



# GET Prepared: Developments in FMD Training and for improved Emergency Response

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**eofmd**  
european commission for the  
control of foot-and-mouth disease



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control of foot-and-mouth disease

**OPEN SESSION**

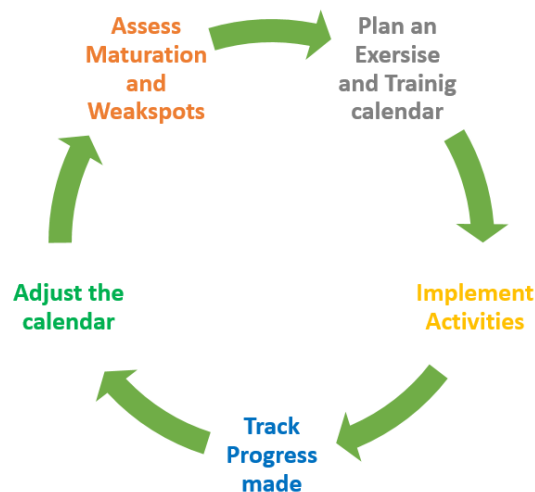
Oct.18, Italy

| **#OS18**





# GET Prepared: Guide to Exercises and Training for Preparedness for emergency response to animal diseases

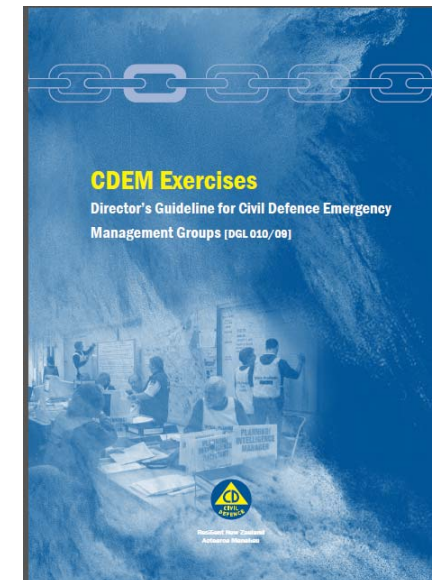
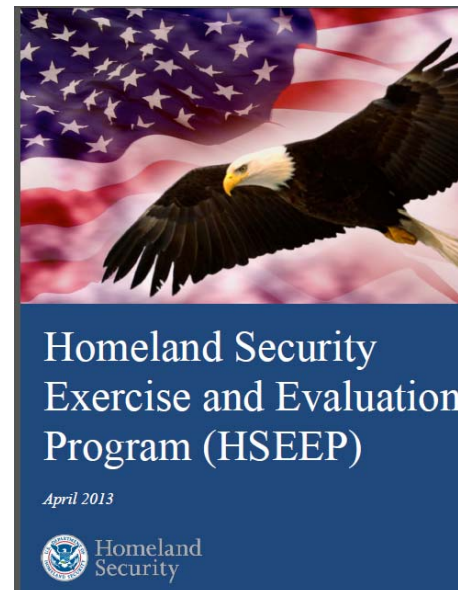
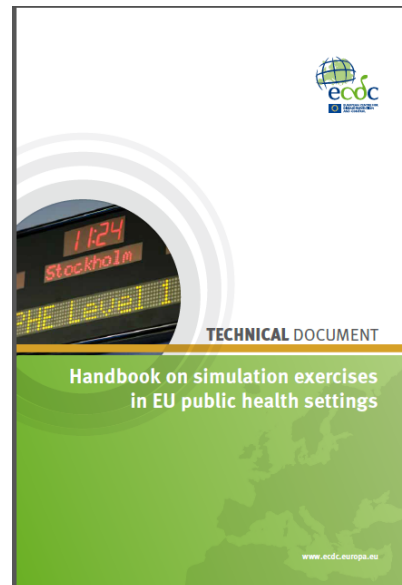
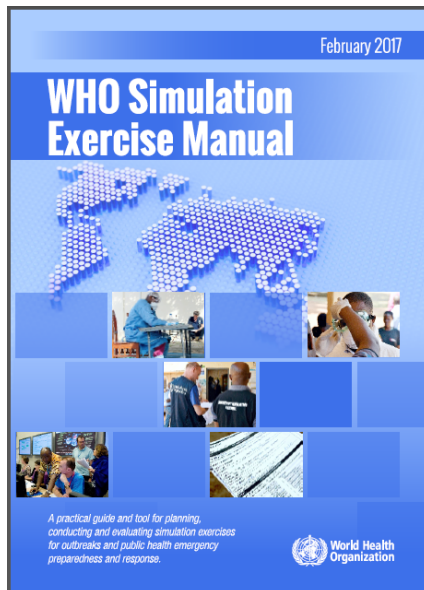


*a pathway towards improved emergency response*

# The GET Prepared Pathway

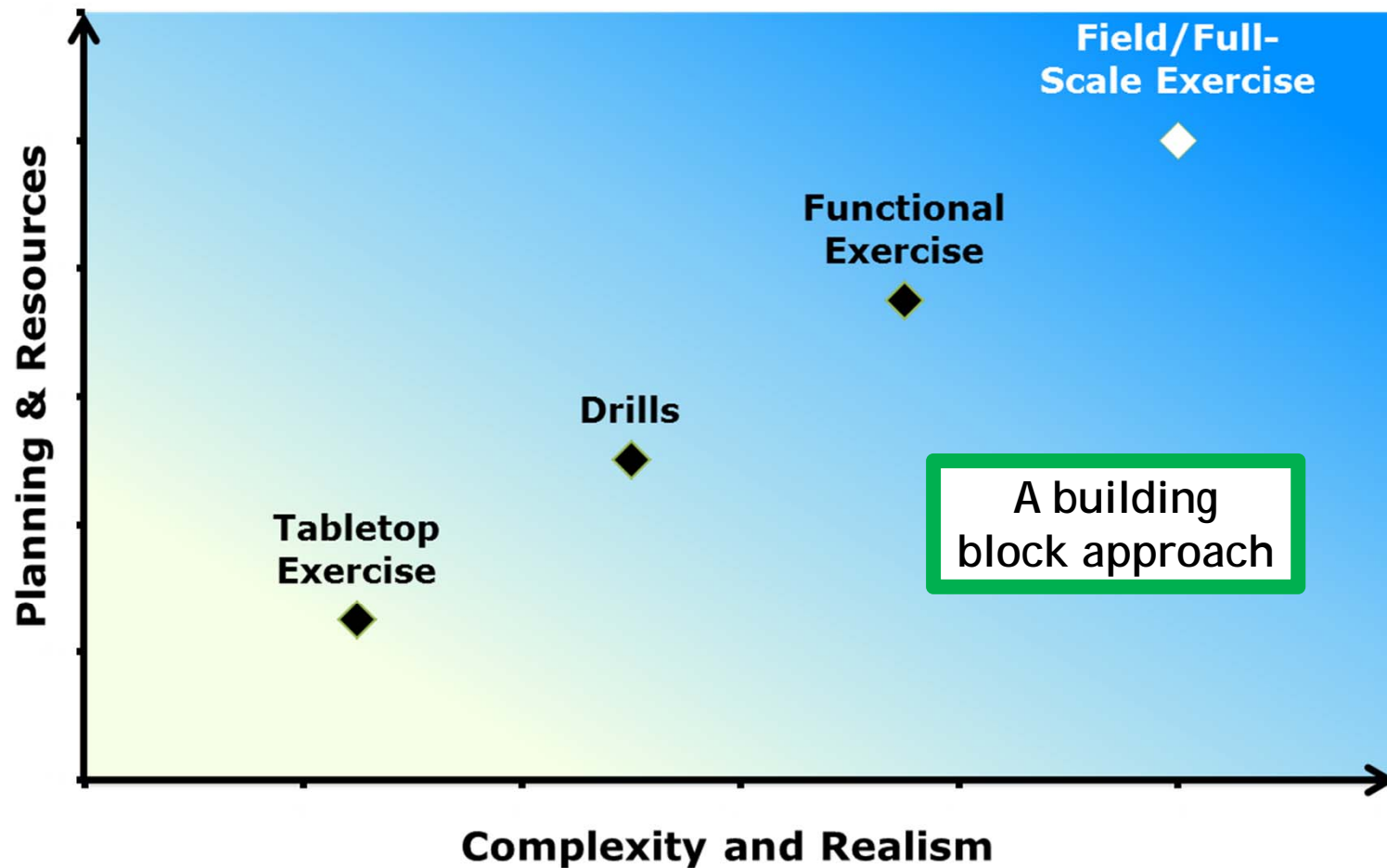
Addresses the lack of guidance on simulation exercises for **FMD** (or other TADs) in a **European Veterinary Setting**.

Several guides exist on simulation exercises (WHO, ECDC, HS (US) CDEM (NZ) in the human health field.





# Building exercise depth, Step-by-Step





# Outline of the GET Prepared pathway





## **GET Prepared: first steps in the Balkans**

### **For the 3 pilot countries**

- Guidance by EuFMD to start along the pathway
- Assist with defining weakspots
- Assist with planning a calendar
- Provide training materials on FMD
- Help design and implement simulation exercises (including costs endured)

### **What we also provide expect from the pilot countries**

- On line assistance (self-assessment of preparedness tools)
- Knowledge bank of resources to address emergency response issues

# **Assured Emergency Supply Options (AESOP) - for FMD vaccines**

***A new, potential additional option  
for access to vaccines in  
emergencies***

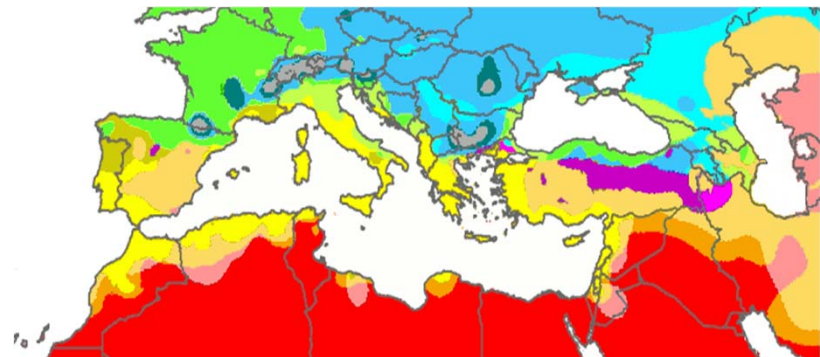




## Emergency supply : current issues

- Sufficient, suitable vaccine stock is NOT available on the open market in a crisis
- Cost to buy millions of doses
- Dynamic risk: changing antigens is very costly

1. In a crisis, funds not the principal issue.
2. FMD free and non-free: who are most likely to use emergency access?
3. Who should organize, pay, benefit?



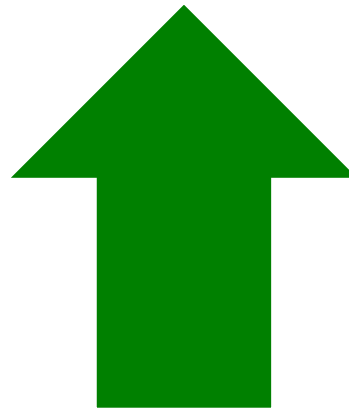


## Creating an “assurance option”

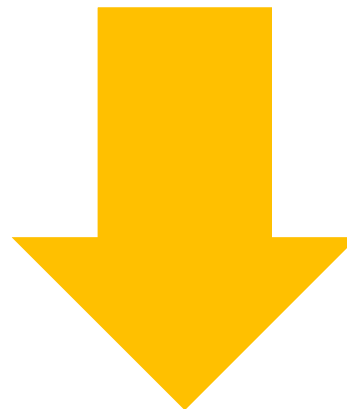
Separating costs of antigen storage from costs of final product

Creates options:

- One party to pay for storage costs
- Assures stock is held available
- Assured party to pay for final formulation and delivery



Assured availability  
- contracts to hold sufficient stock

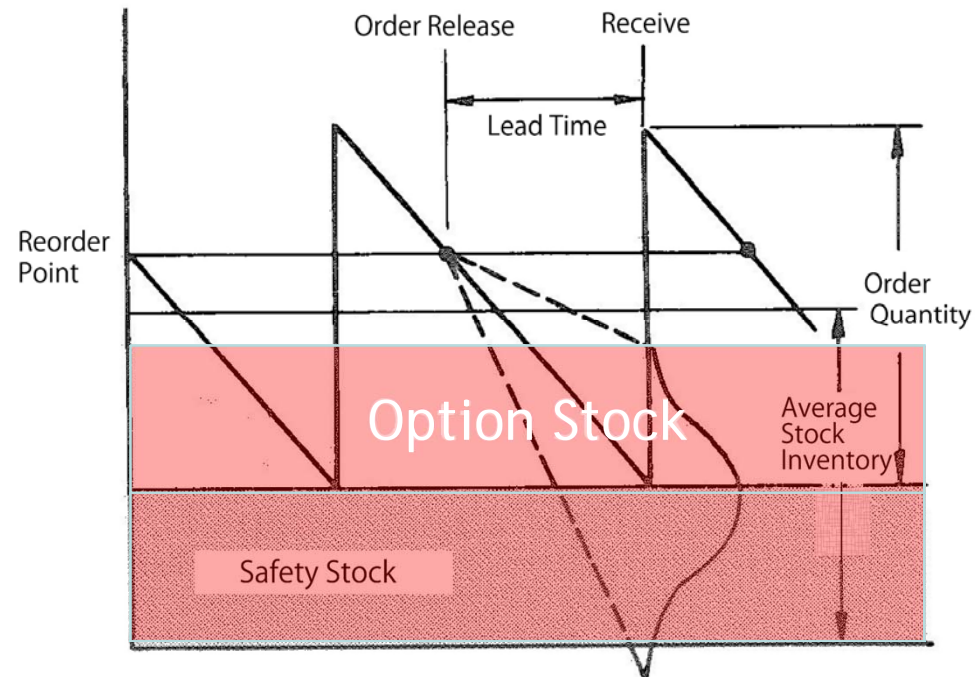


Assured access:  
Stock released to assured party after guarantee of payment (final product + delivery cost)



## Assured emergency supply options (AESOP) for FMD vaccine – how it may work

- Vaccine producers always carry safety levels of stock to deal with demand and level of re-supply from production cycles
- Under AESOP, these are contracted to carry **higher safety levels of stock** (Antigen OR vaccine) as **“option stock”**
- The **Option Stock** antigens remain property of the producer
- The holder of the contract has the **option to buy** the stock
- The system separates the cost of **“holding the stock”** from the **vaccine cost** (per dose supplied)



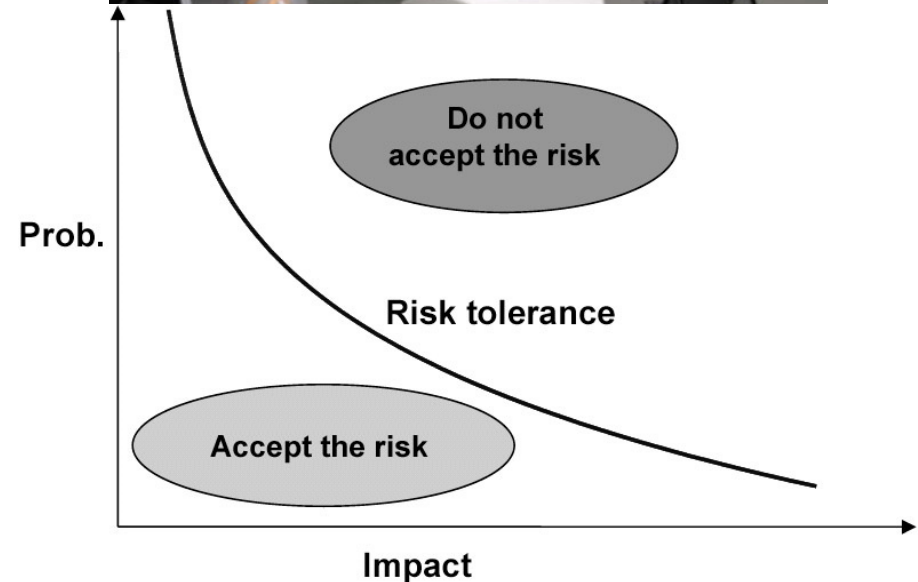


# Potential future development: risk –sharing to reduce costs

The cost of the AESOP contract to hold antigen stock could be shared between countries

The best option and “premium” to pay would depend on the “risk” each applicant country adds

No profit, Mutual management system:  
Could be managed by EuFMD/FAO as a neutral party





# What could the AESOP system look like in 2-5 years?

- ✓ Pilot scheme – Europe, tested by 2019
- ✓ Costs and premiums will be identified – opening “assurance options”
- ✓ (Expected) Several vaccine producers engaged, offering range of priority antigens
- ✓ Independent expert group in place to recommend antigen priorities
  - ✓ financial mechanisms expected to be in place in April 2019
  - ✓ potential to open to interested parties from 2019
- ✓
- ✓ **Potentially the system is a model for other emergency supplies as well.**



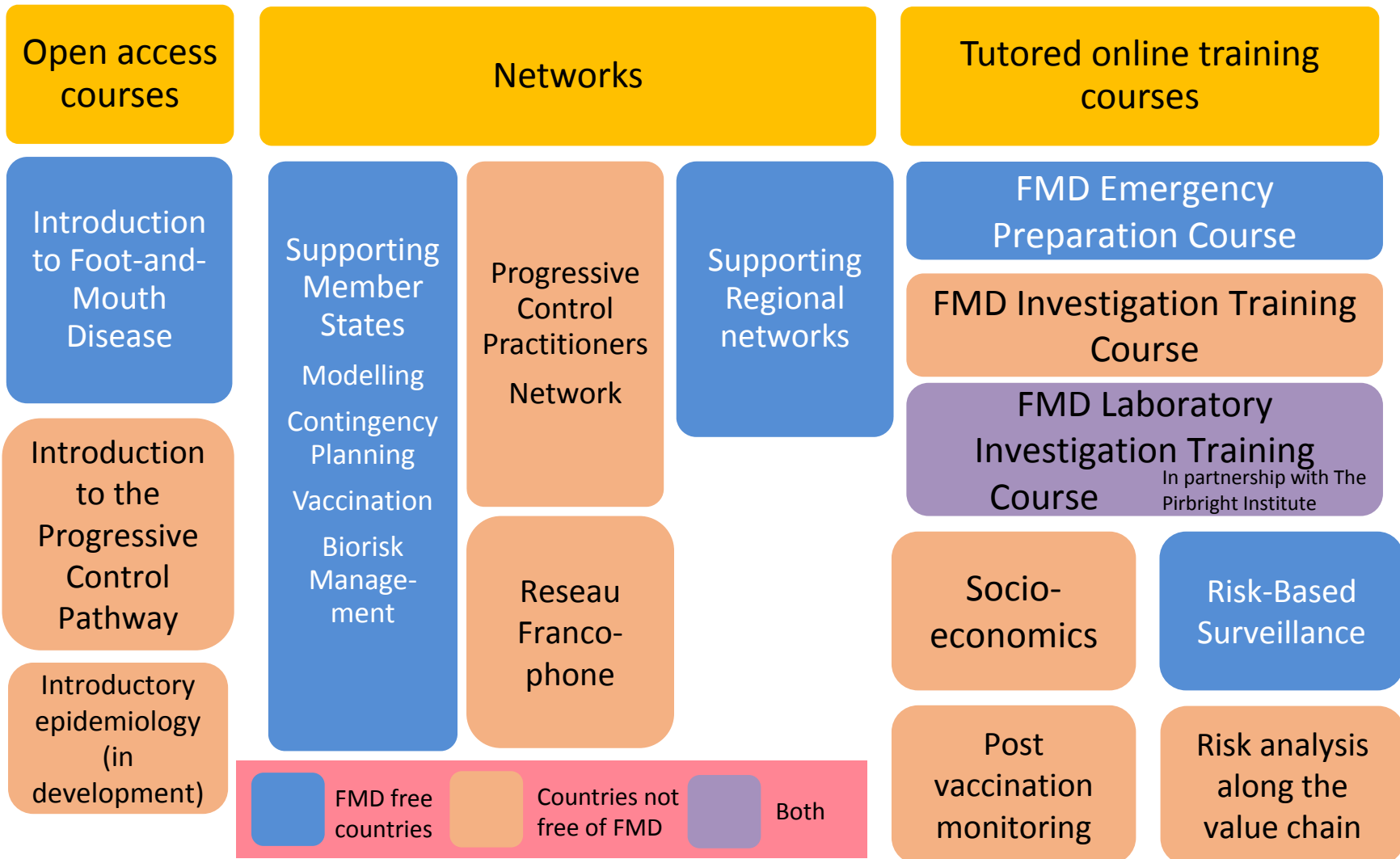
## EuFMD Training – global access

- Rapid expansion in the past 2 years
- High uptake - 1000 new users registered to e-learning in past 6 months | (Now over **5500 vets**)
- High delivery rate: 12 e-learning courses
- delivered | past 6 months
- One new course offered every 2 weeks
- **MULTIPLE LANGUAGES** and **REGIONS**

The screenshot shows the eofmd e-Learning website. At the top, there is a navigation bar with 'Dashboard', 'Resources', 'Networks', and 'Contact'. Below this is a large banner image showing a person in a blue protective suit and mask working with a cow. A text box below the banner reads 'Fund for Applied Research: Apply Now! Research grants up to 50,000 EUR now available, click here to find out more...'. Below the banner are three smaller images: 'Courses', 'Knowledge Bank', and 'Networks'. A 'Twitter feed' section follows, showing tweets from Juan Lubroth (@juan\_lubroth) and FAD Animal Health (@FADAnimalHealth). Below the tweets is a 'Watch a recording of one of our recent webinars' section, featuring a video player and a text box titled 'Introducing the Progressive Control Practitioners' Network'. At the bottom, there is a footer with copyright information, a 'Contact Us' link, and social media icons.



## Knowledge Bank





## FMD Emergency Preparation Course (4)

7<sup>th</sup> EuFMD-wide course, plus national e-learning courses for France (2<sup>nd</sup>), Spain (3<sup>rd</sup>) and Australia (2<sup>nd</sup>). 100-150 per course.

**Beneficial involvement of public and private veterinarians**

The screenshot displays the EuFMD online training interface. It includes a navigation menu with options like 'Dashboard', 'Resources', 'Networks', 'Contact', and 'My Courses'. The main content area shows a course titled 'Formation en ligne sur la détection précoce de la fièvre aphteuse (FRAZ)'. Below this, there's a 'Bienvenue au cours' section with a list of experts and a 'Module 4: Biosecurity' section. The 'Biosecurity' module contains an interactive activity titled 'The three key principles of biosecurity' with three examples of good biosecurity practices: Segregation, Cleaning, and Travel. A table titled 'IMPACTO DE LA FIEBRE AFTOSA EN PAISES LIBRES' compares the impact of FMD in the UK (2001) and South Korea (2010-11).

País	Año	Animales sacrificados	Animales vacunados	Costes
Reino Unido	2001	6.5 millones	12 millones	€3100 millones directos, €3600 millones indirectos
Corea	2010-11	3.5 millones	12 millones	\$3000 millones (solo en costes de compensación a ganaderos)

Tutored online training courses

FMD Emergency Preparation Course

FMD Investigation Training Course

FMD Laboratory Investigation Training Course  
In partnership with The Pirbright Institute

Socio-economics

Risk-Based Surveillance

Post vaccination monitoring

Risk analysis along the value chain





## Risk-Based Surveillance for FMD (new)

3 Participants from each EuFMD Member State

4 weeks tutored course making use of materials generated by RISKSUR project.

- Week One: Introduction to surveillance and risk-based surveillance
- Week Two: Surveillance systems for early detection of FMD
- Week Three: Case detection during an outbreak
- Week Four: Surveillance to prove freedom

The screenshot shows a video conference window with a slide titled "Probability of freedom of FMD virus circulation". The slide lists:
 

- Making use of:
  1. Historical evidence
  2. Probability of introduction
  3. Multiple surveillance activities
- Ad 2. Probability of introduction over multiple time periods
  - Constant risk that will lower the probability of freedom that was established over time
  - Based on historical data or using risk-analysis
  - Indicates that surveillance system needs to fed regularly to counterbalance the decrease

 The main part of the screenshot is an interactive table titled "FMD Risk-Based Surveillance: Introductory Concepts". It asks to "Drag the information into the correct place in the table:"
 

	Prevalence	Incidence risk	Incidence rate
Numerator			
Denominator			
Time			
Interpretation			

 Available information boxes include:
 

- All individuals examined, including cases and non-cases
- Single point or a period
- Risk of developing disease over given time period
- All cases counted in a single survey
- For each individual, from beginning of follow-up until disease
- New cases occurring during a period of time among a group initially free of disease
- All susceptible individuals at the beginning of the time period
- Duration of study period
- Probability of having disease at a particular point in time

Tutored online training courses

FMD Emergency preparation Course

Investigation Training Course

FMD Laboratory Investigation Training Course  
In partnership with The Pirbright Institute

Economic

Risk-Based Surveillance

Post mortem monitoring

Risk analysis along the value chain



## FMD Investigation Training Course (2)

First **Arabic** language course, working in partnership with Jordan Institute Science and Technology



180 participants nominated from 11 countries

First **Turkish** language national course for Turkey, working with ŞAP Institute and GDFC



150 participants from Turkey

Tutored online training courses

FMD Emergency Preparation Course

FMD Investigation Training Course

FMD Laboratory Investigation Training Course  
In partnership with The Pirbright Institute

Socio-economics

Risk-Based Surveillance

Post vaccination monitoring

Risk analysis along the value chain



## In-depth tutored courses for Pillar II neighbourhood countries (new)

- Six week courses, four hours per week
- Strong tuition (weekly webinar, weekly marking of assignments by experts)
- Based on existing FAO/OIE guidelines
- Develop expertise needed at central level for leadership on progressive control

**FMD Socio-Economic Impact Assessment: May 2017**

**FMD Risk Analysis Along the Value Chain: Sept 2017**

**4 participants from each neighbourhood country**



Tutored online training courses

FMD Emergency Preparation Course

FMD Investigation Training Course

FMD Laboratory Investigation Training Course  
In partnership with The Pirbright Institute

Socio-economics

Risk-Based Surveillance

Post vaccination monitoring

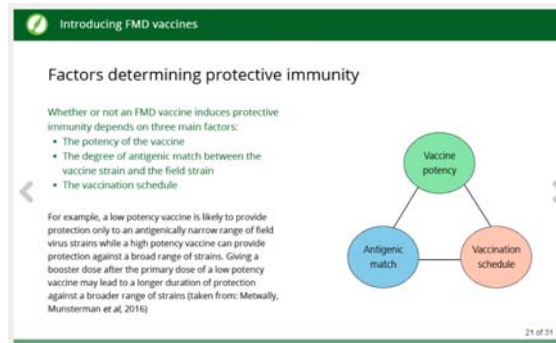
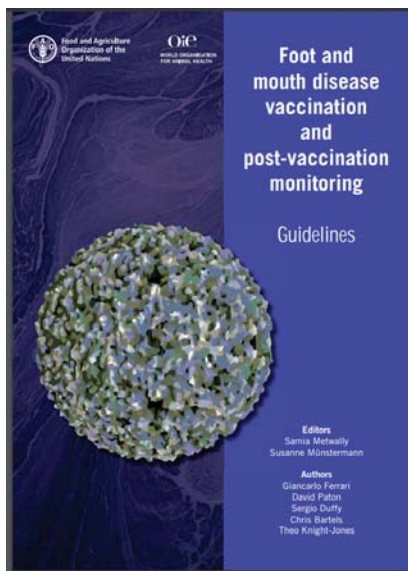
Risk analysis along the value chain



## Post Vaccination Monitoring (new)

Following the first pilot online courses for Southern African and South Asian Countries under Pillar III this in depth course:

- 3 participants from each country in SAARC/Southern Africa
- Based on FAO/OIE PVM guidelines
- Tutored by Giancarlo Ferrari/David Paton/Nick Lyons



Tutored online training courses

FMD Emergency Preparation Course

FMD Investigation Training Course

FMD Laboratory Investigation Training Course  
In partnership with The Pirbright Institute

Socio-economics

Risk-Based Surveillance

Post vaccination monitoring

Risk analysis along the value chain



## FMD Laboratory Investigation Training

- In partnership with The Pirbright Institute who have developed the training modules.
- Pilot course started September
- Over 100 participants (from FMD laboratories) from over 50 countries
- 4 weeks, approx. 12 hours
- Co-tutored by TPI and EuFMD

SAMPLE DISPATCH AND RECEIPT

What **not** to do: the contents of an unsuitable international shipment

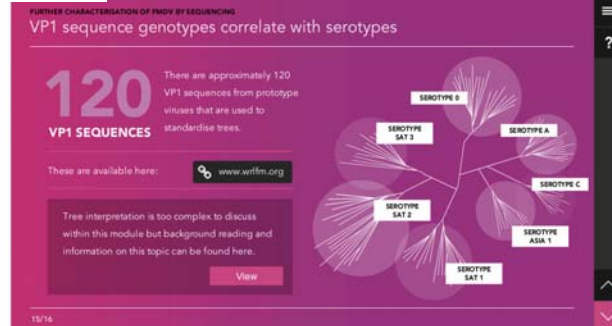


08/19



**Participants in our course**

ALBANIA	GEORGIA	MOROCCO
ARMENIA	GREECE	MOZAMBIQUE
AZERBAIJAN	INDIA	NEPAL
BANGLADESH	IRAN	NORWAY
BELARUS	IRAQ	PAKISTAN
BELGIUM	ITALY	PALESTINE
BHUTAN	JORDAN	SERBIA
BOSNIA	KENYA	SOUTH SUDAN
BOTSWANA	KOREA	SPAIN
BRAZIL	LEBANON	SRI LANKA
DRC	LESOTHO	SYRIA
EGYPT	LIBYA	TAJIKISTAN
ERITREA	MALTA	TANZANIA
ETHIOPIA	MAURITANIA	THAILAND
FRANCE	MAURITIUS	TUNISIA
FYR OF MACEDONIA	MOLDOVA	TURKEY
		TURKMENISTAN
		ZIMBABWE



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## What's next?



### **Pillar I Training for EuFMD Member States**

#### **2017-19 training menu includes:**

- E-learning and national courses
- Real Time Training

#### **Workshops:**

- Practical vaccination
- Crisis Management
- **FMD in Wildlife**
- Simulation Exercises
- **Ethical considerations** in FMD Decision Making

#### **New Regional Approach**





## What's next?



### **Pillar II Training for Neighbourhood Countries**

Focus on integrating e-learning and face to face support to progressive control and vaccination issues

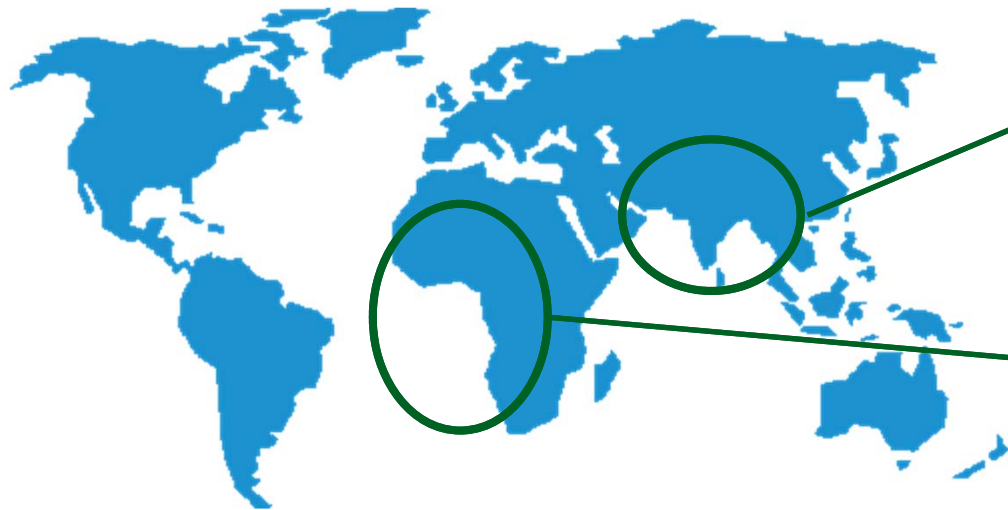
French and Russian language e-learning for central veterinary services

Additional Arabic language resources for local level veterinary services and stakeholder communication





## What's next?



### **Pillar III Support to Global Strategy**

Particular focus on training and networking support to :

- **South Asia**
- **West and Central Africa**

Training needs assessment process

Training of PCP experts

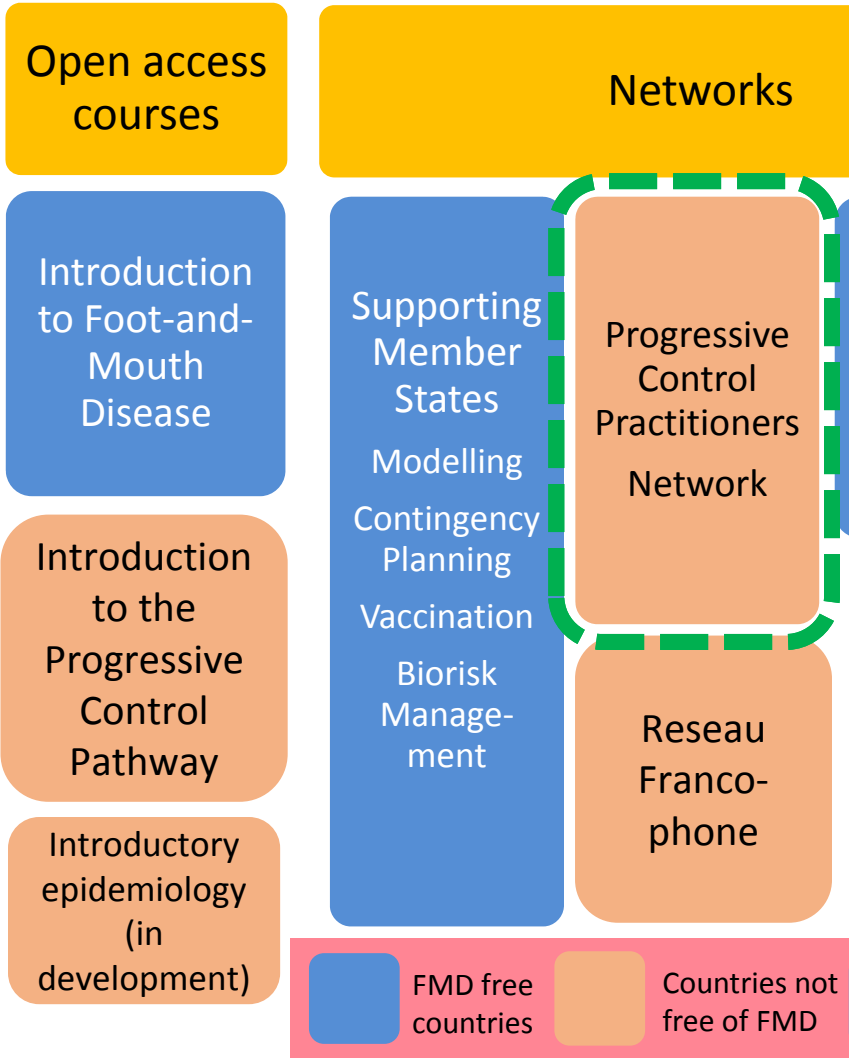
Progressive Control Practitioners network and Francophone Network





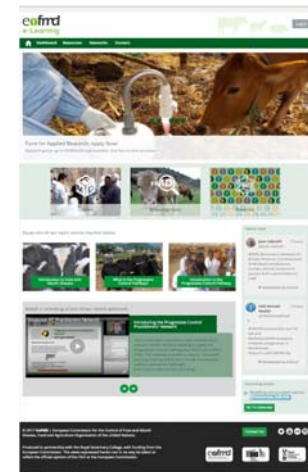


Knowledge



## Progressive Control Practitioners' Network

**Training and experience sharing network:** 2 webinars and at least 3 online exercises covering a different topic each month: so far NSP sero-surveys and outbreak investigation. Certificates and “levels” of completion.



**To join:** Click the networks icon





## Progressive Control Practitioners' Network





What should I do next?  
How can I join the network?

- E-mail [eufmd-training@fao.org](mailto:eufmd-training@fao.org) for more information
- Share this opportunity with colleagues





## EuFMD training is a team effort!

Thanks to Nadia, Chiara, Amir, Mark, Jenny, Maria, Ruth, Malin, Eunice, Chris, Melissa, Kees, Carsten, Maud, Giancarlo, David, Keith, Fabrizio, Nick, Gunel, Dinara, Bishnu, Karima, RVC, Erica, Cecile, Maurizio, Emanuela, Silvia, Filippo, Francesca .....



Thank you for your attention!

Any questions?