The Global Foot and Mouth Disease Control Strategy

Strengthening animal health systems through improved control of major diseases

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FAO OIE GF-TADs FMD Working Group
Annexes to Part A
1. Socio-economics of FMD
2, 3, 4. Tools
5. Building on experience 6. Vaccines
7. Research

Annexes to Part B
1. Activities of the Strengthening Veterinary Services
2. Portfolio

Supporting documents
1. Rushton J. The impact of FMD
2. The PCP FMD
3. The OIE PVS Tool

The Annexes and supporting documents are available on the OIE and FAO websites
- **Recommendations of the First International Conference on FMD Control, Asunción, June 2009**

  To establish a GF TADs FMD Working Group
  To prepare a FMD Global Control Strategy

- **Resolution of the 79th General Session, OIE, May 2011**

  Support to the preparation of an FAO-OIE GF-TADs Global FMD Control Strategy

- **Recommendation of 79th GF TADs Global Steering Committee, Rome, 18 October 2011**

  A Global Strategy which includes three components: FMD control, Veterinary Services strengthening, control of other major diseases
Consultation process for the elaboration of the FMD Global Strategy

- With experts, national and regional authorities, policy-makers, development partners and private industry: Workshop 2-4 November 2011, Paris

- Lessons learned from regions where FMD control is at an advanced stage or where the disease has been successfully controlled: South America, South East Asia...

- The Global Framework for the Progressive Control of Transboundary Animal Diseases GF-TADs) provided the governance structure to prepare the Strategy

- Inputs from the OIE Scientific Commission
Consultation process for the elaboration of the FMD Global Strategy

|-------------|----------------|--------------|---------------|---------------|--------------|--------------|------------|------------|----------|----------|

- **MC**
- **GSC**
- **Reg meeting**
- **SCAD**
- **Peer Review**
- **MC e-GSC**
- **OIE General Session**
- **FMD Conf**

Legend:
- Decision / validation
- Advisory / consultation
- Information
- Presentation

Drafts:
- Draft 1
- Draft 2
- Draft 3
- Draft 4
- Draft 5
- Draft 6
- Draft FINAL
- Translations
Rationale of the Strategy

Diseases are among the most significant limiting factors for livestock production.

Their impacts are variable:

- Mortality in young animals
- Reduced productivity
- Restricted market access
- Elimination of entire flocks or herds, with the resultant loss of biodiversity and valuable genetic resources
Overall objective of the Global FMD Control Strategy

To contribute to poverty alleviation and improve the livelihoods in developing countries. To protect and further the global and regional trade in animals and animal products.

Specific objective

To improve FMD and other TADs control in regions where diseases are endemic.

Thereby protecting the advanced animal disease control status in other regions of the world.
The FMD Control component of the strategy therefore not only aims to reduce the burden of FMD on animal production in developing countries, but also in FMD-free countries.

When incursions do occur, the cost of outbreak control may be enormous and the FMD control methods used are increasingly criticized.

Reducing FMD at source in FMD-endemic countries is therefore a shared interest and should be considered a Global Public Good.
Relationships between the activities of the three components of the global FMD Control Strategy

The Global FMD Control Strategy is not a ‘stand-alone activity’

On the contrary: FMD control implies to simultaneously progress in the strengthening of veterinary systems and vice versa

Strengthening VS creates better possibilities to control other priority diseases and FMD control creates opportunities through cost-effective combinations of activities.
The Strategy includes three Components:

1- Improving global FMD control

2- Strengthening Veterinary Services

3- Improving the prevention and control of other major diseases of livestock.
The Progressive Control Pathway for Foot and Mouth Disease

OIE standards new article in the Terr. Code

Vaccines

Surveillance systems

WAHIS

WAHID

Tools

Laboratories

The OIE PVS Pathway

The OIE collaborates with governments, donors and other stakeholders

PCP-FMD
Other tools in more advanced stages:

- Emergency response
- Identification of farms and animals
- Biosecurity
- Public/private partnerships
- OIE official recognized free statuses
The Global FAO-OIE FMD Control Strategy

Component 1. FMD control
Rationale of the Component 1 of the Strategy FMD control

- Foot and mouth disease (FMD) is a transboundary animal disease (TAD).

- Affects production of livestock, disrupts regional and international trade in animals and animal products.

- Often underestimated in developing countries: undermines food security and economic development at the level of village smallholders and along the production chains supplying urban and export markets.

- In Southern Africa, impact of some FMD control measures on wildlife conservation
And its articulation to regional initiatives, including Regional Road Maps.
Programa Hemisférico de Erradicación de la Fiebre Aftosa

Plan de Acción 2011-2020

SEAFMD 2020
A roadmap for foot and mouth disease freedom with vaccinates by 2020 in South-East Asia

BANGKOK, THAILAND 27-29 JUNE 2012
Objectives of the Component 1: FMD control

- Within a 15-year period, countries that are currently in PCP Stages 0 and 1 will have progressed at least two stages along the PCP. At the end of this period all countries will have reached at least PCP Stage 2.

- Countries in PCP Stages 2 or 3 should also move up two stages, but the final objective will depend on a country’s decision based on cost-effectiveness studies.

- Countries or zones that already have an OIE-recognised FMD-free status maintain this status or further improve it (i.e. go from FMD-free with vaccination to FMD-free without vaccination).
- 39 in PCP stage 0, 23 in stage 1, 17 in Stage 2
- 8 in stage 3
- 11 in stage 4 or 5
- 66 are officially free: 1 with vaccination, 65 without vacc.
- Other countries are historically free: islands mainly
Underlying principles

• The world is a global village

• We can do better with existing tools

• Prevention for FMD-free countries should include support to fighting/eliminating the disease at source

• Risk-based approach at country level in FMD endemic countries, mainly based on the PCP

• FMD control goes hand in hand with improvement of veterinary services (spin-off effect)
• The strategy is tailored according to the national and regional situations

• Concept of regional virus pools

• Interim benefits along the pathway to control and eradication to be constantly assessed

• FMD control is considered to be a global public good

• Firm political and economic commitment

• Strong private public partnership
Major basic elements

- Effective surveillance and alert systems
- Quality controlled vaccines (OIE standards)
  
  Vaccine matching
  Vaccine banks
  Vaccine quality control centres
  Vaccination strategies: massive, targeted...

- Updated legislations
- Use of OIE standards
- Communication strategies
SEAFMD Progressive Zoning

Progressive zoning approach

Evolution of FMD Programs:
The case of Brazil
Global Strategy based on the PCP approach

It offers a structured 5-stage approach, from the beginning up to the point where a country can submit a dossier to the OIE for official recognition of freedom from FMD.

Detailed descriptions available (see other presentation):

- Stage 1: focus on understanding FMD epidemiology and risk assessment
- Stage 2: focus on implementing a control strategy targeted to part of the country, a sector or subsector. Will usually involve vaccination
- Stage 3: prompt response mechanisms become crucial
- Stage 4: activities to be continued with a strong focus on prevention
- Stage 5: the country may apply for OIE recognition as being FMD-free with vaccination.
New possible trade-related options become feasible such as:

- Compartmentalisation
- Commodity-based approaches

The case of wildlife, particularly in Southern Africa, has to be addressed.
The FMD-PCP tool can be used for self and external assessment.

Once at Stage 3 a national FMD control programme may be submitted to OIE for endorsement.

PCP Stage 5 corresponds to the official OIE recognition of country (or zone) free with vaccination; free without vaccination is above the PCP.
Capacity building

A fundamental activity at all levels:

- At central Veterinary Service level: Epidemiological expertise, laboratory, organization, finances, legislation

- At regional Veterinary Service level: operational

- In the field: vets, paravets, veterinary assistants, laboratories...
Activities at regional level

• Laboratory and epidemiology networks

• Regional labs for vaccine quality control

• Vaccine banks where appropriate

• Regional roadmap and GF-TADs Steering Committee meetings

• Combine FMD control activities with other regional priorities to increase incentives: surveillance and investigations, vaccinations, treatments, extension, communication...
Activities at global level

• Advocacy and communication

• Harmonization/coordination (with clear role of GF-TADs regional Steering Committees)

• Technical support to FMD endemic countries

• Monitoring progress and constraints of Global FMD Control Strategy implementation: Annual report from the GF TADs Working Group

• Overall guidance by the GF TADs Global Steering Committee
Research needs and expectations

Research funding requested, but only foreseen for specific purposes
Component 2
Strengthening Veterinary Services

The OIE Performance of the Veterinary Services (PVS) Pathway is the major tool of Component 2 to structure and plan the activities and assess progress.

Relevant articles of the OIE Terrestrial Animal Health Code (Terrestrial Code) and Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (Terrestrial Manual) will guide and highlight the requirements for countries to have their national FMD control plan endorsed by the OIE or to apply for FMD-free status recognition.
Countries progressing along the PCP Pathway will have to develop in parallel their VS to be able to fulfill the criteria.

A correspondence table has been worked out between the PCP Stages and the compliance level required for each of the PVS Critical competencies (CCs) relevant to FMD control: see other presentations on PCP, PVS, Surveillance...
### Table I: Relationship between FMD PCP Stages and OIE PVS Critical competency Levels

<table>
<thead>
<tr>
<th>OIE PVS Critical competencies and Levels (in red)</th>
<th>FMD PCP Stage</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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<tr>
<td>Professional competencies of veterinarians (CC I.2.A.4)</td>
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<tr>
<td>Competencies of veterinary para-professionals (CC I.2.B.)</td>
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<tr>
<td>Continuing education (CC I.3.)</td>
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</tr>
<tr>
<td>Internal coordination (chain of command) (CC I.6.A.)</td>
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</tr>
<tr>
<td>External coordination (CC I.6.B.)</td>
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</tr>
<tr>
<td>Management of resources and operations (CC I.11.)</td>
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<tr>
<td>Risk analysis (CC II.3)</td>
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<td>Emerging issues (CC II.11)</td>
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<tr>
<td>Communications (CC III.1)</td>
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<tr>
<td>Consultation with stakeholders (CC III.2)</td>
<td>3</td>
</tr>
<tr>
<td>Official representation (CC III.3)</td>
<td>2</td>
</tr>
<tr>
<td>Accreditation / authorisation / delegation (CC III.4)</td>
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</tr>
<tr>
<td>Veterinary Statutory Body authority (CC III.5.A)</td>
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</tr>
<tr>
<td>Veterinary Statutory Body capacity (CC III.5.B)</td>
<td>1</td>
</tr>
<tr>
<td>Participation of producers and stakeholders in joint programmes (CC III.6)</td>
<td>2</td>
</tr>
<tr>
<td>Preparation of legislation and regulations (CC IV.1)</td>
<td>3</td>
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</tbody>
</table>
Objectives of the Component 2

Within a 15-year period:

- All countries that are not compliant with OIE standards have reached a minimum of Level 3 (i.e. general agreement with OIE standards) for selected CCs in relevant PCP-FMD stages e.g. all countries reaching PCP Stage 3 must at least have reached compliancy level 3 for the 33 FMD-relevant CCs

- All countries that are compliant with OIE standards (i.e. Level 3 or above) at least maintain their level of compliance.
Activities for Component 2

The activities proposed under Component 2 (creating an ‘enabling environment’) are not FMD-specific and therefore are expected to have spill-over effects on the control of all major TADs.
At the national level

Surveillance systems
Laboratories
Biosecurity
Movement control
Identification of farms and animals
Wildlife surveillance
Legislation and transparency
Socioeconomic expertise
Emergency preparedness
Veterinary education
Public-private partnerships
Monitoring and evaluation
Communication.

Capacity building is a key activity
At the regional and international levels

The activities will address:

- Coordination

- Support to disease-specific laboratories and epidemiology networks

- Joint capacity building workshops

- Strengthening of regional animal health expertise

- Participation in regional and international conferences on animal health, including regional and global GF-TADs Steering Committee meetings
Component 3
Prevention and control of other major diseases of livestock

The tools to be used for implementing Components 1 and 2 also contribute to Component 3.

Achieving progress in FMD control (i.e. reaching a higher FMD-PCP Stage) implies having created an appropriate enabling environment for disease control.

This implies that the VS are also better equipped and better prepared to deal with the control of other priority animal diseases.
Activities Component 3

At national level

Combinations of FMD control activities with other TAD control or production-related activities will be implemented:

- Vaccinations against other major diseases,
- Epidemiological investigations, diagnostic activities
- Treatments
At regional level

At the regional and international levels, the Strategy foresees an important role for the Regional GF-TADs Steering Committees.

Workshops will help to prepare disease-specific regional strategies and specific epidemiological and socio-economic studies will be undertaken.

In view of the above, the objectives of Component 3 cannot be formulated more specifically at present.
At international level

Support to:

- Disease specific laboratory and epidemiology international reference centers
- Disease specific laboratory and epidemiology networks
- The Crisis Management Centre - Animal Health located at FAO Rome
- The information Global Early Warning System (GLEWS) of FAO and the OIE (and WHO for zoonotic disease outbreaks in humans)
- OIE official reporting system WAHIS/WAHID
Governance

Overall policy guidance will be provided by the GF-TADs Global Steering Committee

Global monitoring and coordination of the Global Strategy implementation by the GF TADs FMD Working Group supported by a secretariat

At regional level, the Regional GF-TADs Steering Committees will act as regional platforms with the support of their technical expertise groups
Without however duplicating the work of the regional organisations and platforms already coordinating FMD control programmes which will of course continue their activities.

e.g.

PAHO and COSALFA in South America

SEACFMD in South East and East Asia

EuFMD in Europe

AU-IBAR (with the support of relevant Regional Economic Communities) in Africa
Limiting factors

Political commitment, Vet. Services, Economical capacity
Perception of no clear benefits except export
Movement controls
Wildlife reservoirs
Epidemiology knowledge
National surveillance systems,
International surveillance
Laboratory capacities and regional networking
Vaccine quality control
Education, training
Private Public Partnerships
Part B

Action Plan

Milestones

3 phases of 5 years each
Table 2. Main activities\(^5\) to achieve the different components of the Global FMD Control Strategy

<table>
<thead>
<tr>
<th>Component 1</th>
<th>Component 2(^6)</th>
<th>Component 3(^7)</th>
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<tbody>
<tr>
<td>FMD Control</td>
<td>Strengthening Veterinary Services</td>
<td>Prevention and control of other major diseases of livestock</td>
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</tbody>
</table>

**National level**

**PCP Stage 1**
- Activities and training focusing on:
  - Understanding FMD epidemiology: FMD occurrence, virus types and virus transmission pathways;
  - Risk analyses: defining geographical areas and/or production systems at higher risk;

**PCP Stage 3**
- Activities and training focusing on:
  - Extension of FMD control measures to all FMD-susceptible domestic species;
  - Prompt response mechanisms (emergency plan, upgraded surveillance, implementation of emergency response measures, including culling);
  - Intensive blanket or targeted vaccination (depending on

**Activities and training focusing on (by analogy with the conceptual framework of the PCP-FMD):**
- Epidemiology investigations and socio-economic analysis to assess major animal disease situations in the region and identify

**Activities and training focusing on:**
- Assessing the situation of Veterinary Services (VS), with respect to resources, staffing, funding and chain of command;
- Supporting VS to ensure they have the authority and the

**Activities and training focusing on:**
- Same activities as in Stage 2 above
- Implementing cost-effective combinations of disease control or production-related activities with FMD-related activities;
- Developing strategies for regional priority TADs.

**NB:** Reaching this stage in TAD control and improved
Component 1. FMD Control

Table 3. Chronogram of the Global FMD Control Strategy

<table>
<thead>
<tr>
<th>PCP Stage at year 0</th>
<th>PCP Stage at the end of year 5</th>
<th>PCP Stage at the end of year 10</th>
<th>PCP Stage at the end of year 15</th>
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Minimum numbers and levels of PVS CCs to be complied with at each PCP Stage

### Component 2
Strengthening Veterinary Services

<table>
<thead>
<tr>
<th>CC compliance level</th>
<th>PCP Stage</th>
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Component 3. Prevention and control of other major diseases of livestock

- Priority diseases have been identified in each region by the GF TADs Regional Steering Committees

- Need further studies and consultations between countries, regional and international organisations to define control strategies for other TADs with specific objectives and expected results.

- Preliminary list of activities that may be combined with FMD control is proposed

- At this stage, no milestones can be foreseen for this component.
Thank you for your attention