currently - or in the near future - <b>belong to two Roadmaps</b> be ready to willingly <b>consider which RAG to assess their PCP-FMD Stage</b> . Nevertheless, <b>they will remain as 'participating countries'</b> in the second Roadmaps whenever relevant to present their national situation and provide inputs to gain a better understanding to regional risks;		<b>Middle-East</b> Irak and Syria  SAARC Afghanistan, Iran, Pakistan (upon countries decision whenever the roadmap will be operational)
5. That <b>countries which have a provisional PCP-FMD stage 2 submit their revised risk-based strategic plan (RBSP)</b> to GF-TADs FMD Working group ( <a href="mailto:FAO-FMD@fao.org">FAO-FMD@fao.org</a> and <a href="mailto:OIE-FMD@oie.int">OIE-FMD@oie.int</a> ) for review no later than October 2015. The revised RBSP should have clear evidence of the programme feasibility for implementation, in accordance to the template provided by the GF-TADs FMD WG. FAO and OIE will provide feedback and recommendations on the RBSP to countries within three months of its submission for effective implementation in coherence with the PCP-FMD guidelines;		Armenia, Azerbaijan and Kyrgyzstan sent their RBSP  Assessed by FMD working group and final Stage decision take by RAG by E-consultation

6 <sup>th</sup> meeting recommendations (2015)	Status	
<p>6. That the new or revised RBSP should focus not only on FMD specific activities but also include activities on the <b>reinforcement of their Veterinary Services</b> in line with OIE standards on the quality of Veterinary Services<sup>5</sup> (as part of the Enabling Environment to FMD specific activities) and the <b>possible combination of FMD and other animal disease control activities</b>, in line with the FAO-OIE Global Strategy for the control of FMD disease (components 2 and 3, respectively);</p>		<p>Countries must keep this in mind when developing or revising their RBSP</p> <p>See template in recommendation 18</p>
<p>7. That countries <b>consider requesting an OIE PVS initial evaluation or OIE PVS follow up mission</b> (if the initial PVS evaluation was carried out before 2012) to have an updated understanding of their Veterinary Services (VS) capacity and addressed the gaps in the RBSP in particular for the OIE PVS critical competences relevant to PCP-FMD Stage 2;</p>		<p>ARM (04/2007) GEO (04/2009) IRK SYR (07/2008) TJK (04/2009) TUR (06/2007) UZB (06/2007)</p> <p>KAZ (08/2011) on tracks AZE (02/2015) IRN (09/2010) KYG (02/2016) PAK (11/2014) TKM (04/2013)</p>
<p>8. That countries consider that following prevailing FMD virus lineages circulating in the region:</p> <p><b>Active outbreaks</b></p> <ul style="list-style-type: none"> <li>• O/ME-SA/PanAsia-2</li> <li>• A/ASIA/Iran-05</li> <li>• Asia-1 (Sindh-08 lineage)</li> </ul> <p><b>Sporadic incursions</b> (in countries bordering China)</p> <ul style="list-style-type: none"> <li>• O/ME-SA/PanAsia (from Pool 1)</li> <li>• A/ASIA/Sea-97 (from Pool 1)</li> </ul> <p><b>New emerging risks from the Middle East and North Africa</b></p> <ul style="list-style-type: none"> <li>• O/ME-SA/Ind2001</li> <li>• SAT 2 (for countries in the south of the region)</li> </ul> <p>The most appropriate vaccines for current risks in the region and recommended for use in 2015 are provided in <b>Annex</b></p> <p><i>Nota bene:</i> countries should <b>make greater use of the vaccine matching services</b> offered by the World Reference Laboratory at Pirbright and other OIE/FAO Reference Centres (such as ARRIAH/Russia);</p>		<p>9/14 answering countries (ARM, AZE, GEO, IRK, IRN, PAK, SYR, TKM, TUR)</p> <p>3/9 have conducted vaccine matching tests, with WRLFMD and/or with their own national reference laboratory</p> <p>Make a greater use of the service offered by these laboratories</p>

<sup>5</sup> Section 3 on the quality of Veterinary Services of the OIE Animal Health Code

**6<sup>th</sup> meeting recommendations (2015)**

**Status**

<p>9. That countries consider the <b>establishment of a regional vaccine bank</b> using the existing OIE FMD antigen/vaccine banks or other efficient regional vaccine banks as models (for emergency and/or prophylactic vaccination). This mechanism, at the service of the countries, is principally for the emergency situations faced at national or regional level and should not pre-empt countries from the continuation of their normal preventive programmes for vaccination but will provide additional opportunities to obtain quality assured vaccines in a timely manner; The Secretariat will work on a possible modus operandi of the regional vaccine bank;</p>			<p>To be reconsidered when funding will be available</p>
<p>10. That countries develop their <b>FMD vaccination schedule taking into account and possibly aligned with their neighbouring countries vaccination plans</b>;</p>			<p>9/14 answering countries (ARM, AZE, GEO, IRK, IRN, PAK, SYR, TKM, TUR)</p> <p>3/9 declare they consider the schedule of their neighbouring countries, in their vaccination policy</p> <p>Take advantage of this meeting to discuss about it</p>
<p>11. That FAO and OIE investigate the possibility of <b>establishing an independent quality control vaccine centre</b> in West Eurasia to stimulate production of quality vaccines at national level and by commercial manufacturers;</p>			<p>Take advantage of this meeting to discuss about it</p>
<p>12. That countries, when implementing an <b>FMD simulation exercise</b>, systematically take into account the simulation exercises of its neighbouring countries and align it whenever possible (cross-border dimension); early notification to the OIE of simulation exercise can help regional coordination; <b>stage 3 or countries beyond Stage 3</b>;</p>			<p>Beyond stage 3 when FMD situation is no longer endemic in the country Kazakhstan: To be organized in 2016 Neighbouring countries will be informed</p>

<sup>6</sup> OIE dedicate a specific webpage to disseminate announcement received from Member Countries on disease introduction simulation exercises taking place in their countries (<http://www.oie.int/en/animal-health-in-the-world/the-world-animal-health-information-system/simulation-exercises/2015/>)

6 <sup>th</sup> meeting recommendations (2015)	Status	
<p>13. That countries, when developing their control strategy, <b>consider meat price as an important ‘risk factor’ linked to possible increased movements of animals within and between countries</b>; setting up a system or mechanisms - or improving the use of available data from such already existing systems - to monitor livestock prices (live animals and meat) at national or better at regional level, could allow anticipating these movements and put in place the proper measures such as for instance increased control at borders and coordinated border management. For instance the use of new tools such as the use mobile devices can support the collection of FMD outbreak information from farmers, slaughterhouses or animal markets together with livestock prices can be explored.</p>		<p>To be consider this year and to put in 2016 recommendations</p> <p>Countries should better define their needs</p>
<p>14. That countries <b>conduct socio-economic impact assessment studies</b> and cost benefit analyses to provide evidence of the impact and to estimate the benefits of FMD control or eradication. These studies can be supported by experts from FAO/OIE;</p>		<p>5 answers ARM, IRQ, KYR, SYR, TUR (+3 2015: TJK, TKM, UZB) Socio-economic impact of FMD has not been assessed (except for 3 countries) Mandatory in stage 1 but to be done by any country at any stage if needed</p> <p>GF-TADs Socio-economic guidelines to finalize</p> <p>EuFMD Webinars and E-learning to organize</p>

		For most of the countries answering,
<p>15. That countries <b>better document, including through surveys if needed, movement of animals including illegal movements, and define appropriate actions to be implemented</b> (with the support of the GF-TADs FMD Working Group if needed); while illegal movements are not preventable, these could made be safer with intervention with an appropriate vaccination regimen; value chain studies; to continue; I&amp;R requirements for countries &gt;3</p>		<p>movements of key livestock species are thoroughly described within and into the country but need to be linked with a better information on animal identification</p> <p>Technical workshops to organize at regional level</p>
<p>16. That countries fully <b>comply with their reporting obligations to the OIE with regards to FMD (and other OIE listed diseases) epidemiological situation</b> (obligation to report FMD clinical disease and infection<sup>7</sup>); and use other information systems or platforms such as EMPRES-i and the West Eurasia data collection to improve information sharing within the region;</p>		<p>Reported in 3 countries within the region since 6<sup>th</sup> meeting</p> <p>Importance of declaration to get rid of the disease with external help and to prevent spread to other countries (reciprocity)</p>
<p>17. That countries with (or near to achieving) free zones <b>ensure that they have written and exercised contingency plans</b> according to OIE obligations to ensure rapid detection and response to any incursion of FMD in the free-zone;</p>		<p>Kazakhstan (North)</p> <p>Turkey - Thrace</p>

<sup>7</sup> Reporting obligations to the OIE laid down in Chapter 1.1. (general) and chapter 8.x7 (for FMD) of the OIE Terrestrial Animal Health Code

6 <sup>th</sup> meeting recommendations (2015)	Status	
<b>GF-TADs FMD Working Group and PCP experts</b>		
<p>18. That they <b>finalize the templates</b> for:</p> <ul style="list-style-type: none"> <li>- <b>risk assessment plan (to enter Stage 1),</b></li> <li>- <b>RBSP (to enter stage 2) and</b></li> <li>- <b>national eradication strategy (to enter Stage 3)</b></li> </ul> <p>by including Component 2 (strengthening of Veterinary Services) and 3 (combined disease control) according to the FAO-OIE Global Strategy for the control of FMD;</p>		<p>On going</p> <p>Component 2 added</p> <p>Component 3 pending</p>
<p>19. That they provide further <b>guidance on the possible combination of vaccination protocols between FMD and other diseases</b> in the near future;</p>		<p>Global expert group to establish (component 3)</p>
<p>20. That they provide capacity building activities and tools to countries; in particular,</p> <ul style="list-style-type: none"> <li>(i) <b>EuFMD webinars</b> (in EN and RU);</li> <li>(ii) <b>E-learning tools</b> (training topics should include in epidemiology and PCP);</li> <li>(iii) <b>GF-TADs FMD socio-economic guidelines</b> (under development); and</li> <li>(iv) <b>support to countries to finalize their control strategy</b> is also expected;</li> <li>(v) <b>FMD surveillance programs;</b></li> </ul>		<p>EU-FMD GF-TADs</p> <p>1 done 2 ongoing 3 under development 4 EuFMD done</p>
<p>21. That they <b>develop terms of reference for:</b></p> <ul style="list-style-type: none"> <li>- the <b>regional leading Laboratory,</b></li> <li>- <b>regional epidemiology and laboratory networks</b> as well as</li> <li>- the <b>EPI Network and WELNET coordinators</b> (it is recommended that at least 2 co-leaders per Network will be nominated) and circulate to countries for comments before the next regional FMD roadmap meeting (where they will be discussed and adopted accordingly); (expression of interest from Pakistan for both; Iran for both of them; Kazakhstan for both);</li> </ul>		<p>ToR, selection criteria and assessment of regional leading laboratory are developed</p> <p>ToR for the networks to be developed</p>
<p>22. That they <b>develop terms of reference for the three national Contact Points (PCP roadmap; laboratory; epidemiology)</b> and circulate them to countries for comments before the next meeting of the regional FMD roadmap meeting (where they will be discussed and adopted);</p>		<p>Drafted and circulated</p> <p>Answers waited</p>
<p>23. That they <b>assist the EPI-Network and WELNET networks to secure funds for network activities,</b> if requested;</p>		<p>Next year if requested by networks</p>
<p>24. That they, in collaboration with the EPI-network, <b>identify or further develop a suitable information system for data gathering which may complement the existing global systems (WAHIS and EMPRES-I systems and the joint FAO-OIE-WHO GLEWS Platform)</b> to allow the sharing of information relating to FMD outbreaks, preparedness and control activities, as well as an early warning system for significant epidemiological events;</p>		

6 <sup>th</sup> meeting recommendations (2015)	Status	
<b>EPI-Network and WELNET</b>		
<p>25. That the <b>relevant OIE/FAO reference laboratories</b> (such as WRLFMD or ARRIAH) to <b>prepare annual proficiency test panels</b> for the fourteen countries in the region to ensure <b>accurate performance and harmonization of ELISA</b> (and other lab diagnostic test) <b>test results</b>; to seek external support for WRLFMD (to ship material); 8 countries currently not covered by EuFMD;</p>		<p>The 14 countries received invitations for proficiency tests</p>
<p>26. That the <b>leaders of the regional laboratory and epidemiology networks</b> to <b>setup an annual work plan based on priority needs for the region</b>, including at least one regional workshop. The international organizations, donors, EuFMD and/or a leading country in the region to assist in securing funds for the implementation of the work plan.</p>		<p>Pirbright conducted test with ARM, AZE, GEO, IRQ, KAZ, RUS, TUR</p> <p>ARRIAH conducted test with ARM, AZE, GEO, KAZ, KYR, TJK, TKM, UZB</p> <p>Countries need to better describe what they need</p>

# Annex 4 - Summary of contents of country reports

## Armenia



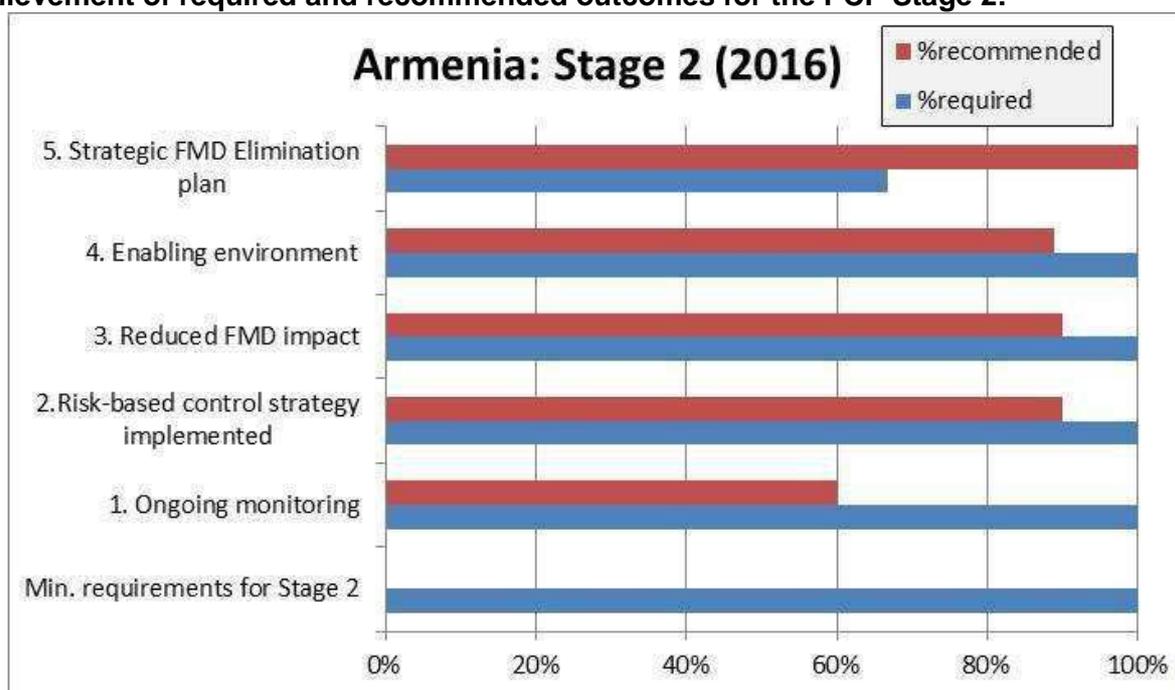
PCP-FMD Stage	
2015	2*
2016	2
OIE PVS evaluation	2007

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Armenia	2	2	2	2	2	2	2*	2*	2	2	3	3	3	3	4	4	5	5		

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage)

### Achievement of required and recommended outcomes for the PCP Stage 2:



### FMD outbreaks & surveillance:

- 1 FMD outbreak was reported in December 2015. Identified FMD diagnosis: type A, genetic line A/G-VII.
- Response to outbreak: quarantine, recording of the susceptible animals, restriction of animal and food transportation, ring vaccination, disinfection.
- In 2015 for NSP, 495 samples have been investigated with 6 positive.
- In 2015 for SP, 624 samples (A 94.74%, O-97,04, Asia 1-98.01%).

### FMD Control Measures:

- Mass Vaccination in 2015 using trivalent high potency vaccines ( $\geq 6$  PD<sub>50</sub>), including A/Iran 2005, O/PanAsia 2, Asia- 1/Georgia2001 strains.
  - After an outbreak, ring vaccination in 22 marz (8009 heads of LR) including A/Iran 2005, O/PanAsia 2, Asia-1/Georgia2001. In March, vaccination with vaccine produced by ARRIAH (RF) strains A Iran 05, A/G-VII, O PanAsia2, Asia1 Sidnh 08.  $\geq 6$ PD<sub>50</sub> (1200000 doses).
  - In 2016, vaccination coverage estimated to be 100% for LR and SR in risk zones (227 3000 doses).
    - Renovation of border checkpoints.
- Cooperation with the authorized bodies of neighbouring countries.
- Raising awareness of stakeholders.

### Other notes and priorities for the future:

- The Armenia Government allocated US \$ 1 180 000 in total for FMD control and submitted application to increase this amount.
- Serological monitoring activities are planned to carry to the systematic level.
- Introduction of electronic data exchange systems both in the inspectorate and laboratory are in progress.
- A new laboratory building is in process of construction.
- The central and marz laboratories are to be equipped.
- Continuous advanced training courses for inspectors, field veterinarians and laboratory staff at different levels.

# Azerbaijan



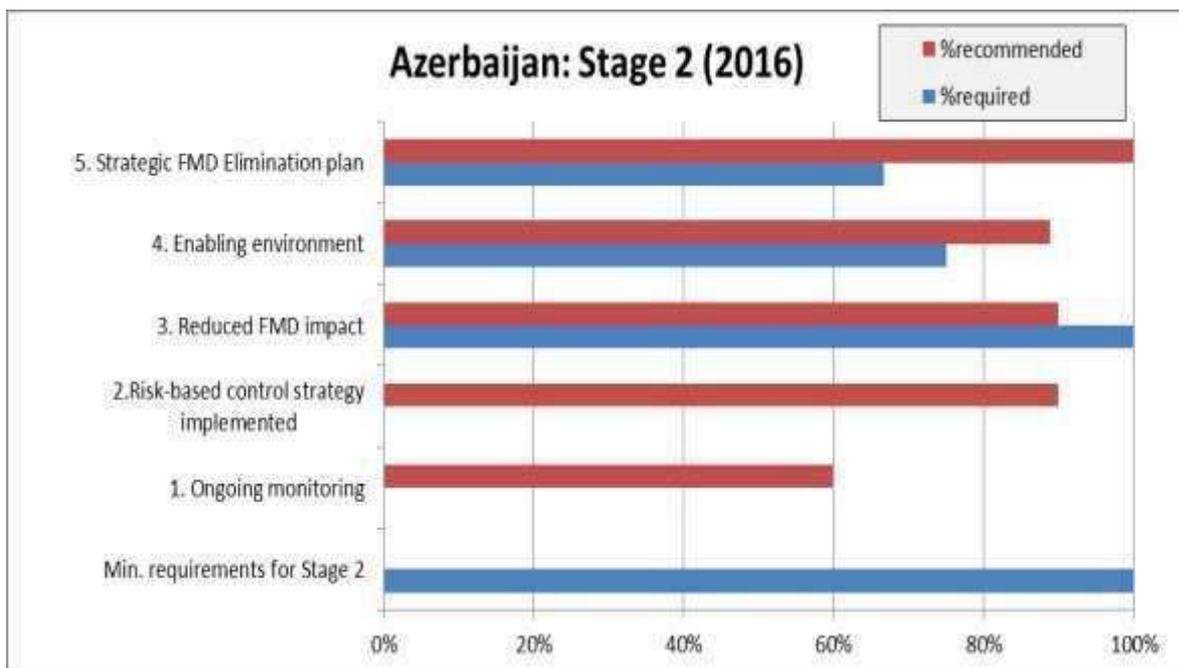
PCP-FMD Stage	
2015	2*
2016	2
OIE PVS evaluation	2015

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Azerbaijan	2	2	2	2	2	2	2*	2*	2	2	3	3	3	3	3	3	4	4		

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage)

### Achievement of required and recommended outcomes for the PCP Stage 2:



#### **FMD outbreaks & surveillance:**

- No outbreak reported.
- Serosurveillance planned for 2015 was not carried out, due to the reconstruction of Republic Veterinary Laboratory.
- NSP and SP serosurvey is planned for April-May, using a part of blood samples collected for brucellosis serosurvey under the program of the World Bank.

#### **FMD Control Measures:**

- Mass vaccination using trivalent high potency vaccines ( $\geq 6$  PD<sub>50</sub>), including A/Iran 2005, O/PanAsia 2, Asia-1 Sindh- 08.
- 2015 vaccination coverage  
100% for LR  
55.7% for SR.
- In 2016 donation of 500 000 doses of trivalent vaccine including G-VII by Sap Institute (Turkey).

#### **Other notes and priorities for the future:**

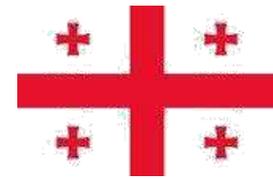
- Progress of Nakhchivan Autonomous Republic to PCP stage 3.
- Clinical surveillance.
- Strengthening of animal movement control, control on animals markets and borders, to prevent FMD incursion from neighbouring countries.
- Development of continuous professional education.

Regional trainings of the veterinary specialists in epidemiology, clinical analysis, laboratory diagnostics and informational systems.

Development of the National information reporting systems (Azvet and EIDSS).

- Development of controlled and regulated animal slaughter system.  
Construction of slaughterhouses.

# Georgia



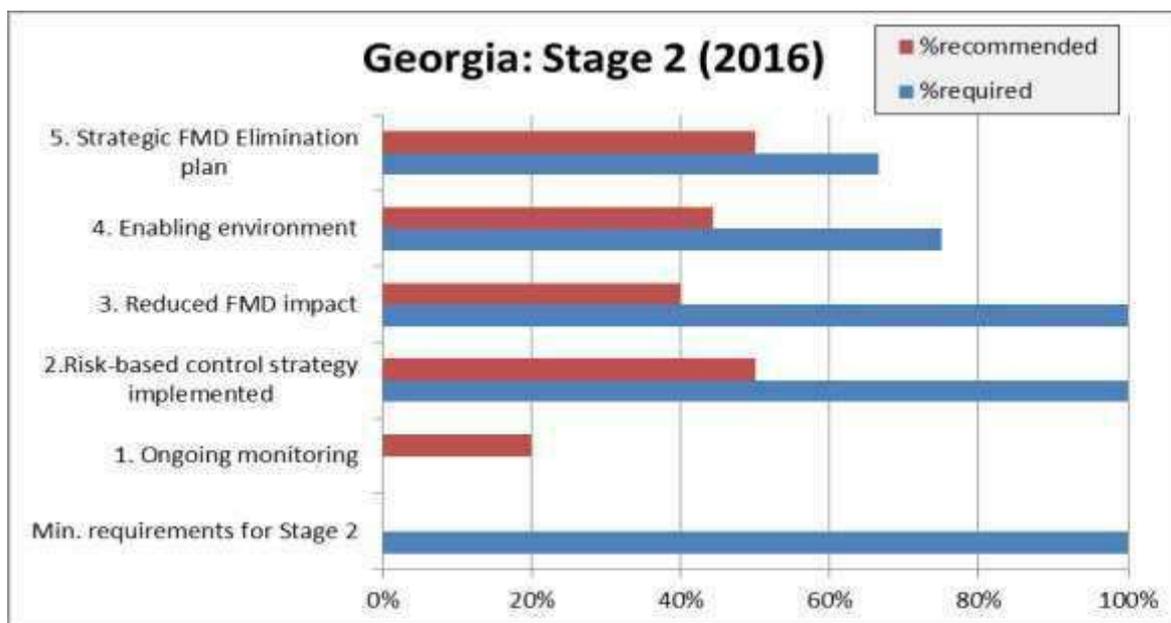
PCP-FMD Stage	
2015	2
2016	2
OIE PVS evaluation	2009

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Georgia	2	1	1	1	1	1	2*	2	2	2	3	3	3	3	4	5	5	5		

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage)

### Achievement of required and recommended outcomes for the PCP Stage 2:



### FMD outbreaks & surveillance:

- No outbreaks reported. Last outbreak in 2002 (Samtskhe-Javakheti Region).
- Serosurvey in 2015

**NSP-Ab** - Estimation of level of FMDV circulation in different high risk hotspot areas and in the rest of the country.

**SP-Ab** - Assessment of the effectiveness of the vaccination campaign and estimation of sero-conversion in vaccinated LR and SR populations. Results are pending. To be reported to the WG.

- Guidelines for field veterinarians and laboratory staff with all necessary paper forms has been elaborated.
- Field and Laboratory information was entered in Electronic Integrated Disease Surveillance System (EIDSS).

### FMD Control Measures:

- In 2015, Vaccination is implemented with trivalent (A, O, Asia1) 6PD<sub>50</sub> vaccine.
- Vaccination is aiming whole population of LR and SR twice per year.
- Cross regional communication for disease control has been established between Georgia, Azerbaijan, Kazakhstan and Ukraine.
- Biosafety points along the animal migration roads (3 finished out of 8).

### Other notes and priorities for the future:

- State budget is constantly allocated for FMD activities (35-40 % of total budget).
- Establishment of PCP stage 3 in defined zone in Georgia:

Major goal: aims to detect any cases of the disease in the “low risk zone”, or to provide documentary evidence of the absence of clinical cases of the disease in the zone at the given stage.

Strategic objective: enter PCP Stage 3 for 2018 for this zone.

- Lack of finances on NSP/SP diagnostics, especially for defined “low risk” zone.

# Islamic Republic of Iran

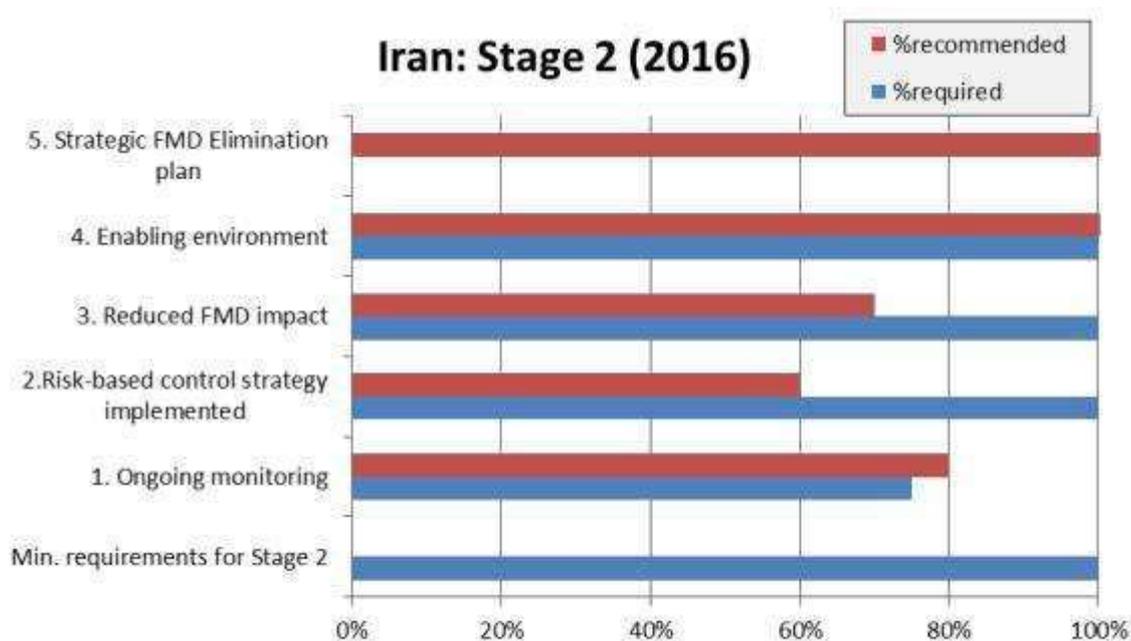


PCP-FMD Stage	
2015	2
2016	2
OIE PVS evaluation	2010

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Iran	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	4	4	4	

Achievement of required and recommended outcomes for the PCP Stage 2:



### **FMD outbreaks & surveillance:**

- In 2015 increased number of outbreaks.  
In March 2016 more than 700 outbreaks.
- In 2015: more than 1 200 epithelial samples investigated (CVL and Razi Institute), 27 samples sent to Pirbright WRLFMD, 25 positive samples were characterized by WRLFMD.
- In March 2016, 318 samples were sent to the lab (83 negative, 2-Asia 1, 52-A, 173-O). Iran announced the current circulation of a new serotype O strain that is being characterized.
- Active surveillance conducted monthly in each province, based on FMD epidemiological situation (visiting random selected epi units). Slaughterhouse surveillance in eastern borderline in 2016.

### **FMD Control Measures:**

- Usually, cattle are vaccinated 3 times a year.  
In 2015 two times vaccination was performed, due to lack of local vaccines.
- 8 400 000 cattle vaccinated with Merial, Razi & Ronak vaccines.
- Vaccination of SR 2 times per year (in each phase, at least 35% coverage). 35 millions of SR vaccinated with local and imported vaccine
- Plan for 2016:  
75 % cattle vaccinated, 3 times, with high potent vaccine and  
70 % sheep and goat vaccinated with local vaccine.

### **Other notes and priorities for the future:**

- Establish quarantine check point in eastern borders.
- Subnational FMD laboratory equipped in border province.
- All cattle population ear tagged in western border.
- 75 % of large animals vaccinated each phase.
- Designing integrated animal movement and quarantine systems.
- Link to GIS, slaughterhouse, animal health certificate
- Memorandum of Understanding (MoU) with the toll and road transport organization in the use of health certificates code in transportation licenses.
- MoU with farmer cooperative union in vaccine supplying.
- Strict biosecurity measures in response to outbreaks and in dairy farms complex.



# Kazakhstan



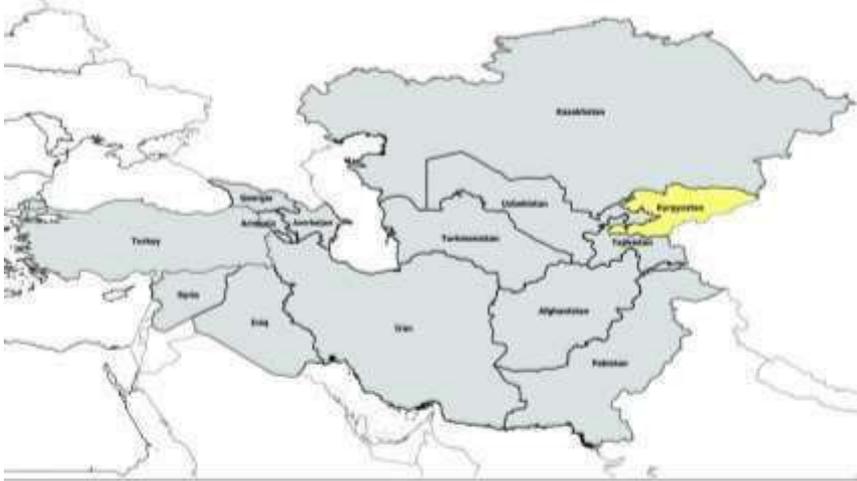
PCP-FMD Stage	
2015	Not assessed
2016	Not assessed
OIE PVS evaluation	
	2011

Country has entered the OIE pathway (recognised FMD-free zone without vaccination + application for the endorsement of the national official control programme for FMD) and was therefore not assessed at the Roadmap meeting.

Countries	Validated Stages										Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Kazakhstan 9 northern regions	1	1	1	1	1	1	2*	**	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V	F/V	
Kazakhstan 5 southern regions	1	1	1	1	1	1	2*	***	***										

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage).  
F/V : Free without vaccination

# Kyrgyzstan

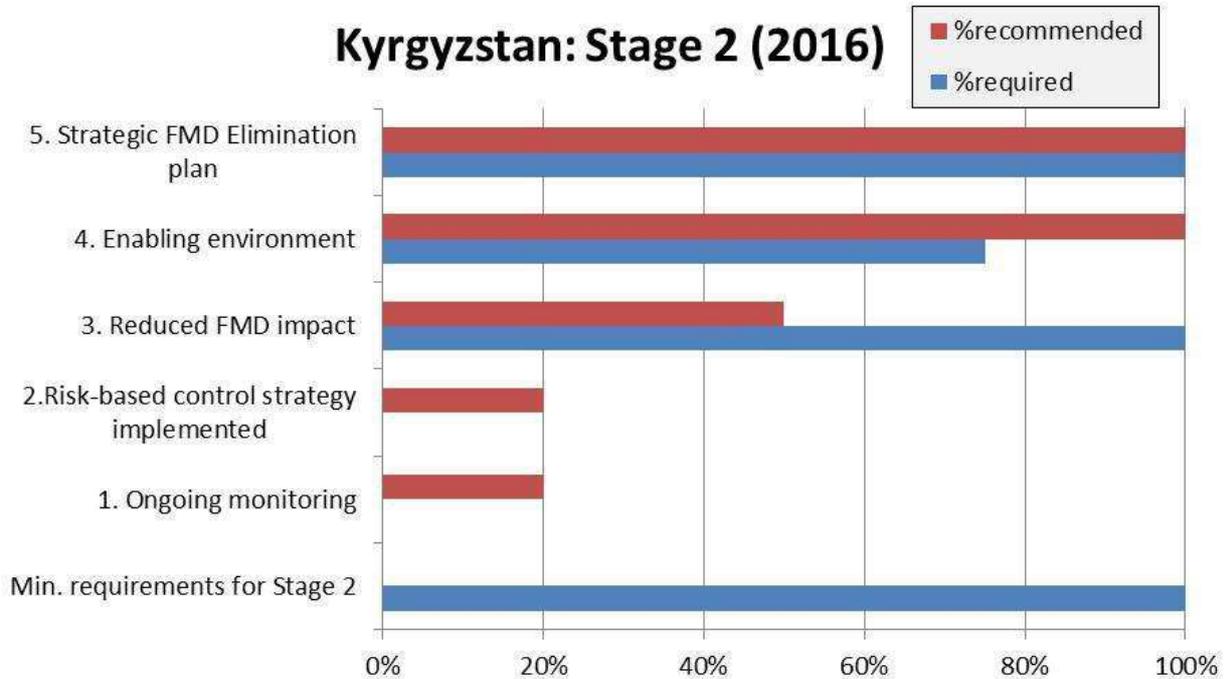


PCP-FMD Stage	
2015	2*
2016	2*
OIE PVS evaluation	2016

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Kyrgyzstan	1	0	0	0	1	1	2*	2*	2*	3	3	3	4	4	5	5	5	5		

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a Risk Based Strategic Plan - if not, they will be downgraded to the previous stage)



#### **FMD outbreaks & surveillance:**

- 1 case in 2014 (not serotyped due to the low quality of the sample sent to ARRIAH).
- No case reported in 2015 and 2016

#### **FMD Control Measures:**

- Cattle is vaccinated by trivalent vaccine of A, O, Asia-1 strains manufactured by Russia twice a year (3.9 million. doses)

#### **Other notes and priorities for the future:**

- Adopted FMD control strategy for 2016-2020.
- Animal identification is introduced throughout the country.
- Virology departments are accredited according to ISO/IEC -17025-2009
- The Contract for consulting services for animal health and production between the APIU MoAM KR and the OIE was signed and implemented under the LMDP.
- The Memorandum on joint control of transboundary and other diseases was signed with the Republic of Tajikistan in 2014.
- The Memorandum on joint control of transboundary and other diseases in border areas was signed with the Republic of Kazakhstan in 2015.
- Strict quarantine and animal movement restrictions should be introduced during disease outbreak in order to prevent further spread of the disease and to minimize environmental contamination.
- Developed and applied the biosafety regulations to prevent spread of virus during sampling, laboratory survey, conducting epizootic monitoring, etc.
- Gaps and requests for support: Technical support; Creating a vaccine bank; Investigation of Wild Fauna; Training, internship

# Pakistan



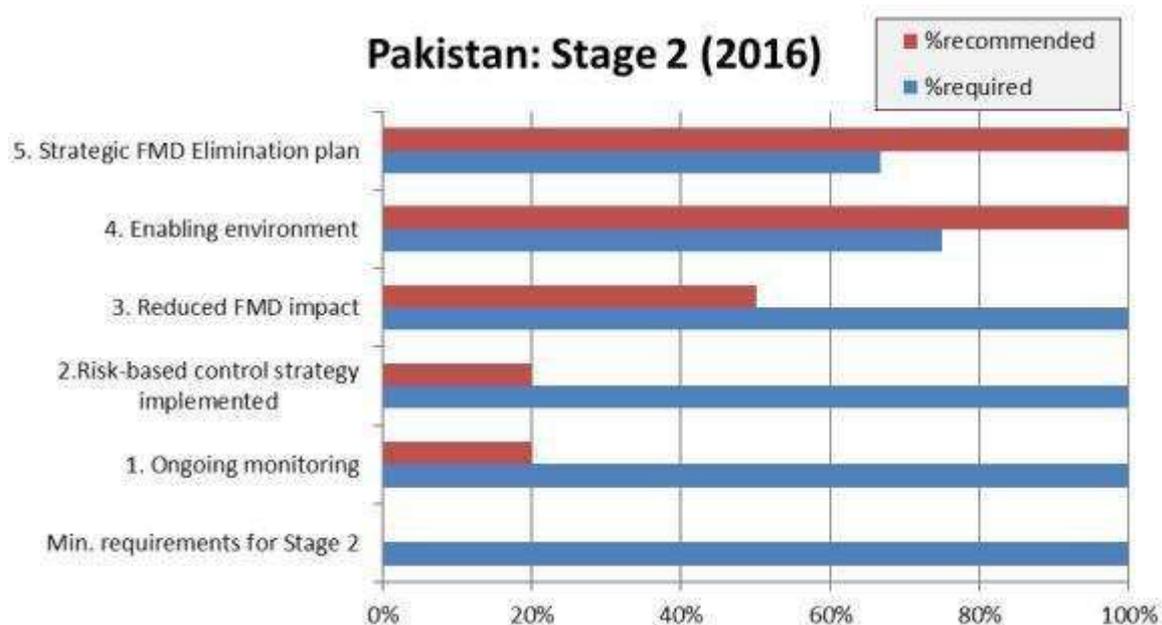
PCP-FMD Stage	
2015	2
2016	2
OIE PVS evaluation	2014

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Pakistan	0	1	1	1	1	1	2*	2	2	2	2	3	3	3	3	3	4	4	

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage)

### Achievement of required and recommended outcomes for the PCP Stage 2:



### FMD outbreaks & surveillance:

- Outbreaks in January-December 2015: **1055** (Type O -399; Type A-325, Asia 1-77; Mixed-141)
- Outbreaks in January-March 2016: 443 (Type O -119; Type A-80, Asia 1-19; Mixed-19)
- Seromonitoring was carried out in dairy LR:
  - **Panjab**  
Total of samples tested 1008, NSP positives 441 (43.7%)
  - **Sindh**  
Total of samples tested 2322, NSP positives 1687 (72.6%)
  - **Khyber Pakhtunkhwa** Total of samples tested 709, NSP positives 334 (47%)
  - **Balochistan**  
Total of samples tested 806, NSP positives 385 (47.8%)
  - **Ajk**  
Total of samples tested 1156, NSP positives 265 (23%)
  - **Fata**  
Total of samples tested 363, NSP positives 59 (16.2%)
  - **In desert cattle farming**  
Total 373, NSP positives 232 (62.2)

### FMD Control Measures:

- Vaccination in 2015: O, A, Asia 1- Local FMD vaccine, Afrovax (Merial), Decivac (Merck), O - PanAsia-2;A - Kabardino-Balkaria-2013;Asia-1 - Sind 08 (ARRIAH);
- Coverage LR-2.5% (2 mill doses), no vaccination of LR
- Vaccination was effective in preventing the clinical disease in both rural smallholder and dairy colonies production system.  
Only one rural smallholder farmer (<0.4 %) and two dairy farmers (2.8%) reported clinical disease after vaccination.

### Other notes and priorities for the future:

- Development of a Technical Framework for the Progressive control of Foot and Mouth Disease in Pakistan (A USDA funded project that concluded in Sept 2015)
- Enhancement of vaccine production capacity of FMD Research Centre, Lahore (Punjab Government Rs. 189 millions)
- Purchase of 5 million doses of FMD vaccine for use in animals of smallholders dairy farmers (Special grant of Chief Minister Punjab)
- Development of National Control Program for Foot and Mouth Disease in Pakistan (A FAO-TCP Project expiring in Oct 2016)
- FAO-Pakistan proposed a UTF Project "Risk based Control of Foot and Mouth Disease in Pakistan" to the Pakistan Government. No decision on funding yet

# Syria



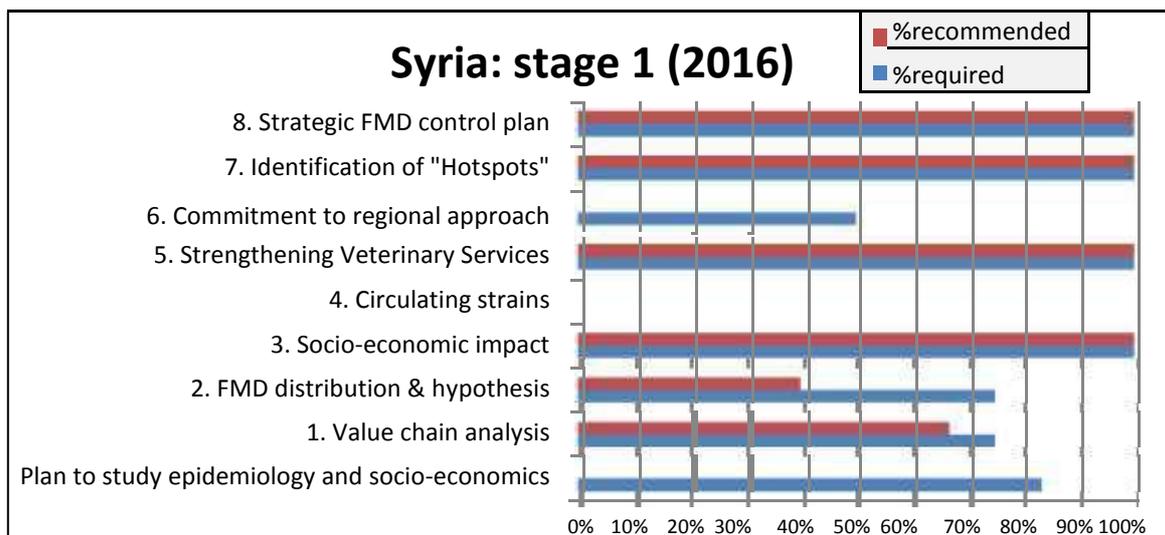
PCP-FMD Stage	
2015	1
	Not
	assesse d
OIE PVS evaluation 2008	

The 2016 PCP Stage for Syria will be assessed as part of the next Middle East Roadmap meeting

Countries	Validated Stages										Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Syria		1	1	1	1	1	2*	2*	2*										

\* indicates a provisional status given to the countries (countries had 6 months to provide additional information including a RBSP - if not, they will be downgraded to the previous stage)

## Achievement of required and recommended outcomes for the PCP Stage 1:





### FMD outbreaks & surveillance:

- No cases of FMD reported in 2015 and 2016.
- Serosurvey: samples collected 21 days after

vaccination for SP Survey

Annually tested samples:

- about 3 000 sample LR
- 2000 sample SR.

### FMD Control Measures:

- Cattle vaccination is applied twice a year. Sheep is vaccinated once a year. Opan Asia2-A Iran 05-Asia 1 (Pokrov bio plants).
- The vaccination covers all Syrian areas. Purchased doses in 2015 (7 million). Vaccination coverage LR 85%, SR 80% of females.

### Other notes and priorities for the future:

- Restrictions on introduction of livestock and livestock products from known infected areas within and outside the country are planned.
- Areas of livestock-wildlife interaction will receive special consideration with regard to FMD control strategies.
- Research and development on FMD control will be strengthened, particularly on vaccine development.
- FMD control strategies will be implemented along regional and international obligations, as stipulated under internal organizations.
- Impact of crisis:
  - difficulty in providing diagnostic materials, kits, laboratory equipment and spares
  - a lot of veterinary laboratories became out of service
  - shortfall in technical staff, especially the owners of expertise
  - difficulty to participate in external training courses - some organizations stopped to invite the country to participate in these courses
  - difficulty of reaching animal breeders places in some villages
  - affects epidemiology surveillances and early warning system.

# Tajikistan

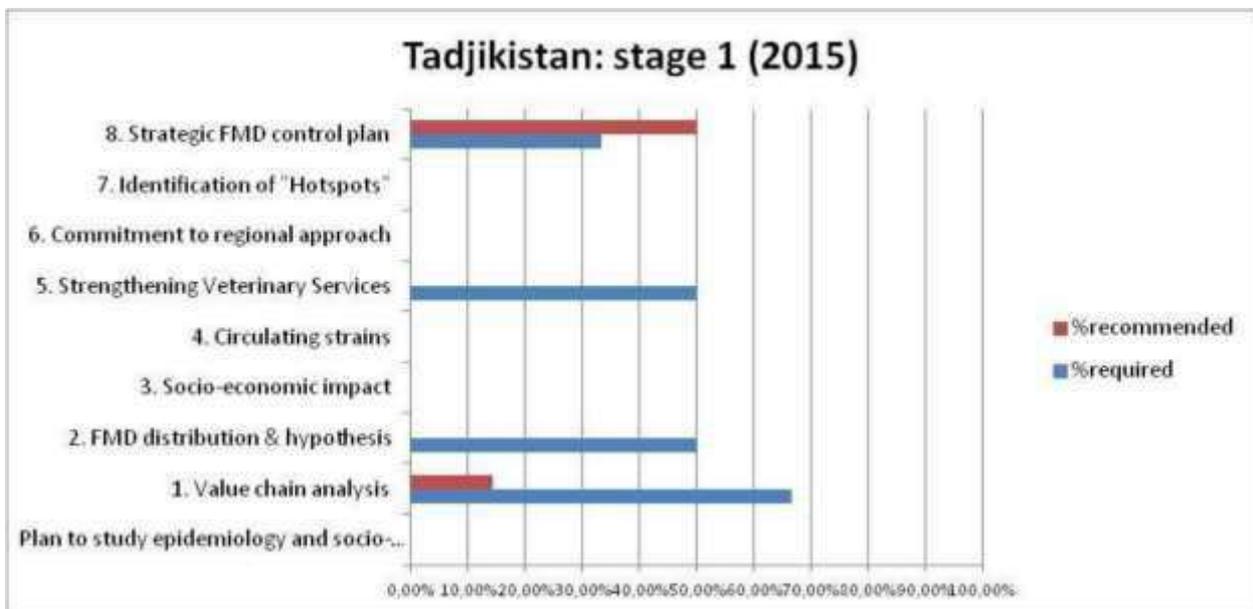


PCP-FMD Stage	
2015	1
2016	1
OIE PVS evaluation	2009

## Provisional Roadmap 2016

Countries	Validated Stages									Provisional Stages (not validated)								
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Tajikistan	0	1	1	1	1	1	1	1	1	2	3	3	4	4	4	4	4	4

2015 achievement of required and recommended outcomes for the PCP Stage 1 (Tajikistan did not provide its self-assessment questionnaire in 2016):



**FMD outbreaks & surveillance:**

- Ongoing outbreaks in Tajikistan
- No information on serosurveillance given for 2014-2016

**FMD Control Measures:**

- Vaccines including A, O, Asia1 (Raksha, Futvac, Pokrov, Shelkovo).  
In 2015 3.5 million doses provided by government, 2.5 mill doses paid by owners.
- Border veterinary posts (17) to control imports and exports of animals and animal products.

**Other notes and priorities for the future:**

- Strengthen the control over the movement of livestock, purchase and sale of animals on cattle markets, with the activity of the enterprises for processing of live products.
- Organize the implementation of adopted legal instruments and mutual information support for the change of the epizootic situation for FMD in all regions of the country.
- Implemented joint activities of ministries and departments in the involvement of the Global Strategy for FMD control for monitoring, prevention and prevention of importation of FMD in the republic.
- Plans for the prevention of FMD, the elimination of possible sources and the procedure for determining the FMD status of zones and regions, taking into account the requirements and recommendations of OIE.
- Approval of each of the administrative units at the appropriate level of "Regulation (instructions) for the prevention and control of FMD", taking into account the specific recommendations of the FAO / OIE and national legislation on appropriate methods of dealing.

# Turkey (Anatolia)

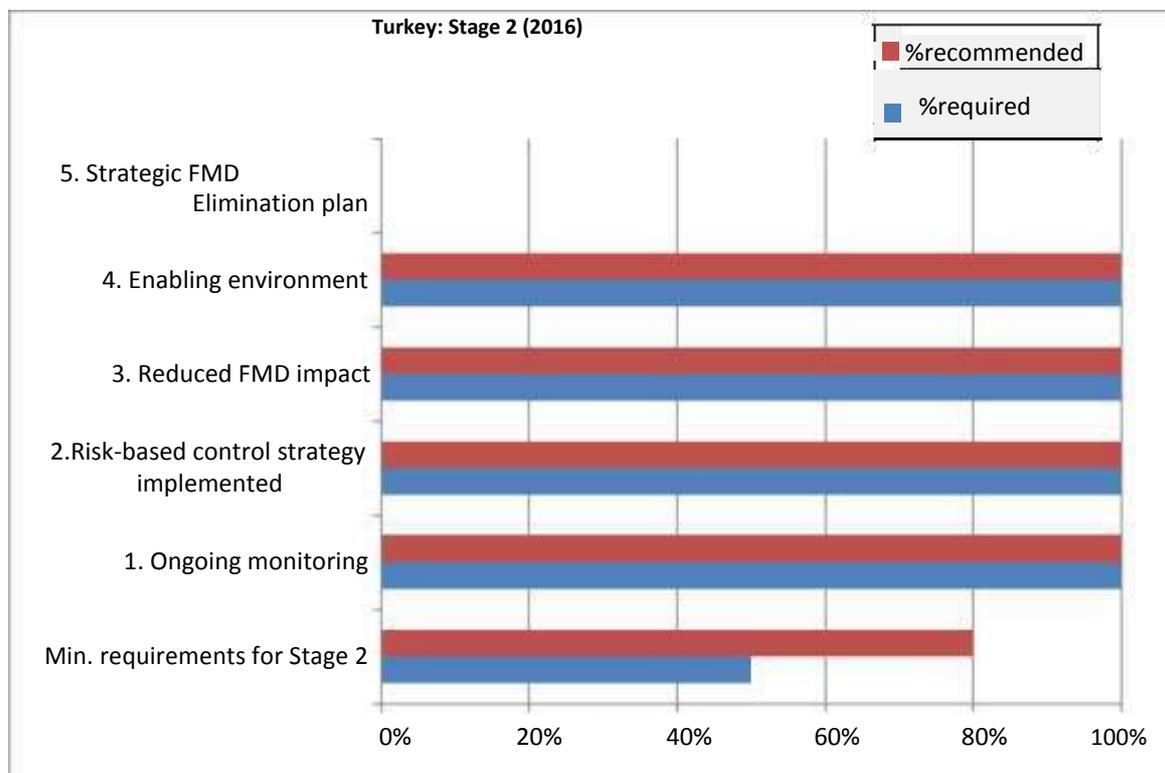


PCP-FMD Stage	
2015	2
2016	2
OIE PVS evaluation	2007

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Turkey Anatolia Marmara-Aegean									2	3	3	4	4	4	4	4	5	5		
Turkey Remaining Anatolia	1	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	4			

### Achievement of required and recommended outcomes for the PCP Stage 2:



### FMD outbreaks & surveillance:

- Current circulating virus strains:
  - Serotype O (O PanAsiaII),
  - A (Asia/GVII) incursion of a new serotype
  - Asia-1 (Asia1/SINDH08)
- Number of outbreaks in 2015: **575**,  
In 2016: **116**
- Clinical surveillance and outbreak case studies.
- Serosurveillance to estimate NSP prevalence for LR and SR.
- Significant declining on 2015.  
NSP prevalence was detected, when compared with previous year:
  - **LR**: 17.04% (2014) / 13.07% (2015)
  - **SR**: 24.00% (2014) / 13.14% (2015)

### FMD Control Measures:

- Due to incursion of the new G-VII serotype
- Animal markets were closed in high risk areas.  
Movement was banned from/to high risk area.  
Increase awareness activities covering all stakeholders.
- Tetra valent vaccine (O PanasiII/, A (AsiaGVII, A Iran05/A Tur14 and Asia1/SINDH08) was produced and used for campaign.
- Spring 2016 vaccination campaign has been postponed to December 2015 for main LR and SR in some areas.  
Coverage 90% (15.5 million doses)
- Vaccination campaign in Marmara and Aegean will be implemented 3 times in 2016

### Other notes and priorities for the future:

- An epidemiology and monitoring unit had been established in 2014 with three different level:
  - Central level (GDFC);
  - research Institutes (FMD Institute and 8 regional reference institutes)
  - provincial level.
- To enhance technical capacity of the units, an epidemiology training course has been conducted with technical support of EuFMD.
- 5 simulation exercises for FMD were conducted in the different regions.

# Turkmenistan

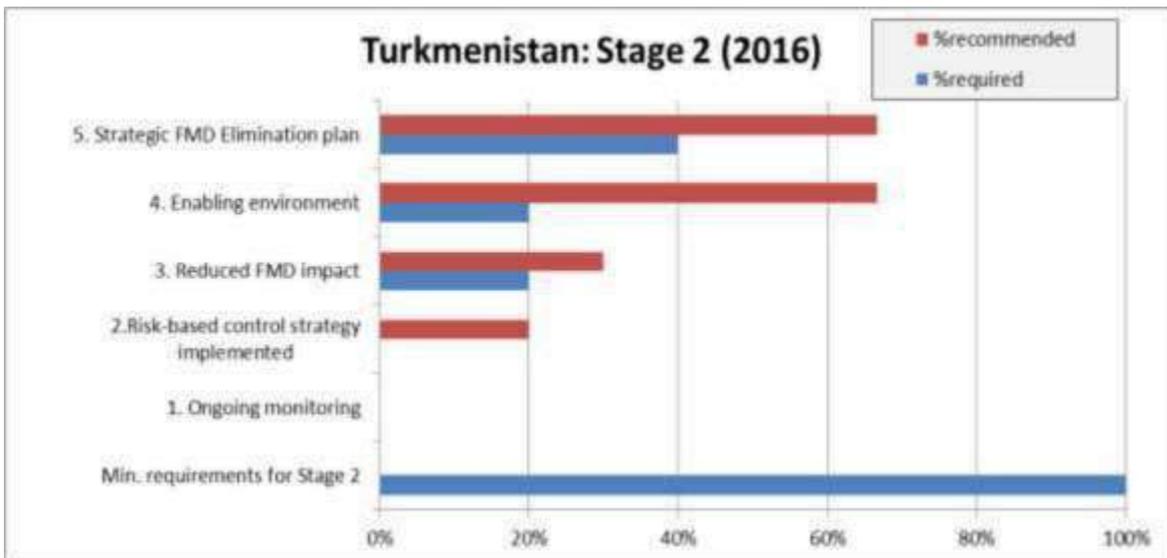


PCP-FMD Stage	
2015	1
2016	1
OIE PVS evaluation	2013

## Provisional Roadmap 2016

Countries	Validated Stages										Provisional Stages (not validated)									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Turkmenistan	0	0	0	0	1	1	1	1	1	2	2	2	2	3	3	4	4	5		

**Achievement of required and recommended outcomes for the PCP Stage 2:**  
 Although Turkmenistan doesn't plan to access to PCP stage 2 before 2017, the country only provided a stage 2 self-assessment questionnaire in 2016.



**FMD outbreaks & surveillance:**

- No case reported since 1999.
- No serosurveillance carried out up to now, lack of laboratory capacity.

**FMD Control Measures:**

- Vaccination carried out once a year.

Vaccination in 2015: O, A, Asia 1

(ARRIAH).

328 086 doses for LR (vaccination coverage 14%),

60 400 doses for SR

(vaccination coverage 3%).

Vaccination is carried out in a buffer zone along the border with neighbouring countries

**Other notes and priorities for the future:**

Indicated needs:

- Practical training of laboratory staff on modern methods of diagnostics of infectious diseases of animals.
  - Acquire laboratory equipment and ELISA and PCR reagents for five provincial veterinary laboratories.
  - Need to purchase sufficient amount of disinfection equipment and disinfectants. •
- Repair the premises of the regional (oblast) and district laboratories.
- Functionality of the laboratory does not contribute to the control of FMD and other diseases.

# Annex 5 - Survey on vaccination conducted in the context of the West Eurasia roadmap meeting

Ten countries among the 14 receiving the questionnaire responded to the survey. Of these, 5 countries reported FMD outbreaks in 2015/2016 (Turkey, Iran, Pakistan, Iraq, Armenia). All of these countries detected serotypes O, A and Asia1. Incursion of a new serotype A/Asia/genotype VII in Turkey, Iran and Armenia.

## Vaccination Policies

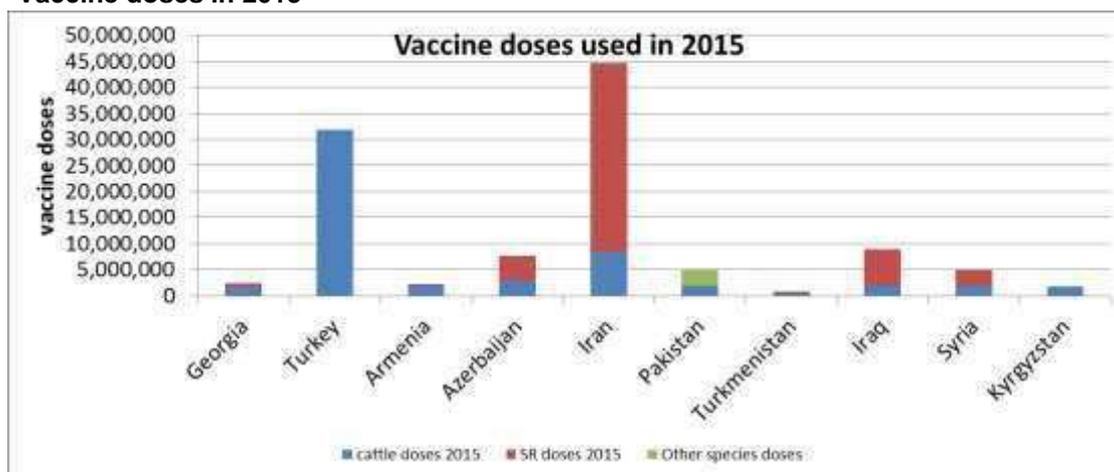
- FMD vaccination is compulsory in 5/10 countries for large ruminants and 2/10 for both large and small ruminants
- 8 out of 10 countries report that they conduct vaccination campaigns for large ruminants, either 3 times per year (2 countries), twice per year (6 countries) or once per year (1 country)
- 8 out of 10 countries report that they conduct vaccination campaigns for small ruminants, either, twice per year (2 countries) or once per year (5 countries)
- 6 out of 9 countries report that they vaccinate large and small ruminants as part of their response to outbreaks, 1 country only large ruminants
- The State pays all of the costs of vaccination in 6 countries, 3 countries have cost sharing and the owner bears all the costs in 1 country
- State veterinarians perform all of the vaccination in 3 countries and they work together with private veterinarians in 5 countries. Private veterinarians do all the vaccination in 2 countries.
- 3 out of 10 countries report that they consider their neighbors' vaccination schedule when they set their own. The 2015 and 2016 vaccination schedule for respondent countries is shown below:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Georgia												
Turkey												
Armenia												
Azerbaijan												
Iraq												
Syria												

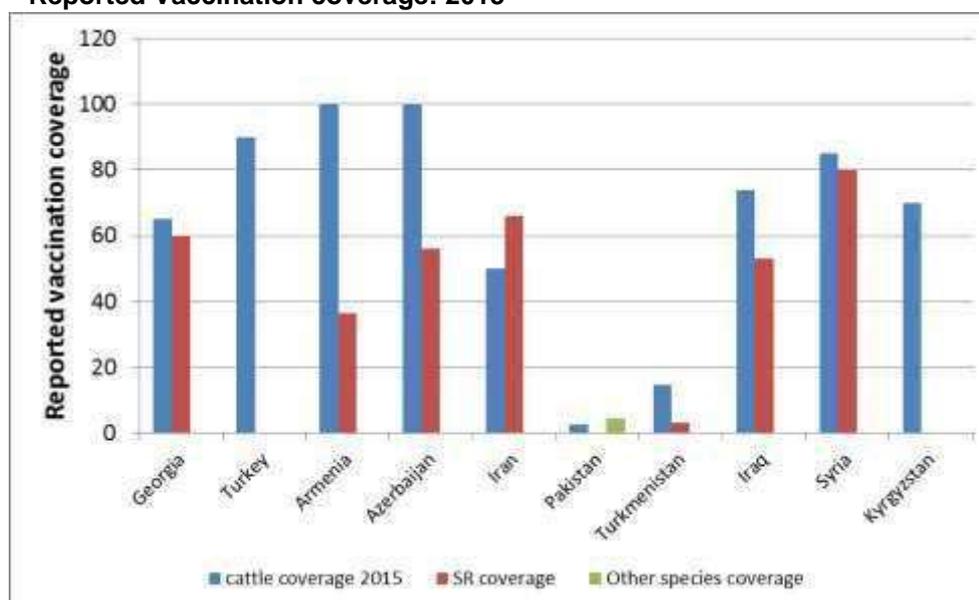
## Vaccine used

- There is a wide range in the reported number of doses of vaccine used by each country, as shown in the chart below
- There is also a wide range in the reported coverage achieved. However, methods of measuring vaccination coverage vary.
- 10 out of 10 reporting countries use high potency vaccine ( $\geq 6PD_{50}$ ) only or as well as unknown potency (1 country)
- Eight different vaccine producers were reported to supply vaccine for the region
- The reported strains in the vaccine are in line with the recommendations from the 2015 roadmap meeting. Two countries vaccinated with a vaccine containing A/Asia/genotype VII.

## Vaccine doses in 2015



## Reported Vaccination coverage: 2015



## Vaccine strains reported used

Serotype 0	Serotype A	Serotype Asia1
O PanAsia2	A Iran05	Sindh08
O Tur2015	A TUR 2006	Shamir
	Kabardino-Balkaria-2013	Georgia2001
	A/Asia/genotype VII	

Vaccination Program effectiveness (8 out of 10 countries report that they monitor vaccination program effectiveness)

- Methods reported for monitoring vaccination were: serological surveys (7 countries), outbreak investigation (1 country), field vaccine effectiveness study (1 country)
- 4 out of 10 countries report having vaccine matching results from circulating field strains
- 2 countries reported detecting outbreaks in vaccinated animals.

## Annex 6 - Conclusions of the GF-TADs FMD wrap-up meeting

Country	2015	RAG proposal (plenary presentation + advisory group)	Comments
Armenia	2*	2	<ul style="list-style-type: none"> <li>• A serosurvey monitoring is recommended to assess the impact of the incursion of A/Asia/GVII</li> <li>• Based on the results, the strategy may need to be modified</li> <li>• RBSP needs to be updated considering feedback from the RAG</li> <li>• Include the global strategy components 2 and 3 when updating the RBSP</li> <li>• An aggressive control plan should be in place, with the aim of eliminating FMD virus circulation, to advance to stage 3               <ul style="list-style-type: none"> <li>→ Armenia to submit the updated RBSP to the WG when becomes available</li> <li>→ <b>WG to provide the feedback on the submitted RBSP in one month</b></li> </ul> </li> </ul>
Azerbaijan	2*	2	<ul style="list-style-type: none"> <li>• RBSP is accepted by the RAG</li> <li>• RAG suggested to add the followings in the revised RBSP: identification of circulating virus, filed investigation, budget and timeline for implementation of the plan</li> <li>• Provide sero-surveillance data in three months</li> <li>• Vaccinate cattle twice a year and sheep once a year</li> <li>• EC twinning program for training on epidemiology               <ul style="list-style-type: none"> <li>→ Azerbaijan to submit the updated RBSP to the WG when becomes available</li> <li>→ <b>WG to provide the feedback on the submitted RBSP in one month</b></li> </ul> </li> </ul>
Georgia	2	2	<ul style="list-style-type: none"> <li>• Lack of data on sero-monitoring provided which is not consistent with Stage 2. <b>These data to be provided to the WG within 3 months</b></li> <li>• Control activities described but given the incursion of other diseases (PPR), the lack of timely sero-monitoring for FMD is a significant gap for confidence in measures</li> <li>• Ensure timely laboratory analysis when advancing to a higher PCP stage</li> <li>• Include the global strategy components 2 and 3 when updating the RBSP and to be considered when implementing FMD control activities</li> </ul>

Country	2015	RAG proposal (plenary presentation + advisory group)	Comments
Iran	2	2	<ul style="list-style-type: none"> <li>• Cattle vaccinated every 4 months and sheep every 6 months with a trivalent vaccine</li> <li>• Recently included A/Asia/G IIV to the trivalent vaccine</li> <li>• Imported vaccine is used for cattle and locally-produced vaccine for sheep</li> <li>• Scaling local vaccine production to 18 M doses per year in the near future</li> <li>• Cost sharing project with farmer association</li> <li>• Support needed: training on epidemiology and diagnostic kits</li> </ul>
Kazakhstan	OIE status	OIE status	<ul style="list-style-type: none"> <li>• Active surveillance plan for virus circulation in the three sub-regions in the south</li> <li>• Low level of NSP and no indication of virus circulation</li> <li>• Submitted national control plan to OIE for endorsement</li> <li>• Planning a simulation exercise in the coming months</li> <li>• 100% vaccination coverage with the plan to reduce it in the future and limited to the borders with Kyrgyzstan</li> </ul>
Kyrgyzstan	2*	2*	<ul style="list-style-type: none"> <li>• The submitted RBSP is missing the critical elements for the implementation of Stage 2 (i.e. names of circulating strains and identification of the hotspots)</li> <li>• Additional information provided during the country report and interview should be included in the revised RBSP (i.e. vaccination scheme, use of information system (NADIS), establishing of animal identification system)</li> <li>• The RAG recommended to revise the RBSP and submit to the GF-TADs WG by November 2016 <ul style="list-style-type: none"> <li>→ WG to identify a consultant to assist in the revision of RBSP</li> <li>→ FAO/OIE to explore source of funding to hire the consultant</li> <li>→ WG to provide the feedback on the submitted RBSP in one month</li> </ul> </li> </ul>
Pakistan		2	<ul style="list-style-type: none"> <li>• Implementation of the FAO project succeeded in building the national infrastructure to advance along Stage 2.</li> <li>• As this project ended in 2015, Pakistan is looking for an external funding to complement the ongoing national FMD program</li> <li>• Will request a PVS mission (gap analysis and possibly legislation) to address the gaps in the legal framework</li> </ul>

Country	2015	RAG proposal (plenary presentation + advisory group)	Comments
Syria	Assessed by Middle East RAG		<ul style="list-style-type: none"> <li>Current situation does not allow implementation of animal health programs, including FMD</li> <li>Support needed including training</li> </ul>
Turkey (Marm + rest anatolia)		2	<ul style="list-style-type: none"> <li>Include components 2 &amp; 3 in the RBSP</li> <li>Establish an early detection system for incursion from neighbouring countries</li> <li>Improving early reporting and respond to new incursions.</li> <li>Repeat the simulation exercise with different levels of VS to improve early response to outbreaks</li> <li>Continue capacity building on surveillance, early detection, reporting and response</li> <li>Improve regional coordination with Iran Iraq (including Kurdish AR) &amp; Syria,</li> </ul>
Tajikistan	1	1	<ul style="list-style-type: none"> <li>risk of importation of live animals from Iran, Pakistan and Afghanistan but quarantine measures in place</li> <li>No seromonitoring to date; but serosurveys plan for 2017</li> <li>A PVS Evaluation mission was requested</li> <li><i>Capacity building activities needed in Russian</i> <ul style="list-style-type: none"> <li>→ Continuation of PCP-FMD Stage 1 activities (collection of information)</li> <li>→ In particular, import risk assessment to be conducted</li> <li>→ Draft RBSP to be provided in 2017 (using the Template)</li> <li>→ Support from FAO/OIE can be provided upon request</li> </ul> </li> </ul>
Turkmenistan	1	1	<ul style="list-style-type: none"> <li>Last reported FMD case in 1999</li> <li>Main risk of incursion: importation of live animals with Iran, Afghanistan and Uzbekistan → vaccination (buffer zone) along these borders is conducted (trivalent A, O, Asia 1 from ARRIAH)</li> <li>Limited laboratory capacity; no seromonitoring <ul style="list-style-type: none"> <li>→ Continuation of PCP-FMD Stage 1 activities (collection of information)</li> <li>→ In addition, to conduct a serosurvey in vaccinated animals</li> <li>→ Draft RBSP to be provided in 2017 (using the Template)</li> <li>→ Support from FAO/OIE can be provided upon request</li> </ul> </li> </ul>