











# FMD Progressive Control Pathway (PCP-FMD)

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European Commission for the Control of Foot-and-Mouth Disease

7<sup>th</sup> Regional FMD West Eurasia Roadmap Meeting, 6-8 April, 2016













# **Outline of this presentation**

- 1) Key features of the PCP-FMD
- 2) PCP-FMD and the Global Strategy for FMD control
- 3) PCP-FMD stages 1-3
- 4) Changing objectives when progressing FMD control
- 5) Main requirements for entering PCP-FMD stages













# 1) Features of the PCP-FMD





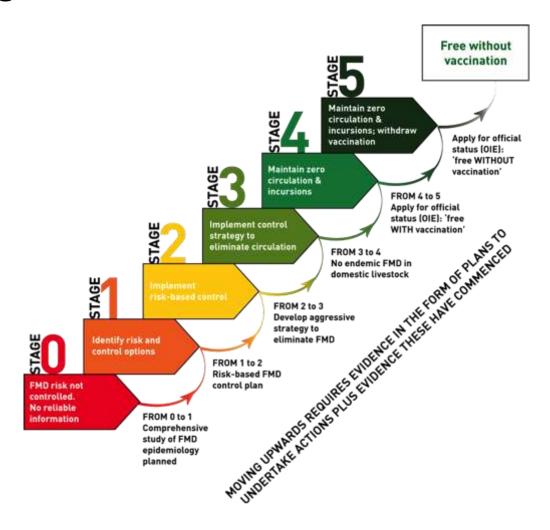








# PCP-FMD is framework which assists countries in controlling Foot-and-Mouth Disease









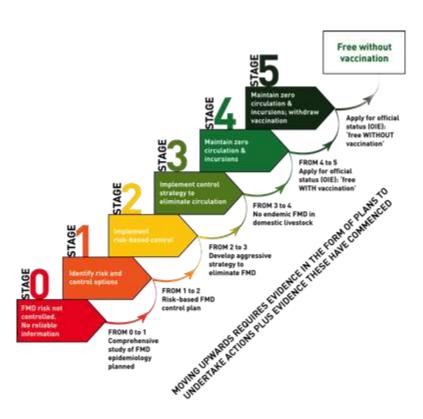






#### **PCP-FMD**

- The PCP-FMD has 6 Stages (Stage 0 Stage 5) in which clinical FMD and subsequently FMD virus circulation progressively come under control
- In each Stage, specific outcomes need to be completed for a country to progress to the next stage







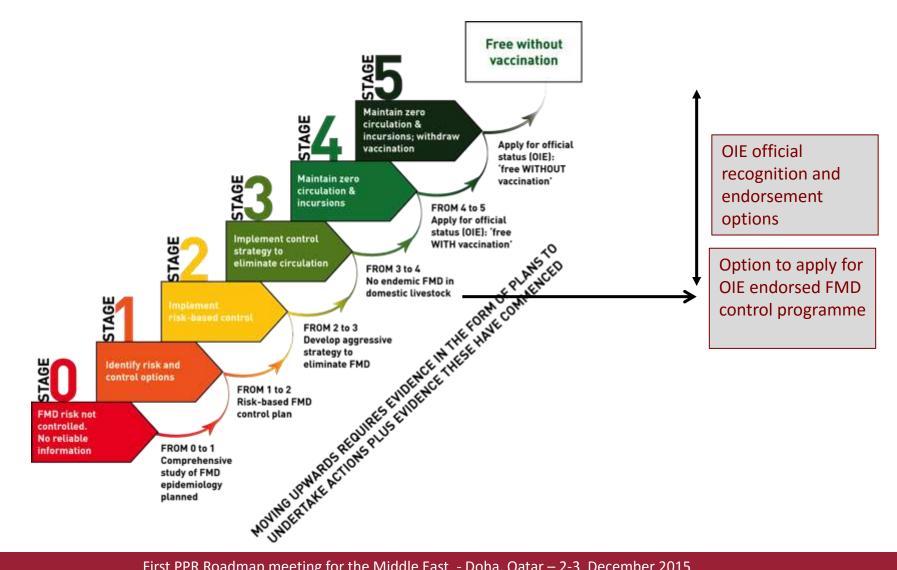








#### Links between PCP-FMD and OIE health status















# Each stage has an objective and indicator:

PCP stage	Stage objective(s)	Indicator outcome			
0	FMD risk not controlled, no reliable information	To move to Stage 1: Comprehensive plan to study FMD epidemiology			
1	Identify risk and control options	To move to Stage 2:     Risk-based Strategic Plan developed			
2	Implement Risk-based control	To move to Stage 3: Aggressive strategy to eliminate FMD developed			
3	Implement control strategy to eliminate virus circulation	To move to Stage 4: No endemic FMD in domestic livestock			
4	Maintain zero circulation and incursion	To move to Stage 5: Apply for official status (OIE) "free with vaccination"			
5	Maintain zero circulation and incursions, withdraw vaccination	Apply for official status (OIE) "free without vaccination" and finish PCP			

















































#### For countries with endemic FMD

The PCP-FMD is NOT for free countries that want to regain FMD freedom after there has been a disease incursion.

Previously FMD free countries that are seeking to quickly regain freedom following an incursion have to follow the OIE requirements for FMD-free status.

























### FMD control is applied in achievable steps

- Disease control is a complex process requiring a considerable period of time and many resources to implement.
- The pathway begins with gaining an understanding of the disease's circulation in a country and its impacts.
- At the next step, this knowledge is used to plan the initial strategic control based on identified risks for FMD.
- Critically, the control plan is monitored and evaluated.

























## Non prescriptive

The PCP is intended to be NON-prescriptive. The PCP does not tell a country exactly what it has to do. Instead, the pathway **focuses on results or outcomes.** As such, the PCP-FMD represents an approach, NOT a list of prescribed activities that must be followed.

The PCP-FMD is also non-prescriptive in terms of how far countries should progress along the pathway:

- A country does not have to progress the whole way "up" the pathway.
   Disease eradication may not be achievable.
- The approach can be applied at national level, but it can also be used only in a specific production sector or geographical region.

























## Prioritize risks that are considered most important

PCP-FMD uses risk analysis principles to identify and prioritise risk "hotspots"

A risk "hotspot" might be a production sector, activity or geographical area where there is a high likelihood of spread of disease, or where disease leads to high impacts and losses.

Once these risk "hotspots" are identified, these are used to define the objectives, tactics and activities of a risk-based strategic plan.

Using risk analysis principles helps to **make best use of limited resources**, and direct FMD control measures where they will have most benefit.

























#### Make best use of limited resources

Countries which are endemic for FMD often have very limited resources.

Time, personnel and funding are often in short supply, and there are many competing animal health concerns.

Using risk based principles, the PCP-FMD seeks to make best use of these limited resources, applying them where they can have the most impact.















#### **Evidence based**

Every stage of the PCP-FMD involves **collecting and analysing evidence**. We need evidence to guide our decision making, and to continuously monitor our control measures, and adapt them as necessary to the situation on the ground.

The PCP requires countries to **progressively monitor the level of implementation of planned activities and evaluate the impact of these on occurrence of FMD**. This provides evidence that the approach is working as planned and gives room to adapt or change the activities if necessary.















The PCP-FMD requires at least \$50 million of investment just to get started. Countries without these resources should not even consider starting to control foot-and-mouth disease.















False: the PCP-FMD recognises that many countries with endemic FMD have limited resources. The PCP-FMD focuses on making best use of these limited resources to reduce the impacts of FMD as much as possible.

















Countries which start on the PCP-FMD pathway should eradicate FMD from their entire country within 15 years.















False- countries can choose how far and how fast to progress along the pathway. It is not necessary for countries to aim for complete eradication, if this is not beneficial or viable. Some countries may apply the pathway to only one geographical region or production sector.













# 2) PCP-FMD and the Global Strategy for FMD Control













Three components of the strategy















# Component 1: Improving global FMD control



- 1) Improving FMD Control
- The PCP-FMD is the preferred approach for progressively controlling FMD in FMDendemic countries
- The PCP process involves a regional approach to FMD control













# Component 1: Improving global FMD control



#### 2) Strengthening veterinary services

- The OIE Performance of the Veterinary Services (PVS) pathway\* is the major tool for component 2
- Of the 47 critical competencies\*\* of the PVS, 33 are considered relevant for FMD control. For each of these, level 3 out of 5 i considered minimally required













## Linking the PCP-FMD stages and the Critical Competences (CC) of the OIE PVS evaluation tool

Professional competencies of veterinarians

Continuing education

External coordination

Risk analysis

Consultation with stakeholders

Preparation of legislation and regulations

Active surveillance

Critical commences	PCP stage			
Critical competencies	1	2	3	4
2.A. Professional competencies of veterinarians	3	3	3	3
I.2.B. Competencies of veterinary para-professionals	1	3	3	3
T.3. Continuing education	3	3	3	3
I.6.A. Internal coordination (chain of command)	1	2	3	3
₩6.B. External coordination	3	3*	3	3
I.11. Management of resources and operations	1	2	3	3
<b>1</b> ∕.3 Risk analysis	3	3*	3*	3*
II.11 Emerging issues	1	2	3	3
III.1 Communications	4	4*	4*	4*
III.2 Consultation with stakeholders	3	3	3	3
III.3 Official representation	2	3	3	3
III.4 Accreditation / authorisation / delegation	1	2	3/4	3/4*
III.5.A. Veterinary Statutory Body authority	1	2	3/4	3/4*
III.5.B. Veterinary Statutory Body capacity	1	2	3	3*
III.6 Participation of producers and stakeholders in joint programs	2	3	3	3*
IV.1 Preparation of legislation and regulations	3	3*	3*	3*
IV.2 Implementation of legislation & stakeholder compliance	1	3	3	3
II.5.A. Passive epidemiological surveillance	1	3	3	3
II.5.B. Active epidemiological surveillance	3	3*	3	3/4
II.6 Early detection and emergency response	1	1	3	3
II.7 Disease prevention, control and eradication	1	2	3	3
II.8 Ante and post mortem inspection	1	2	3	3
II.1 Veterinary laboratory diagnosis	2	2/3	2/3	2/3
II.2. Laboratory quality assurance	2	3	3	3
II.4 Quarantine and border security	1	2	3	3/4
II.13.A. Animal identification and movement control	1	2	3	3
IV.6 Transparency	2	3	3	3
IV.7 Zoning	1	2	2	3
I.1.A. Veterinarians and other professionals	2	3	3	3
I.1.B. Veterinary para-professionals and other technical staff	2	3	3	3
I.7. Physical resources	2	2	3	3
I.8. Operational funding	1	2/3	4/5	4/5
I.9. Emergency funding	1	1	3	4/5













# **Component 3:** Improving control of other major diseases

# 3) Improving the control of other major diseases

 identification of priority diseases that may be combined with FMD control (Anthrax, CBPP, Brucellosis, etc)

















We've just seen that the objective of the Global Strategy is to improve FMD control in **endemic regions**.

Does this mean that **only** countries which are endemic for FMD will benefit from the implementations of the strategy?















Improving FMD control is of economic benefit to endemic countries. However, improved FMD control is also beneficial to regions of the world which are free of the disease.

Improved global FMD control reduces the risk of disease incursions into free areas, and thereby protects the advanced disease control status of FMD free countries. **FMD control is therefore seen as a global public good: both endemic and free countries benefit.** 













# 3) PCP Stages 1 to 3













PCP Stage 1 is about understanding epidemiology and impact of FMD in a particular country. This knowledge is essential to develop a control strategy that is feasible to implement and will make the best use of the limited resources available to control FMD

Stage 2

Requirement for inclusion into Stage 1: Comprehensive plan to study FMD epidemiology and impact of FMD

Stage 0

### Stage 1

Objective: Gain understanding of FMD epidemiology and impact, and develop a risk-based approach to reduce impact of FMD

#### Key outcomes relate to:

- value-chain analysis and stakeholder identification
- Working hypothesis of FMD circulation
- Socio-economic impact of FMD estimated
- Identification of FMD virus
- Strengthening veterinary services
- Participation in regional roadmap meetings
- Identification of FMD risk hotspots

Requirement for progression
Endorsed risk-based
strategy plan for country,

a livestock sector or region













Countries in PCP Stage 2 should be implementing a risk-based FMD control strategy designed to decrease the impact of FMD in at least one livestock sector or zone. Both the level of implementation and impact of the control strategy should be routinely monitored through measurable indicators.

Stage 3

Requirement for inclusion Endorsed risk-based strategy plan for country, a livestock sector or region

Stage 1

Stage 0

#### Stage 2

<u>Objective:</u> Implement risk-based control measures in country or region

#### Key outcomes relate to:

- Ongoing monitoring of virus strains and risks in different husbandry systems
- Evaluation of level of implementation
- Evaluation of level of impact of control strategy
- Further strengthening of veterinary services

Requirement for progression

A revised moreaggressive control strategy with the aim of eliminating FMD virus from at least a region of the country













Countries in PCP Stage 3 are working towards the eradication of FMD virus. They should be able to provide evidence that the control measures are effectively and progressively reducing the FMD incidence. By the end of Stage 3, FMD virus circulation is eliminated in at least 1 zone of the country.

Stage 4

# Requirement for progression

A revised more-aggressive control strategy with the aim of eliminating FMD virus from at least a region of the country

Stage 2

Stage 1

Stage 0 no reliable information

### Stage 3

Objectives: Progressive reduction in outbreak incidence followed by elimination of virus circulation

#### Key outcomes

- Ongoing monitoring of virus strains and risks in different husbandry systems
- Control plan implemented safeguarding rapid detection of outbreaks
- Incidence of FMD is progressively eliminated in domestic animals
- Further strengthening of veterinary services

# Requirement for progression

Evidence that FMD virus is not circulating endemically in domestic animals within the country or a region of the country













## Question



What activities are typical for PCP-FMD Stage 1, Stage 2 or Stage 3?

		Stage 1	Stage 2	Stage 3
1.	Collating FMD outbreak reporting from across the count	ry 🔲		
2.	Cost-benefit analysis of FMD control measures			
3.	Monitoring & evaluation of FMD control measures			













### Question



What activities are typical for PCP-FMD Stage 1, Stage 2 or Stage 3?

Stage 1 Stage 2 Stage 3

- 1. Collating FMD outbreak reporting from across the country
  - ry X

X

2. Cost-benefit analysis of FMD control measures

- )

3. Monitoring & evaluation of FMD control measures













# Do it your own way

A country may decide to remain in stage 3 for some years, taking advantage of having limited virus circulation, thus little clinical FMD against limited resource use

PCP Stage 4

Implement aggressive national control plan (NCP) to eradicate virus circulation

Monitor:

Implementation and impact of control measures

Evaluate: Update approach to control FMD (NCP) or develop strategy to apply for OIE status Free with vaccination



PCP Stage 3

Implement aggressive national control plan (NCP) to eradicate virus circulation

Monitor: Implementation and impact of control measures

Evaluate: Update approach to control FMD (RBSP) or develop national control plan (NCP)



PCP Stage 2

Manage: Implement control measures

A country may decide to remain in stage 2 for some years, taking advantage of having less clinical impact of FMD against limited resource use

PCP Stage 1

Develop risk-based strategy plan to mitigate clinical FMD

Understand epidemiologic situation and impact













# 4) Changing objectives when progressing FMD control











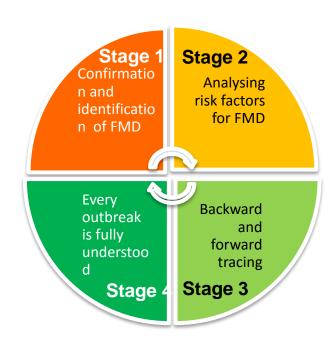


## Changing objectives when progressing FMD control



The level of outbreak investigation will also require to become more elaborate. Where confirmation of suspect cases in PCP-FMD stage 1 was the focus, in additional stages, it becomes important to learn from each and every outbreak: risk factors, origin and routes of spread.

















## Changing objectives when progressing FMD control

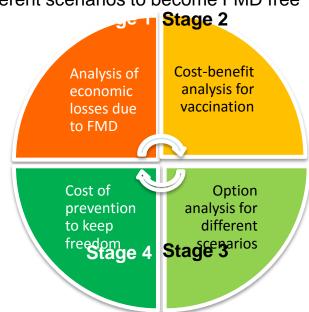


In the first stage of PCP-FMD, impact analysis focuses primarily on the direct impact of clinical FMD on livestock production and livelihoods.

Further up on the PCP-FMD framework, impact analysis becomes more a tool to analyse the cost-benefit of particular control measures, such as vaccination. But could equally be applied for a cost-benefit analysis on other control measures such as movement control, restriction of animal markets, etc

In stages 3, preparing for a free status, there will be a need for option appraisal on different scenarios to become FMD free

















# 5) Requirements for recognition of PCP stages













# Why do we need a PCP-FMD Roadmap?

FMD is a **transboundary animal disease**, that does not respect national borders.

In order to control FMD effectively, we need to take a **regional approach.** 

The Roadmap process allows countries in the same region to come together to share their progress on FMD control, and to assess and compare their activities and PCP stage with that of their neighbours.











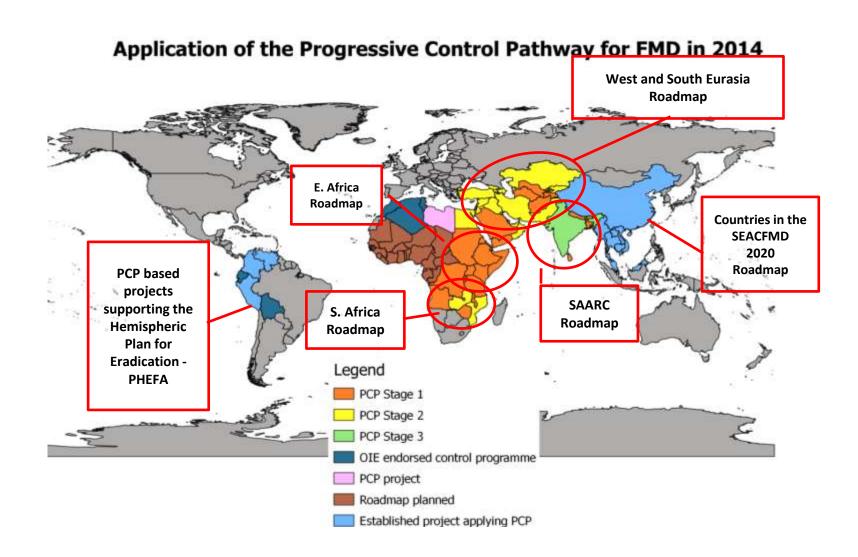








# Regional Roadmap meetings up to 2015















### **PCP-FMD** assessment procedure

Assessment of a country's PCP-FMD status is done during a **regional roadmap meeting** by members of the region.

- Peer-review approach using the evidence provided by countries.
- Meetings take place every 1-2 years per region
- Meetings are supported by the OIE/FAO FMDworking group under the framework of GfTADs

















## **PCP-FMD** assessment procedure

The review process is designed to be:

- Transparent
- Evidence-based
- Advisory (through networking)
- Consistent/Standard: regionally and globally
- Not too arduous









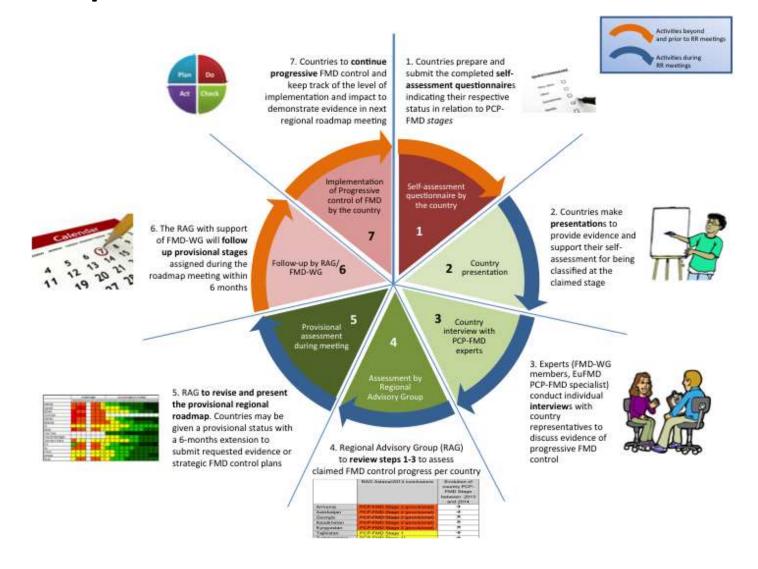








## The 7 steps of PCP-FMD assessment







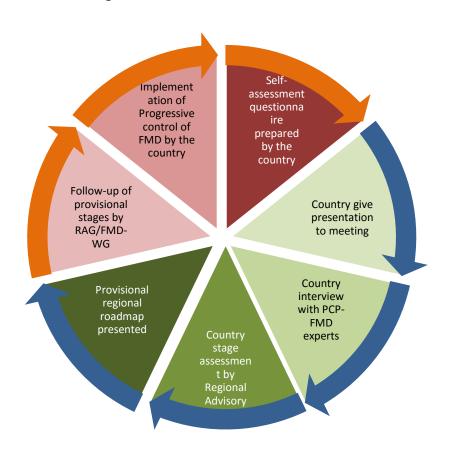








# The 7 steps of PCP-FMD assessment





















1. Countries prepare and submit the completed **self-assessment questionnaires** indicating their respective status in relation to PCP-FMD *stages* 

















For a country to know how they progress within a certain stage, a self-assessment questionnaire ("PCP Checklist") is available. PCP-checklists are developed for PCP-FMD Stages 1 through 3 and accessible at

http://www.fao.org/ag/againfo/commissions/eufmd/commissions/eufmd-home/progressive-control-pathway-pcp/en/

The purpose of these PCP checklists is twofold:

- In-country: Identify the gaps and needs to complete a certain PCP-FMD stage
- In region: explain others to what extent the country has progressed in a certain stage





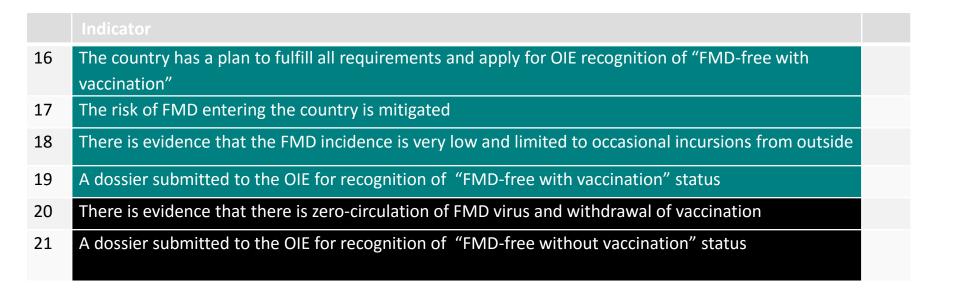








	Indicator	
1	The main husbandry systems and animal movements are well characterised	
2	The distribution of FMD outbreaks in the country, and which serotypes/strains are circulating is known. This is constantly monitored and is up-to-date-information is available (within the last 12 months)	
3	The impact of FMD on different stakeholders is well understood	
4	The main mechanisms by which FMD circulates are well understood and can be ranked according to importance	
5	FMD is a notifiable disease in the country	
6	The country regularly informs the OIE and its neighbours about the FMD situation	
7	The country has a written risk-based strategic plan for FMD control	
8	Risk based control measures are <u>implemented</u> in at least one sector or zone	
9	There is evidence that FMD impact is reduced by the control measures	
10	The legal framework allows all surveillance and control activities to be carried out (eg right to enter	
	premises, examine animals and collect samples)	
11	A control plan is written to <u>eliminate</u> FMD from country or zone	
12	There is rapid detection of and response to all FMD outbreaks	
13	There is evidence that the <u>incidence</u> of clinical FMD <u>progressively decreases</u>	
14	The legal framework allows to impose animal movement restrictions, compulsory culling and compensation of livestock in the event of an FMD outbreak	
15	There is a body of evidence that FMD is not circulating endemically	















# Did you tick...

#### No boxes at all?

- Your country is in PCP Stage 0some of the orange boxes but not all?
- Your country is eligible for PCP Stage 1all of the orange boxes <u>and</u> indicator 8?
- Your country is eligible for PCP Stage 2
   all of the orange and yellow boxes <u>and</u> indicator 12
- Your country is eligible for PCP Stage 3
   all of indicators 12-16?
- Your country is eligible for PCP Stage 4indicators 19 and 20?
  - Your country is eligible for PCP Stage 5



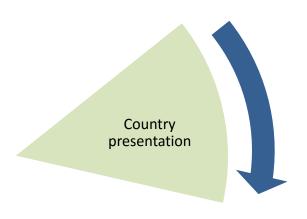














2. Countries make **presentation**s to provide evidence and support their self-assessment for being classified at the claimed stage

A country is asked to provide information about:

- Info about virus serotypes and strains diagnosed in last 12-24 months
- Gaps and needs identified through the self-assessment questionnaire
- Description of the current FMD control strategy including aim and rationale
- Description of surveillance results over last 12-24 months
- Assessment of current control strategy
- Plans for years to come as to improve control strategy













# Which of these slides should be included in a country's presentation?





Update on recent FMD situation

Surveillance strategy and results

History of FMD control in country over past 20 years

Future plans for improvements to control strategy

Overview of vaccination strategy and other control measures

Post vaccination monitoring results

PCP stage self assessment results

Evaluation of current control measures

Detailed list of each sublocation vaccinated













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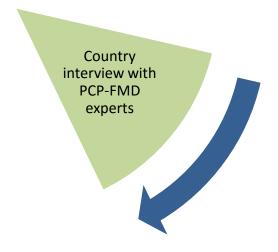














3. Experts (FMD-WG members, EuFMD PCP-FMD specialist) conduct individual **interview**s with country representatives to discuss evidence of progressive FMD control















	RAG Astana/2014 conclusions	Evolution of
		country PCP-
		FMD Stage
		between 2013
		and 2014
Armenia	PCP-FMD Stage 2 (provisional)	<b>→</b>
Azerbaijan	PCP-FMD Stage 2 (provisional)	<b>→</b>
Georgia	PCP-FMD Stage 2 (provisional)	71
Kazakhstan	PCP-FMD Stage 2 (provisional)	7
Kyrgyzstan	PCP-FMD Stage 2 (provisional)	7
Tajikistan	PCP-FMD Stage 1	<b>→</b>
Turkmenistan	DCD_FMD Stage 1*	7

4. Regional Advisory Group (RAG) to **review steps 1-3** to assess claimed FMD control progress per country



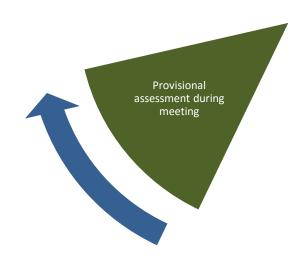












			valid	ateds	tages			provisional stages (not validated)											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	202	
(æáhsan	1	1	1		1	1	2*	- 3	3	3	4	- 4	- 4	- 4	- 4				
(yrgyzstan	1	- 0	0		1	- 1	2*	2	2	2	3	3	- 4	- 4	- 4				
Tajikistan	0	- 1	1		1	1	1	2	2	2	2	2	- 3	- 3	- 4	- 4	- 4		
Turkmenistan	0		0		1	1	1												
Ubbekistan	0	- 1	1		- 1	_ 1	1	2	2	3	- 3	- 4	- 4						
Afghanistan	- 0	1	1		1	1	1	1	2	2	3	3	3	- 4	- 4		4		
ran	2	2	2		2	2	2	2	2	2	2	2	3	3	3	3	3		
Pakistan	0	1	1		1	1	2*	2	2	2	3	3	- 3	- 3	3	- 4	- 4		
Turkey Thrace							3	4	- 4	4	4								
Turkey Marmara-Aegean								2	2	2	3	3	3	3	- 4	4	4		
Turkey Rest of Anatolia	1	2	2		2	2	2	2	2	2	2	2	3	3	- 4	- 4	- 4		
Syria	3	1	1		1	1	2*	2	3	3	4	- 4	- 4	- 4					
raq	1	1	1		1	- 1	2*	- 3	3	3	- 3	3	3	4	- 4	4	4		
Armenia	2	2	2		2	2	2*	2	2	3	3	3	- 4	- 4	- 4	- 4	4		
kzerbaijan	2	2	2		2	2	2*	2	2	3	- 3	3	- 4	- 4	- 4	4			
Georgia	2	- 1	1		- 1	- 1	2*	- 2	3	- 3	- 3	- 4		- 4	- 4		4		

5. RAG to revise and present the provisional regional roadmap. Countries may be given a provisional status with a 6-months extension to submit requested evidence or strategic FMD control plans



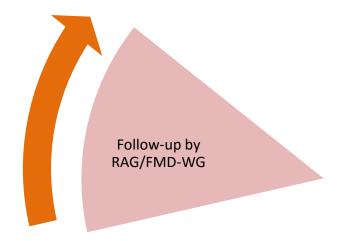














6. The RAG with support of FMD-WG will follow up provisional stages assigned during the roadmap meeting within 6 months













#### **Validated and provisional PCP-FMD stages**

			Vá	alidate	d stag	es			provisional stages (not validated)											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
Afghanistan	0	1	1		1	1	1	1	1	1	2	2	2	2	3	3	3	4		
Armenia	2	2	2		2	2	2*	2**	2	2	3	3	3	3	3	4	4	4		
Azerbaijan	2	2	2		2	2	2*	2**	2	2	3	3	3	4	4	4	4			
Georgia	2	1	1		1	1	2*	2	2	3	3	3	4	4	4	4	4			
Iran	2	2	2		2	2	2	2	2	2	2	3	3	3	3	3	4	4		
Kazakhstan	1	1	1		1	1	2*	***												
Kyrgyzstan	1	0	0		1	1	2*	2**	2	2	2	3	3	3	4	4	5	5		
Pakistan	0	1	1		1	1	2*	2	2	2	2	3	3	3	3	3	4	4		
Tajikistan	0	1	1		1	1	1	1	2	2	3	3	3	4	4					
Turkey Thrace									4	4	4	5	5							
Turkey Marmara-Aegean									2	3	3	4	4	4	4	4				
Turkey (Anatolia)	1	2	2		2	2	2	2	2	2	2	2	2	3	3	4	4	4		
Turkmenistan	0	0	0		1	1	1	1	2	2	3	3	3	4	4					
Uzbekistan	0	1	1		1	1	1	1	2	2	3	3	3	4	4	5	5	5		
PCP-FMD stages of WestEu	ırasia co	untrie	s as of	May	2015															
*indicates a provisional status giver																				
** indicates provisional status (cour	ntries have	till Octo	ber 201	5 to prov	ide add	itional ii	nformati	on inclu	iding a C	ontrol P	lan; if no	t, they w	ill be do	wngrade	ed to the	previou	s stage)			

<sup>\*\*\*</sup>indicates that country have entered the OIE pathway for recognition of an FMD-free zone without vaccination

















7. Countries to **continue progressive** FMD control and keep track of the level of implementation and impact to demonstrate evidence in next regional roadmap meeting













## **Additional Information**

FMD Practical Management Series (EuFMD)

#### **Webinars:**

- Introduction to the Risk Based Strategic plan
   In English-27 January 2016; in Russian -3 February 2016
- PCP in West Eurasia

In English-16 march 2016; in Russian -26 April 2016

Risk Based Strategic Plan-Georgia example

In English-04 may 2016; 18 may 2016 (provisional dates)

### **Recordings**

West Eurasia Webinar series:

https://eufmd.rvc.ac.uk/course/view.php?id=37













# Thank you very much for your attention



