



Food and Agriculture
Organization of the
United Nations

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

ROME 20-21 APRIL 2017



Report

42ND GENERAL SESSION
OF THE EUROPEAN COMMISSION
FOR THE CONTROL OF
FOOT-AND-MOUTH DISEASE
(EuFMD)

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-109902-5

© FAO, 2017

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

This publication has been printed using selected products and processes so as to ensure minimal environmental impact and to promote sustainable forest management.

Report

42ND GENERAL SESSION
OF THE EUROPEAN COMMISSION
FOR THE CONTROL OF
FOOT-AND-MOUTH DISEASE
(EuFMD)

Contents

Recommendations of the 42 nd General Session of the EuFMD Commission.....	5
Report.....	8
Item 1. Adoption of the Agenda	9
Item 2. Global Foot and Mouth Disease (FMD) surveillance report.....	10
Item 3. The GF-TADS Global Strategy: progress over the first five years	12
Item 4. Technical point 1: Towards a framework for resolving ethical conflicts relating to disease control measures.....	13
Item 5. Technical point 2: The private sector role in FMD emergency preparedness	14
Item 6. Technical point 3: Confidence in early detection of FMD – when is passive surveillance sufficient and what are the options for increasing confidence in disease freedom?	15
Item 7. Training Needs assessment: results of the survey of Member States and non-Member States in the European neighbourhood and other regions	17
Item 8. Report of the Executive Committee on the actions since the 41 st General Session	19
Item 9. Proposed updating to the four-year Strategic Plan (2015-19) and Pillar workprogrammes for the biennium to April 2019.....	21
Item 10. Report on the status of FMD antigen and vaccine banks in the European neighbourhood.....	25
Item 11. Report of the Standing Technical Committee and its working groups	27
Item 12. Technical guidelines and updated Standards presented for adoption Election of the Officers, the Executive Committee and Standing and Technical Committees	28
Item 13. Technical Committees and their functions in the upcoming biennium	29
Item 14. Financial Report, Budget and membership contributions biennium 2018-2019	30

Please note the Appendices are available online and as a separate document on the EuFMD website.

Recommendations of the 42nd General Session of the EuFMD Commission**Considering**

1. The enormous economic consequences of even single Foot-and-Mouth Disease (FMD) outbreaks in FMD-free countries;
2. The extent and impact of the repeated FMD incursions of South Asian lineages of FMDV - particularly O India 2001 and A/Asia/GVII, into the Middle-East and direct European neighbourhood, including Turkey in 2015-16; and the spread of the O India 2001 to Far-East and isolated Indian Ocean islands;
3. The apparent shift in usual routes of travel of FMDV infection, from the Arabian peninsula to Turkey and Iran, the recent unexplained jumps of African origin viruses into Algeria in 2017 which may be associated with difficulties to control borders in the Middle-East and parts of North Africa;
4. The need for improving virus intelligence on the strains circulating in South Asia and immediately south of the Sahara, and to ensure the development of vaccines protective against the next likely incursions from these areas;
5. The critically important role that the FAO World Reference Laboratory for FMD (WRL-FMD) has played in leading the network of reference centres that provide global laboratory surveillance, which enables tracking and assessment of changes in risk;
6. The importance of the Progressive Control Pathway (PCP) for FMD, as a tool for promotion of improved management of FMD risks in non-free countries, and the need for its application in the European neighbourhood to foster sustained improvement of disease control;
7. The progress made by GF-TADs in the implementation of the global strategy over the past five years and the significance of FMD risk from the number of countries that remain in Stages 0 or 1;
8. The progress made under GF-TADS to put into place assessment processes for PCP stages and their successful application in Roadmap Meetings in West Eurasia and other regions;
9. The growing awareness of the role of moral convictions of citizens in shaping perceptions of measures for disease control, and the potential this creates ethical conflicts in the application of disease control measures by Member States (MS);
10. That the private sector is involved in various levels in emergency preparedness for FMD in the Member States and while there are good examples of collaboration between the private and state sectors, there are many Member States in which the private sector has a limited current engagement with emergency preparedness;
11. Reporting of the disease, and particularly farmer reporting, is the most critical surveillance component for early detection of an incursion of FMD in most FMD free countries;
12. The demand for support to national training programmes to better equip national trainers in provision of courses to update and train their staff, and positive impact of the cascade training;
13. The demand of Member States for assistance to test the emergency preparedness plans, and the development of guidance by EuFMD on management of exercises and training (GET Prepared);
14. The lessons learnt during implementation of the biennium workplan, under Phase III and Phase IV from the EC, and the strong progress made in implementation of Phase IV;
15. The economic constraints affecting Member States and the advantages of working with other regions and countries which face similar challenges with FMD prevention and control, in addition to the benefits of mutual activities in training, research and development of greater capacity for emergency management;
16. The importance of biocontainment of FMD virus in laboratories responsible for diagnosis and vaccine production and the different risk situation in counties free and not free of virus infection in their livestock population.

Acknowledges

1. The support of the European Commission (DG-SANTE) through the four-year Phase IV of the work programme of the Strategic Plan agreed in 2015, and the excellent working arrangements that have resulted in efficient and timely emergency responses to situations arising in the European neighbourhood.

Recognizes

1. Progress with the implementation of the current Strategic Plan and the positive development of planning processes with the World Organisation for Animal Health (OIE) and with FAO on matters relating to the programme of the EuFMD in countries which are not members of the Commission, and in regard to EuFMD support of the GF-TADS Global FMD Control Strategy.

Agrees

1. Upon the updating of the Strategic Plan for 2017-19, with the inclusion of the changes proposed in the paper presented under Item 9 of the agenda of the 42nd General Session;
2. That the work program to be presented to the EC should be based on the plan accepted under point 1;
3. That relating to the work program for Pillars II and III, special attention be given to the South Asia and Francophone Regions of Africa, supporting capacity building through the online course programme and better surveillance for FMD, working with the relevant FAO/OIE Laboratory Networks and aligned with the GF-TADS FMD Road Maps recommendations for these regions;
4. Upon the proposal to establish a Special Committee for Biorisk Management;
5. Upon the proposal for the budget of the MTF/INT/011/MUL (Administrative Fund) for the forthcoming biennium and the specific proposal relating to the situation of Iceland;
6. Upon the proposed programme of work and budget for Emergency and Training Fund (MUL004) for the next biennium;
7. Upon the need to update the joint FAO/EuFMD/OIE PCP-FMD Guidelines, and roll-out training to PCP practitioners on these changes and on the in-depth application of PCP associated practise;
8. Upon the list of six experts for the Standing Technical Committee (STC), the list of experts for the Special Committee for Research and Programme Development (SCRPD), and for the experts for the Special Committee for Biorisk Management (SCBRM).

Recommends

1. Member States review the risk associated with the developing FMD situation in North Africa and that additional effort is made under REMESA to mobilize vaccines or other assistance should the situation further deteriorate;
2. Member States consider the value of training in veterinary ethics for those engaged in FMD control programmes and that, should sufficient demand be identified, the topic be included in the future EuFMD training menu;
3. EuFMD continues supporting the Member States on the preparedness for an effective emergency vaccination response in the case of an outbreak;
4. Member States recognize the importance of appropriate forms of crisis communication and develop their communication strategies based on sufficient understanding on the perceptions and moral convictions of citizens concerning livestock affected by an FMD crisis;
5. A platform is established to better engage the involvement of the private sector in emergency preparedness and management;
6. The Standing Technical Committee (STC) review the options and provide guidance on the relevant methods to evaluate the sensitivity of reporting systems in the Member States;
7. Further discussions be undertaken between the FAO and OIE on how to ensure global efforts on FMD control and PPR control and eradication are complementary, synergistic and efficient, and reaffirm how the role of the training materials and expertise, developed by the EuFMD, can best assist FAO and OIE in this area;
8. The Executive Committee and Secretariat make every effort to find ways to increase the funding for research on FMD, exploring the possibility for national or other agencies to jointly fund research via the EuFMD-FAR fund or other means;

9. The Executive Committee seek additional funding contributions or co-funding arrangements to sustain course development for the areas where demands from Member States and others have been received, for assistance with national capacity development and cascade training;
10. That the Executive Committee review the benefits to the Commission of further updating to the Constitution including the benefits and conditions for associate or additional membership.

Calls upon

1. The international community to recognize the impact of contagious animal diseases upon livelihoods and human health and to promote and support the regional coordination of FMD control as part of an integrated approach to control the most contagious and devastating Transboundary Animal Diseases in Africa and Asia under the Global Strategies for FMD and PPR control.

REPORT

The 42nd General Session of the EuFMD Commission was held in Rome, at the headquarters of FAO, on the 20-21 April 2017. Delegates from 30 of the 38 Member States of the Commission and observers from the European Commission (EC), the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE), and Civil Society participated to the two-day meeting.

The Session was opened by Dr Berhe Tekola, Director of the Animal Health Division, FAO. His address is given below.

“Honorable Delegates of the Member States; Dr Stone, Representative of the DG of the OIE; Dr Füssel, Head of the Delegation from DG-SANTE of the European Commission; Observers from FAO Member States from across the world, invited experts. As Director of the Livestock Division let me welcome you to Rome on behalf of the ADG of AG, Ren Wang, and the DG FAO, Mr. Graziano de Silva.

FAO has been proud to host the European Commission for the Control of Foot-and-Mouth Disease at the headquarters of FAO in Rome since 1954, where as an Article XIV body it has been at the forefront of FAO work in the European region. We are glad to see it is continuing to both serve its members and to contribute strongly in support of the Global Strategy of FAO and OIE to control FMD.

Healthy relationship with partners outside FAO, including OIE, regional economic communities especially engaged with SADC, SAARC and active participation in REMESA (both sides of the Mediterranean), UMA (North Africa/Maghreb), and key partners in the FMD Laboratory Network led by the Pirbright Institute in the UK. In fact, the Pirbright Institute was the very first FAO Reference Laboratory and is now a Reference center (since the late sixties) and will be FAO's World Reference Laboratory regardless of Brexit. The President and Executive must also be congratulated for their efforts to ensure partnerships with FAO and OIE under GF-TADS, and with EC as the major donor, have developed, giving support to the Global Strategy and giving confidence for the further development of joint programmes in the next years. In particular, the support of the European Commission, DG-SANTE, through the four-year Phase IV Agreement to 2019 is gratefully acknowledged, and I believe all will see in this Session how this support is having a high impact in the European region, and through its innovative training programmes is now playing a significant part in the global effort to improve the capacity of countries to manage their FMD risks.

In the past two years since we last met, the FMD virus has not ceased to circulate in livestock populations in six of the seven virus pools that make up the global distribution of the disease. Europe is uniquely at risk, being next to three of these pools, areas plagued with current insecurity, particularly in Syria, Iraq and Libya, in the European neighborhood. The recent spread of FMD into Algeria from the sahelian zone of central and West Africa is more evidence of changing nature of risk.

The Sahara desert is no longer, it seems, the barrier it used to be. Livestock trade, formal and informal, is changing. Countries in Eastern Africa are already major exporters to the near-east, but are developing strategies to export to long distance markets in the Far-East and elsewhere. Informal movements across borders will continue as long as there is a difference in price to attract. These are times of change, that should be positive for investment in animal health and FMD control, but also times of risk, as disease events in the past year have shown us.

FAO continues to change and, in the past year, major evaluations have taken place of the FAO system for emergency prevention (EMPRES), and the important and innovative role of the EuFMD was recognized in these external independent evaluations.

Dear Colleagues, FAO believes the EuFMD has an important role to play in Europe, its neighborhood and in support of the global effort. On behalf of the DG of FAO I thank you for your continued support as Member States to this globally important effort.

You will be hearing about activities carried out by FAO, some in conjunction with OIE and others in conjunction with EuFMD in interfacing with Pillar III of the EuFMD workplan which is mutually beneficial.

I would like to thank the Officers of the Commission, Jean-Luc Angot, Christianne Brusckke and Ulrich Herzog for dedicating time to this work, and the guidance all nine members of the Executive provide. May I stress the importance of electing an Executive that has a passion for making things happen that is willing to partner with FAO and OIE in the regional and global efforts. FAO needs your guidance, as you speak for the ultimate beneficiaries.

Lastly may I express my thanks to you all for participating in this Session, your voice and vote is important to building together better support to the members and the global safeguards (resilience) needed in livestock production. “

Opening addresses were then given by Dr Stone for the OIE and Dr Füssel, for the EC.

Item 1. Adoption of the Agenda

Dr Angot, Chairman of the EuFMD Commission, welcomed the representatives of Member States and introduced the Agenda (**Appendix 1**). The Agenda was adopted without change. The timing of Item 15 – Election of the Executive Committee- was accepted to be brought forward to 11.00 AM on the second day.

The three Pillars of the EuFMD



Item 2. Global Foot and Mouth Disease (FMD) surveillance report

Document provided: Monthly report on the FMD situation in March 2017 - EuFMD (Appendix 2).

Document provided: Summary paper including Key Messages

Key Messages

- WRLFMD, Pirbright provides the secretariat of the global Network of OIE and FAO FMD Reference Laboratories, for support to global surveillance of FMD and the global GF-TADS Strategy. Since 2013 it has received financing support under Component 3.3 of the EC/EuFMD Programme that partially funds these global services.
- During the past two years, concerns in Europe have been raised by long-distance movements of different FMD virus lineages that have caused unexpected outbreaks of FMD in North Africa, The Middle East, the Indian Ocean, Southeast Asia and East Asia.
- The re-emergence of South Asia as a major source of infection for international spread requires attention and greater, real-time sharing of viral information. Recent spread to North Africa is a reminder that West, Central and East Africa still represent endemic pools where insufficient sampling occurs for risk assessment and vaccine identification.
- WRLFMD also works to improve the diagnostic capacity in Europe and in FMD endemic countries through training missions, new eLearning modules and proficiency-testing schemes for National Reference Laboratories (NRLs) in the EU (27), and with support of EuFMD, other European, neighbourhood NRLs and OIE/FAO reference laboratories (35).
- The WRLFMD assists in networking efforts with the regional laboratory and epidemiology networks that support Regional Roadmaps. The potential for uptake of the new e-learning courses in the regions is good and partnership with EuFMD to assist delivery of these over the next two to four years is encouraged.

The report of the World Reference Centre for FMD was provided by Dr Don King, Head of the FAO-WRL for FMD at The Pirbright Institute, UK (**Appendix 3**). The FMD situation in the past two years was reviewed and the current high risks to EuFMD Member States were highlighted. Of significant concern is the frequency of unexplained jumps of infection into the European neighbourhood, with the most recent epidemics being of type A (Asia/GVII topotype) into the middle-east with entry and wide spread within Turkey and, most recently type A (Africa/GIV) into Algeria from an ultimate source of sub-Saharan Africa. Internationally, a high frequency of movement of strains from the Indian subcontinent has resulted in incursions into Mid-East, far-East and to Indian Ocean islands (Mauritius in 2016), a significant change in both frequency and impact, a change first seen to start in 2013-14 with the O India 2001 incursion into the mid-east that spread as far as Morocco. The greatest concern has been the spread of the type A strains, since the antigenic variability is marked in this serotype, and since A/Asia/GVII had not been seen outside of Pool 2 (Indian subcontinent) before arrival in the Mid-East, suitable vaccines had not been a priority and the lack of submission of samples to the WRL had resulted in the risks of the strain not being detected in advance. The results indicate that South Asia must be given priority for attention. He reviewed the progress to identify vaccine suitability for the current threats, but drew attention to the limited funding for challenge studies in contrast to the frequency of new threats being detected. These gaps in evidence creates some serious uncertainties over the use of vaccines in emergency settings.

Vaccine bank recommendations 2017

High Priority	A/ASIA/G-VII(G-18)* O Manisa O PanAsia-2 (or equivalent) O BFS or Campos A24 Cruzeiro Asia 1 Shamir A Iran-05 (or A TUR 06) A22 Iraq SAT 2 Saudi Arabia (or equivalent i.e. SAT 2 Eritrea)
Medium Priority	A Eritrea SAT 2 Zimbabwe SAT 1 South Africa A Malaysia 97 (or Thai equivalent such as A/Sakolnakorn/97) A Argentina 2001 O Taiwan 97 (pig-adapted strain or Philippine equivalent)
Low Priority	A Iran '96 A Iran '99 A Iran 87 or A Saudi Arabia 23/86 (or equivalent) A15 Bangkok related strain A87 Argentina related strain C Noville SAT 2 Kenya SAT 1 Kenya SAT 3 Zimbabwe

The Chairman thanked Dr King for the report and for the services provided by the WRL.

Discussion

Discussion focused on risk pathways for the FMD entry into EU, and why the jumps are occurring, on concerns that the gaps in vaccines to address the emerging epidemic strains must be filled; and what is being done to improve quality of samples submitted to the reference centers.

Item 3. The GF-TADS Global Strategy: progress over the first five years

Document provided: Summary paper including Key Messages

Key messages

Progress made:

- Regional roadmaps established in West Eurasia, Near East, South Asia, East Africa, Western Africa. Southern Africa to be included soon. The Americas, South East Asia and North Africa covered by specific programmes. Active involvement of regional epidemiology networks and regional laboratory networks, and FAO/OIE regional representations
- Progression along the FMD - progressive control pathway noted in almost all regions. Some countries had their official control programme endorsed by the OIE and one had a zone officially recognised by the OIE as being free from FMD without vaccination.
- Publication of the foot and mouth disease vaccination and post-vaccination monitoring guidelines.

Challenges:

- Lack of political commitment and available resources at national, regional and international level;
- Lack of stakeholders engagement;
- Risk assessment and management by Veterinary Services;
- Access to diagnostic capabilities and material;
- Cross-border movement control and timely exchange of information between neighbouring countries.

Priorities:

Collaboration with EuFMD and other partners should be pursued and strengthened:
 -Urgency to focus on countries at Stage 0 and 1 that maintain a high risk for countries embarked in FMD control.

The Director of the AGA Division of FAO (Dr Berhe Tekola) and the Deputy Director General of the OIE (Dr Mathew Stone) presented jointly the progress report (**Appendix 4**). The GF-TADS Global Strategy for the Control of FMD was launched in Bangkok in June 2012, with a vision that progress could be anticipated in the three components, with endemic countries advancing two stages in the Progressive Control Pathway (PCP-FMD) over 15 years. The Strategy on FMD was also linked to improvement in the capacity of veterinary services and an integration of FMD control with that of other major TADS of ruminants and pigs. Dr Stone drew to attention that the need for investment in the capacity of countries currently endemic for FMD to make risk-based programmes and develop their own capacities for management of FMD is of fundamental importance. Progress has been made in the first five years of the Strategy, with countries moving upwards in the PCP, mainly from Stages 1 to 2, and consolidating these gains were crucial; the countries concerned must be able to see the benefits for themselves of their investments. Institutionally, there has been progress here as well, with agreement on management of the PCP Stage assessment process, the revision of the PCP tool has been undertaken, particularly Component 2 to align with the PVS, and Component 3 on integrated control.

The WG of GF-TADS was developing a joint workplan for the next two years, and had identified key challenges and priorities. On the collaboration with EuFMD, the OIE recognizes the expertise on training and capacity development and looks to strengthen the collaboration, to assist in training and building bridges between regional partners across the diverse regional roadmaps.

Conclusion

The Chairman thanked OIE and FAO for their report and for the expression of interest to work with the Commission over the next two years, as a joint effort. He considered that progress had truly been achieved in the past two years, but much more was needed to be done, given the scale of the challenge in the main endemic regions such as West and Central Africa.

He then gave the floor to the delegation from Botswana, who illustrated their current priorities and challenges, and highlighted how regional collaboration (in the SADC region) is essential, and how laboratory and epidemiology networks in the region exist but require encouragement and support to play a stronger role.

Item 4 Technical point 1: Towards a framework for resolving ethical conflicts relating to disease control measures

Document provided: Summary paper including Key Messages

Key message

- For veterinary professionals and the general public, moral convictions regarding animals factor heavily in shaping perceptions of measures for disease control.
- Beyond presenting medical, legal and technical challenges for official veterinarians, disease control scenarios involve conflicts of values and uncertainties in how to communicate as a professional.
- Ethical tools like the *Animal Disease Intervention Matrix* (ADIM) and the *Responsibility Check* (RC) can inform guidance in resolving conflicting values and clarifying professional responsibilities.
- Training of veterinarians relating to understanding and managing conflicts of values and critical thinking on professional responsibilities will become increasingly important for disease for development and delivery of animal health policies.
- Further collaborative studies in the emerging research field of veterinary ethics are encouraged to develop evidence and guidance.

The Chairman introduced the technical item, indicating that it had been proposed by the Executive Committee, and Professor Herwig Grimm had been approached to provide the paper after the positive experience of Austria in the training of state veterinary officers in management of potential ethical conflicts.

Professor Grimm (from the Ethics and Human-Animal Studies, Messerli Research Institute, University of Veterinary Medicine) reviewed in his paper (**Appendix 5**) the change in societal norms relating to animals and how these affect the perceptions of veterinarians regarding their role ("role both as citizens and professionals"). This can result in severe stress for veterinarians confronted with control of animal disease where personal perceptions may be in conflict with public policy decisions that require implementation. He illustrated how a set of tools (ADIM, and Responsibility Check Tools) have been developed and evaluated under the Vet Ethics 1 and 2 projects, with state veterinary officers (SVOs) in several European countries to provide assistance which have assisted such staff to understand how ethical conflict arise, and how an understanding of this can assist with identifying implementation issues and assessing policy options. He indicated how the field was relatively poorly researched but a promising area for relatively low cost studies that could greatly assist to guide veterinary services in managing staff and public communication in the future. The development of e-learning is underway and this may assist the wider involvement of veterinary officials in training.

Conclusion

Dr Angot thanked Professor Grimm, and considered that the paper was an important one that deserved to be well appreciated by the Session. This item was discussed together with that of Item 5, through a panel discussion.

Item 5. Technical point 2: The private sector role in FMD emergency preparedness

Document provided: Summary paper including Key Messages

Key messages

- More than half (57%) of the Member States (MS) that responded to the survey indicated that there is no formal representation of the private sector in their emergency preparedness planning and response plans;
- The level of influence of the private sector on decision making and prioritization of eradication efforts in the event of an FMD outbreak shows significant variation among the respondent MSs;
- Only 24% of respondent MSs indicated that their private sector would be highly involved in disease control and eradication measures in case of an FMD outbreak;
- Some private sector organizations have their own emergency management plans for an FMD outbreak and these might provide a useful resource, including a source of informed opinion for consultations on emergency management;
- The private sector was viewed as a good source of information to assist identification of critical issues that must be addressed in the case of an FMD crisis;
- A high proportion (86%) of respondent MSs supported the idea that EuFMD opens up training places for representatives of the private sector in the future, as part of an effort to engage in improved communication on the risks of FMD and promote constructive engagement and collaboration.

Dr Mark Hovari, EuFMD, presented the results of a survey of EuFMD Member States on the involvement of the private sector in emergency preparedness, and in relation to this a presentation was given by Dr Jan Dahl, (Chief adviser for the Danish Agriculture & Food Council) (**Appendix 6**). Dr Dahl provided a perspective of how coordination mechanisms between the industry stakeholders and Official Veterinary Services are arranged and how the industry provides a significant, voluntary input to routine biosecurity for prevention of disease entry into the country as well as plays a significant role in emergency arrangements. He gave as an example the private sector management of the costs of washing and disinfection of returning livestock transport vehicles, where over 25.000 transport trucks pass the five Danish disinfection points on yearly basis. The sector was active in updating transporters and producers on the animal health situation (by email, internet, farmer journals), and building up the trust, through addressing issues such as full compensation to ensure early reporting. The involvement in simulation exercises where industry and authorities work together, at least one per year, has been found to be essential and successful, but expensive. In the case of a strong suspicion or a verified case, industry task forces are established immediately. He concluded that since industry is so affected by disease and control options, they are convinced to take up responsibility.

Panel Discussion

Following the papers, a panel discussion with the speakers for Item 4 and 5 then followed. The high number of questions to the speakers showed the interest in the two papers. Discussions focused on the psychology of early reporting, and the incentive or disincentives to achieve this. Farmers act as a community with self-interest to report, but may also disagree with culling as the natural production process involves slaughter for consumption and they may disagree with culling as a loss of valuable commodity. The payment system whereby full losses are compensated with farmers own funds was discussed as a model. The value of farm biosecurity contracts, with annual inspection by vets, was mentioned, and the problem area of biosecurity on hobby and pet farms. One delegate expressed the view that clear rules for veterinary actions should result in vets not facing moral conflicts.

Professor Grimm considered that in fact the opposite is likely, that to obey orders that go against the personal position of the officer leads to severe problems. Denmark asked for advice on managing discussion on social media; guidance here suggested to jump in someone else forum can lead to greater problems that it solves.

Regarding stand-still periods, the severe problems for swine production were mentioned, as one where industry and regulators have to work together as overcrowding will rapidly develop. The issues of exporting to EU (regionalization) members as solutions to loss of export markets were also brought up, but where industries and regulators are across borders.

The Chairman sought the position of the Session on the question of opening training places to private sector; the majority indicated their support.

Conclusion

The Chairman then thanked the speakers and concluded that the private sector role is of fundamental importance to success of disease control; and that for the next biennium, a greater effort in the Pillar I work is needed to assist MS with how they may engage their industries in prevention as well as response to risks.

Item 6. Technical point 3: Confidence in early detection of FMD – when is passive surveillance sufficient and what are the options for increasing confidence in disease freedom?

Document provided: Summary paper including Key Messages

Key messages in the paper

- Passive surveillance, and particularly farmer reporting, is the most critical surveillance component for early detection of an incursion of FMD in most FMD free countries.
- The elements comprising a passive surveillance system can be evaluated to define those most likely to fail, in order to identify priorities for improvement and the potential impact of interventions
- Veterinary services should apply relevant methods to evaluate their passive surveillance systems.
- Since the FMD risk is dynamic, improvement of passive surveillance may be needed on an urgent basis and targeted to high-risk populations where initial cases are expected to develop or which have a high consequence of subsequent spread.
- The impact of communication or incentives to improve surveillance is unclear. Evidence on this is needed.
- In some high-risk settings, continuous surveillance to supplement the passive surveillance system (e.g. THRACE programme) may provide additional confidence in detection of infection if it were present.

This Item was presented by Melissa McLaws and Paolo Motta, EuFMD (**Appendix 7**). The topic is of enormous consequence for the cost of FMD control since early detection has been shown to result in smaller outbreaks and promotes faster recovery after FMD outbreaks in free countries. It is also increasingly of importance that data from surveillance is provided for the yearly reconfirmation of FMD freedom for the OIE where proving the adequacy of coverage across the population at risk is of importance. The potential ways to assess the sensitivity of each step in the surveillance system was reviewed. An interactive session with feedback from delegates was undertaken to elicit responses. Delegates, on the why failure to detect FMD might occur, considered of equal, high importance:

- having areas with high ratio of small to large ruminants;
- areas of extensive livestock production, where the stock are not regularly observed;
- livestock producers and/or veterinarians who are not familiar with the clinical signs of FMD;
- livestock producers who may not report disease concerns to a veterinarian.

On the question of barriers to reporting, the most common answer given at the Session was that farmers fear repercussions after notification. On how many suspect cases are reported and investigated in the country of the delegates: the most common answer was "less than 5"; followed by "5 – 10" and "none at all".

Dr Motta then presented as a case study the system for improving confidence in FMD freedom in Thrace region, under Component 1.3, where Greece, Bulgaria and Turkey share common borders. The "Cameron" model was described, where multiple on-going surveillance activities provide confidence in disease freedom, and surveillance targets high risk populations, and where the additional funded activities are only supported if essential to maintain the confidence level in freedom. The ideal of reducing activities while maintaining confidence may only be achieved if there is sufficient evidence that active surveillance can be replaced by "passive" levels of reporting if disease was suspected.

Discussion

The delegation from Malta emphasized that early awareness is one of the most important topics since awareness is needed to improve the examination of animals for potential diseases, by owners as well as vets. Caution on the use of quantitative outcome of confidence, if based on assumptions about normal human behaviours. Sten Mortensen strongly supported the approach, and encouraged that MS seriously considered undertaking work to give a more quantitative assessment or value to their passive surveillance systems.

Others reiterated that behavioural aspects needed to be very well understood, being country and production system dependent – each country can assess its own likely problem areas for non-observance of disease or non-reporting.

Conclusion

The Chairperson thanked the presenters for the thoughtful and innovative presentation. He considered that the approach to develop tools for use of the official services to assess their national surveillance systems was an important one, but not limited to FMD. Sharing of experience in assessing surveillance systems might be placed on the workplan of the Contingency Planning network. He suggested to refer the identification of tools or assessment procedures for use at national level to the STC for guidance.

Item 7. Training Needs assessment: results of the survey of Member States and non-Member States in the European neighbourhood and other regions

Document provided: Summary paper including Key Messages

Key messages

- Provision of training is a vital component of EuFMD's activities across the Three Pillars of the work programme. A process of training needs assessment has been used to understand audiences and their priorities and strategically target the training developed to the capacity gaps where it can have the greatest impact.
- Training needs assessment is a continuous process which is most effective when it involves a variety of information sources and makes good use of opportunities for direct interaction with audiences and their feedback and evaluation of training courses provided.
- Training priorities have been identified across each of the Three Pillars and new training courses, both face-to-face and online, have been developed and evaluated.
- E-learning has been used increasingly across the work programme and has been successful in reaching new broad target audiences economically, and as a two way communication tool to better understand audiences and regional disease risks. Providing training in local languages and on a country-level basis has been particularly effective.
- The Commission recognizes a great demand for training, particularly from the neighbourhood region and globally. E-learning is a useful tool to strategically address these demands, and particularly to address the currently increased risk situation in the European neighbourhood. Sustained roll-out of e-learning will require the Commission to seek additional funds and regional partners for sustainable delivery of training.

This item was presented jointly by Jenny Maud, EuFMD Training Programmes coordinator, Maria de la Puente Arevalo (for Member States, Pillar I Training Manager) and Karima Ouali (for neighbourhood countries, the EuFMD Pillar II programme) (**Appendix 8**). Since 2015, great efforts have been made to assess the needs of neighbourhood (Pillar II) countries for capacity building for FMD control, in relation to the national FMD status (PCP Stage or OIE recognition) before formulation of cross-cutting training courses relevant to the main priorities of multiple countries. Under the global support (Pillar III), the demand has come from FAO and OIE for specific forms of training but the roll-out of this in pilot regions has involved a needs assessment, by national focal points and to achieve greater information value, by the trainees themselves. The principle applied are that needs assessment is a continuous process, rather than only before training is offered. The use of surveys is combined with one-on-one conversations and participant feedback on EuFMD training in relation to their needs. To address needs for access to resources for national trainers and FMD managers, the updated e-learning website was presented, as was the new EuFMD Knowledge Bank with details of the new open-access courses for advocacy and better understanding such as PCP e-learning and "FMD basics". To address needs for depth in expertise to develop control programmes and manage them, "in-depth" learning has been developed for pillar II countries, in PCP development or implementation topics: Post-Vaccination Monitoring, risk analysis and social economics. The training utilizes FAO/OIE Guidance documents, rather than invent new basic guidance texts and thus assists the wider missions of FAO and OIE but in an applied form to FMD.

M. de la Puente presented the Pillar I training and its relation to the needs assessment process. The training menu offered to EuFMD countries was shown. The demand has been growing for assisting MS to deliver national training, with a strong uptake of EuFMD courses to be applied at national level, in national preferred languages (Germany, Ireland and Italy). Hendrik Camphor (EuFMD) then described in more detail the Putting Vaccination into practice workshop as an example of effective use of face to face workshops by use of prior e-learning (which allows more time for exercises at the WS) and how the resources generated by "new workshops" are not lost but made available for national trainers to follow up on the knowledge bank.

Karima Ouali reviewed the needs assessment for Pillar II countries. Limited resources prevent face to face training, so the strategy has been to develop tools and training that could be given online in official languages of the region, by regional partners before national "cascade". Jenny Maud covered the crossover between the pillars, how resources developed are adapted, tested and revised after feedback for use in Pillar III, with the "FMD Investigation training" for Southern Africa (>50 completed), and recently for South Asia (with >170 enrolled) being a successful examples that provide much positive experience in how to assist FAO and OIE in this area. To cope with demands

for follow-up, expertise development, a Progressive Control Practitioners Network has been established with monthly training provided online by the EuFMD Pillar III team.

Conclusions

- needs assessment is a continues process;
- training in regional languages is very beneficial;
- e-learning can be a useful tool to assist regional networking and expertise development;
- supporting national training is key;
- a model for regional collaboration with OIE and FAO partners has been demonstrated;
- additional, external funds are needed to sustain regional efforts;
- there is a shortage of parallel courses on other diseases, so FMD is currently a lead in this field; funds are needed to support growth in the provision of relevant courses to meet demand.

Item 7.1 Learning project concerning national cascade training of FMD preparedness in a EUFMD Member State

Document provided: Summary paper including Key Messages

Key message

- Training activities provided by EuFMD should be further developed and spread at national level through cascade training programmes. Indeed, the scope is that the EuFMD trainees act as trainers translating into national trainings the knowledge and skills acquired (the Train the Trainer approach).
- A learning 'pilot' project has been established, in cooperation with EuFMD, to address national training needs to reach official veterinarians to improve early detection and rapid control of FMD on the field. The idea is also to promote further training at local level for private veterinarians and farmers.
- The project focuses mainly on practical aspects with problem solving technique, videos, exercises, operational actions (simulation of biosecurity and outbreak management).

An example of how EuFMD has assisted national capacity building was given by Italy. The national cascade training programme was presented by P. Simonetti and F. Calvetti, who described the layers of cascade (**Appendix 9**). The first cascade level was to train at regional officials' level, and the second was provided by these trainees (from regional to local vets working in the field).

Discussion

The Session found the example very interesting. Cascade training at regional level is organized together with the central level planners, with the objective that regional level should make effort to ensure local level vets are aware of the regional response plans.

The training has focused on FMD, but been a successful pilot for other diseases, with trainees motivated by their leadership of second level cascades.

Item 8. Report of the Executive Committee on the actions since the 41st General Session

Document provided: Summary paper Executive summary

Key Message

The work programme in the past two years has been among the most intense ever for the Commission, reflecting the ambition of the Strategic Plan with its Three Pillars and the expansion after GS41 to a 16 Component Workplan, and the subsequent agreement and implementation of this with the EC.

No outbreaks of Foot and Mouth Disease have occurred within the free countries of the Member States (MS) in this period, despite the evident and high and dynamic risk from the neighborhood.

The strong support of the EU Member States and the EC has been continued to be a vital base that underpins the delivery of activities in all three Pillars. During the past two years, the **Phase III** (24 months) programme was successfully concluded and a new four-year **Phase IV** support negotiated with DG-SANTE.

In the new agreement, the training programme has been significantly expanded, in all three Pillars, with a greater use of e-learning and assistance to Member States to cascade train to national staff.

The partnership with FAO and OIE has developed well, ensuring actions are coordinated and supportive to Gf-TADS and the Pillar III actions are now driven by the requests from the GF-TADS FMD Working Group, ensuring the EuFMD is recognized as supporting the Global Strategy and providing its expertise to the international efforts.

There has been major expansion of the training programme with delivery of e-learning courses in Spanish, Russian, French, Serbian, Croatian, Estonian and English. In the past year alone, over 1300 persons from over 50 countries have participated in tutored e-learning courses. Approximately 4500 participants are now registered with the EuFMD e-learning online platform, taking part in open-access courses, discussing in our online networks or accessing the knowledge bank resources and over 40 webinar recordings.

Training needs assessments have been carried out through consultation with over 50 countries, all 38 Member States and at least 15 neighbourhood and 15 additional non neighbourhood countries.

The decline in European FMD research remains alarming and, though the new EuFMD-Fund for Research (EuFMD-FAR) is filling a vital gap, the Standing Technical Committee (STC) has made it clear we need to learn from management approaches and research undertaken outside Europe.

The work on Emergency Preparedness, in the Balkans and with the Contingency Planning network of the MS, has been a driver for development of the “**GET Prepared**” guide to simulation exercise planning and associated training, which fills a gap for veterinary services that may be useful well beyond FMD.

The Secretariat recognizes the role of the Officers of the Commission, particularly the President, Jean-Luc Angot, in this period, who have strongly supported the necessary decisions on direction and oversaw important developments with the Trans-Caucasus countries and North Africa, and assisted development of the partnerships with FAO and OIE.

Dr Angot, in his position as Chairperson, drew the attention of the Session to the Report of the biennium which had been circulated in advance of the Session to all Member States and Observers, and was provided in the Session papers. This paper indicated the very substantial achievement of the programme over the past two years since April 2015, with the completion of Phase III EC funded programme in September 2015, and implementation of the Phase IV from October 2015. The Executive had met four times in the biennium and he was pleased to report a continuity of activity which had not ceased even if the external funding had not been as continuous as desired.

He asked the Secretary to provide the report on behalf of the Executive Committee. The written report was supplemented by a presentation (**Appendix 10**) illustrating how the 16 different components in the work programme fit together and provide synergy and flow of risk information, from Pillar III work in regions endemic for FMD, to the neighbourhood programme with countries at risk of FMD, and the Member States where the foregoing risk assessments assist in the surveillance programme in Thrace, the emergency preparedness in the Balkans, and the overall combination of training, networking of contingency planners, modelling and applied research is managed and communicated with all Member States in ways that are aimed to ensure a high and continuous two-way channel to ensure results- as well as concerns – are fed into the working processes. He explained that the 16 components each have a component manager (some covering several components), each of whom are provided with a designated level of resources (financial and human), to achieve the expected outputs, with a set of quantitative indicators for measuring progress every 6 months; each component has a member of the Executive

Committee for oversight and guidance ; and that each manager comes under an experienced Pillar supervisor, needed since Component managers are frequently from the Member States as short term placements (6 months secondments). This management system aims to achieve a high level of engagement with the MS since the component managers are often from the MS or neighbourhood, which assist to understand and communicate with the needs of their counterparts. He gave the floor to several of the current component managers to explain better the nature of the work under each component – the team had taken the decision that they wished to demonstrate “how” they work, since “what” has been the progress is covered in the written report.

A presentation on this was provided by Mark Hovari, Teresa Scicluna, Karima Ouali, Gunel Ismayilova, Jenny Maud, Maria de La Puente, Paolo Motta and Filippo Pedullá, illustrating the links between Pillars and Components, and how this work leads to messaging and tools for Member States that enable them to “Get Prepared”.

Conclusion

The Member States endorsed the report by acclamation. The Chairman, on behalf of the Executive, thanked them for their support and recognised the work of the Secretariat to develop the programme as agreed with the previous Session and with good involvement of the Executive.

Item 9. Proposed updating to the four-year Strategic Plan (2015-19) and Pillar work programmes for the biennium to April 2019

Document provided: Summary paper

Key points for Decision at the 42nd General Session

1. To endorse the proposed updating of the Strategic Plan, for the period to the 43rd Session in 2019, as proposed by the Executive Committee following the review at its most recent Session.
2. To maintain the balance in effort and funding between Pillars I, II and III but with minor redistribution within each Pillar of the funding between components to allow change in emphasis changes in the areas proposed.
3. That the Executive and Secretariat seek support from DG-SANTE for those parts of the programme it is able to support and to leverage support from the Member States and other states and agencies that could compliment or support parts of the programme.
4. To endorse the efforts of the Secretariat in respect of finding additional funding for
 - a. the Research Fund, including studies relating to laboratory Biorisk management, and development of a European animal disease spread model remains a priority;
 - b. Sustaining the roll-out of FMD training in the Pillar III regions, where e-learning hubs at regional level could be a successful model but there is limited capacity at present in FAO, OIE and the regional economic body secretariats to achieve this.
5. To recognize the scope for potential application of the EuFMD training resources and system for e-learning as part of the response to FMD risks from the European neighbourhood, and the need for additional funding to safeguard work in Pillar II to ensure a significant presence at national level to sustain institutional change in risk management.
6. To take note of the imbalance between the level of insecurity and disease risk in the European neighbourhood and the declining level (since 2006) of overall funds and emergency reserve allocations for major FMD events or interventions in the region.

Member States and Observers had been provided in advance with the proposal for updating the Strategic Plan as a basis for the biennium work to be undertaken before the next General Session. The progress over the past biennium had been reviewed by the Secretariat and the Executive Committee, who had agreed the main areas for change, at the Executive held in March in Mödling, Austria. The Executive Secretary then presented the proposal (**Appendix 11**).

Discussion

The delegate from Poland asked for clarification on the proposal for funding sub-regional trainings. While MS are willing to share costs, the accommodation costs are a problematic area where international travel is needed. The Secretary indicated that use of the funds was not yet defined and may include covering accommodation if this is an issue.

FAO noted that internet connection is a constraint to delivering e-learning in some developing countries. The Secretary responded that where officials have limited internet bandwidth at work, often the mobile coverage is sufficient for access by cell phones although this is not an ideal format for online courses. He noted that resources are extremely stretched under EC funding and greatest impact for the investment can be seen with the online training development.

Conclusion

The Chairman put the proposal to the Session, and it was unanimously supported.
Reports on the FMD situation in the European Neighbourhood

The first hour of Day 2 was devoted to a considering the series of reports on the FMD situation in Turkey, Israel and Algeria, requested by the Executive given the recent FMD epidemic events in the neighbourhood. The reports were given by Dr Naci Bulut (for Turkey), Dr Tamir Goshen for Israel, and Dr Karima Ouali for Algeria (**Appendix 12**).

FMD situation in Turkey

There have been 89 confirmed outbreaks in 2017 in Anatolia, Turkey (none in Turkish Thrace which has been officially free with vaccination since May 2010). The currently circulating strains are Serotype O (O PanAsia II/Qom), and A (Asia/GVII), the latter also having a new variant (called A Asia/GVII)/Sam16) since late 2016. Serotype A outbreaks currently predominate by 3:1. Compared to other countries in the region, it is interesting that O India 2001 (which has been in mid-east since 2014) has not yet established in the country whereas A Asia/GVII has been a severe problem. Dr Bulut indicated how vaccines have had to be tailored to the changing risk; each of the Asia-1, type O and A vaccines in use has changed over the past five years, including an additional serotype A component to manage the change in A GVII lineage and match detected in 2016. The current type A vaccines do not match against A Iran 05 (a potential issue given that the A Iran 05 remains in the region), and for type O, the O TUR14 vaccine is not as well matched as the older O TUR07 vaccine.

He reviewed the change in strategy (To achieve OIE status of FMD free with vaccination by 2025 by regional progressive disease control approach, the strategy consisting of 30 component objectives). Under this, the central and western area of intensified control will meet requirements of PCP3, with eastern Anatolia initially remaining in PCP stage 2, with systems being established to manage the movement between zones. Dr Bulut thanked EuFMD for the assistance to train regional and Province staff for the change in outbreak response in the intensified zone. He indicated how the central monitoring unit functions to provide data on which to monitor the implementation of the vaccination and other control measures. The new strategy marks a significant change, despite a regionally difficult disease situation given the problems in the bordering countries such as Syria.

Discussion

The delegate from Georgia asked which vaccine strains will be used for the next year. Turkey mentioned that they have limited information on the strains circulating in the neighborhood in Turkey since they are lacking – in Dr Bulut's personal opinion – early warning that would be needed to make more elaborate decisions on the vaccines used. Dr Füssel mentioned that the highest number of outbreaks in the middle of Turkey (presumably in Konya), has not changed in 20 years, although numerous improvements (controlling disease movement, potent vaccines) have been implemented. The response indicated that the within-herd incidence had dropped even if the numbers appear the same. Konya is a huge Province with more epi-units and therefore more outbreaks, but severity is declining. However, it was added that incursions are expected to drop with the new strategy on control over entry from the east.

FAO's query concerned sub lineages, their prevalence and how vaccine effectiveness is assessed.

FMD Situation in Israel

The recent FMD outbreak and its detailed investigation were given by Dr Tamir Goshen. Israel is at risk from the FMD situation in the eastern and western neighbours, where different (Asia and African) topotypes of FMDV are circulating. This is one reason behind the compulsory vaccination of all cattle, and circa 900,000 small ruminants, with multivalent vaccines to cover a wide spectrum of FMDV strains. Current vaccines contain antigen mainly originating from West Eurasia:

- Type **O** antigens: Manisa, Geshur 85 (O4625), O-3039, O Panasia 2;
- Type **A** contains antigens: A- 4165 + A Iran 2005;
- Type **Asia1** contains antigen: Asia 1 Shamir (given in cattle only).

The outbreak in 2017 was four km from the border with the Gaza Strip, and the strain was genetically very close to African strains from Egypt, of serotype O (EA-3). Several potential introduction routes were identified; morbidity was high, over 30%, with most in first calf heifers. Re-vaccination was considered to have reduced the eventual losses although eight animals died. The same strain was also isolated from outbreaks in the Gaza Strip.

For the future, the results would be used to adjust the vaccination priorities to address the level of risk close to the borders. The continued collaboration with the Palestinian Authority for the future was essential and he thanked EuFMD for assistance with Joint workshops. Planning of vaccination campaigns and active surveillance programs could still improve and clearly more information on the situation in the neighbours needs to be shared if risk based surveillance or additional risk management is to be introduced at times of risk. The conclusions were to reschedule vaccination program: first 10 km at the border and 10 km from exporting dairy farms. Collaboration with the Palestinian Authorities has increased and more future collaboration is expected. The work of FAO/EuFMD was thanked and highlighted.

Discussion

The delegate from Georgia asked if there was seasonal movement of sheep in Israel, and was told that there are grazing permits for season pastures and movement, only if the animals are vaccinated. No herds are allowed to graze without vaccination.

FMD situation in Algeria

Dr Karima Ouali gave this presentation. On the 24th March 2017, cases of FMD were found in the north-west of Algeria, subsequently shown to be A Africa G-IV topotype and liege, not before registered in Algeria and with sequences close to those found in the Sahel (Nigeria) in 2015. She reviewed the vaccination programmes since the last FMD (type O) outbreaks. Two annual vaccinations in cattle were completed, the last being in 2017 with no vaccination in 2016. Mono-valent type O vaccine was applied, thus there is no expected protection against the type A epidemic. More cases were expected, but relatively few have been reported. One was reported as SAT1 after national laboratory findings, but type A was detected in the reference centre (IZSLER). Vaccine matching results remain pending, and Algeria has undertaken a variety of additional control measures assuming that not only the current serotype but potential for type O to recur from sources in the region. IZSLER and EuFMD were thanked for the quick actions taken, including supply of diagnostic kits to ensure outbreaks are rapidly typed. EuFMD was also thanked for the newly established Francophone network that is viewed as a helpful tool for communication on actions taken and the diagnostic and control aspects. The origin of the outbreaks is still unknown and the current situation in the neighbouring countries is unclear. Important factor is that Algeria currently does not have any serotype A vaccines to vaccinate animals therefore Algeria has requested access to vaccine, to be supplied as fast as possible.

Discussion

Dr Füssel (EC) began the discussion asking if there were epidemiological explanation where the disease could have been entered, and what are the outcomes of the outbreak investigation. Dr Ouali stated that the investigation is still on-going; the outbreak occurred in a small village, and the animals were to be sold at the market. It is not known how the infection arrived.

Dr Stone followed by querying the stop on all trade for every trade partner, irrespective of the FMD status of the partner, by Algeria, adding this was a disproportionate response. He was told that Algeria does not import from the neighbouring countries only from Europe (the answer made the point Dr Stone was raising).

Delegates enquired on the compensation scheme for Algeria and Israel. In Algeria, if the animals are sent to the slaughterhouse, then there is compensation for any loss in value, or if stamped out then the entire cost of the animal is compensated. In Israel there is no stamping out and therefore there is no compensation.

Item 10. Report on the status of FMD antigen and vaccine banks in the European neighbourhood

Document provided: Summary paper

Key Messages

1. All 38 Member States and three North African countries surveyed, 59% overall response rate.
2. All of the high priority strains (WRL-FMD reports to the executive Committee, 2016) are held in one or more national banks.
3. The investment level in antigen banks remains significant and, on an annual recurrent cost-basis, is probably four times greater than the entire EuFMD programme. It is therefore a significant part of the costs borne by the EuFMD members in preparedness and deserves more attention to priority setting and coordination.
4. There has been no significant change in holdings since 2015 with approximately 38 million doses held, covering five serotypes and 18 antigens held by national banks (NB: excluding EU bank).
5. 91% of respondent countries include emergency vaccination in their FMD contingency plans.
6. The PRAGMATIST tool has been developed to assist in priority setting for both the selection of antigens for the banks but also to prioritize surveillance and information gathering efforts for areas most sensitive to uncertainty in prevalence and strain typing data weaknesses.
7. The form of the PRAGMATIST outputs can be user-selected and there is potential for misinterpretation of results. It is recommended to implement this tool for reporting to the EuFMD MS in parallel to the conventional tabling of high, medium and low priority antigens, in the six-monthly reporting to the WRL to the EuFMD regular sessions.
8. It could assist to be able to use the PRAGMATIST to explore the 'added value of changing a portfolio of holdings', given the apparent disparity between holdings and highest scored antigens for types A and O.

The first part of the report consisted of the result of the survey of vaccine and antigen bank holdings in Member States and neighbourhood countries and was presented by Keith Sumption (**Appendix 13**). The second part concerned progress in the development of a tool (PRAGMATIST) to assist in the decision making processes for prioritization of antigen stocks for vaccine banks, and was given by Melissa McLaws (EuFMD) on half of the development group at WRL-FMD and EuFMD.

Of the 38 Member States and neighbourhood countries surveyed regarding the national bank holdings, 8 States (5 EU MS; 3 non-EU MS, overall 22 respondents) indicated that they hold national banks. All the MS who held antigens in 2015 replied to the survey.

Of the total of 38.8 M doses reported as held, the order of holdings is for serotypes A, O, SAT2, Asia-1, SAT1 (15.5, 11.7, 5.75, 4.85 and 0.1 M doses) respectively. This contrasts with the past, when most holdings were type O, as serotype O is internationally the most frequently reported. The higher holdings of A strains may relate to the recognition of the antigenic variation, such that a wider diversity are required compared to type O; 9 different antigens are held across the 8 states. Although there is a very low holding (in one bank) of SAT1, this is not the only holding in Europe, as the EU VB data is not included in the survey. Given the recent reconfirmation that SAT1 is circulating in west and central Africa, after some 30 years of non-detection, the resulting higher risk and scoring attributed to the serotype in the PRAGMATIST must be considered. The recent report of SAT1 in Algeria appears a laboratory error, but highlights the potential questions national banks will face when SAT1 does occur in the neighbourhood or in a MS.

The PRAGMATIST tools gives a variety of formats of output. Comparing scores across all serotypes is not recommended, but identification of priorities within a serotype (top vaccines by serotype) or in terms of the highest scored risk lineages (top antigens for the vaccines for the highest risk strains), gives rise to results that may trouble national bank holders since the highest scored O and A antigens are not held at present. This relates mainly to the fact that commercial arrangements to stock antigens are not based only on scoring, but on other criteria, including cost, speed of service, potential to sell-back unused stocks, etc, but also to changes since national banks last updated their stocks. Given this, it could assist to be able to use the PRAGMATIST to explore the "added value of change", in relation to the "value (score)" of any current holdings.

Discussion

Dr Bruschke (NL) noted that there is investment both by public funds for the antigen banks, but also by the private sector in development of the antigens and obtaining marketing authorisations for use in Europe. The conversation therefore must be between both parties to address the alarming gaps in coverage that keep appearing with emergent viruses.

Dr Stone (OIE) supported the development of the PRAGMATIST tool and asked for more details on the parameters and how expert opinion can affect the scores. In response, the position for expert opinion is at two levels, firstly the risk pathways and their scoring, and secondly the relative prevalence of lineages in the source regions, for which laboratory data and expert opinion must be used given the under-reporting in many countries. EuFMD are happy to discuss with any potential users on the system.

Dr De Normandie indicated support for the PRAGMATIST development but was concerned that the use of “percentage of isolates that match a vaccine” could have risks where there are not enough isolates tested, so confidence intervals would be broad. Dr McLaws took note of this remark and the team would look into whether the uncertainties around low numbers of isolates tested could be visualised or shown in the scoring system. She noted that as a tool it will not replace other formal risk assessment processes or wider multi-criteria analysis for election of strains, but the tool has a potential use to bring the relevant data into one worksheet and show not only antigen scoring but also where the surveillance effort needs to be prioritized.

Item 11. Report of the Standing Technical Committee and its working groups

Dr Eoin Ryan, Chairman of the Standing Technical Committee (STC), presented his Report (**Appendix 14**). He reviewed the role of the STC and how it provided guidance to the Executive and Secretariat, steered the programme of the Special Committee for Research, and the major biennial event of the Open Session. He drew attention to areas of strategic concern identified by the STC:

- Risks posed by long-range spread of FMDV (as indicated earlier in Item 2);
- Need for pan-European disease spread modelling;
- The benefits of coordination in contingency planning to address common issues such as diagnostic capacity;
- Need for bio-risk management expertise to revise laboratory standards, assist Biorisk managers and assess new sample testing and transport methods.

Dr Ryan reported on major areas of work in the biennium:

1. The Vaccination to live working group, which had developed a position paper, and guided the subsequent workshop (2017) on application of vaccination, and which led to draft guidelines on developing an emergency vaccination operational plan.
2. Diagnostic bank working group.
3. The Open Session, held in Cascais, Portugal, October 2016, which was a very successful event in terms of high participation of risk managers from the Member States as well as leading research groups from across the world. Around 600 persons participated, 270 at the Session and a further 320 at the online conference. Almost 140 abstracts were submitted. The third day Session had a final day devoted to developing consensus on ways ahead, managed as group work ("innovation clusters").
4. The funding of applied research under the EC funded programme ("Fund for Applied Research", FAR).

This had resulted in the two years in some very significant and useful outputs, specifically

- The FMD impact calculator (Tool for Contingency Planning; Contractor: J Rushton, RVC);
- Rapid methods for stability testing of FMD vaccines for effect of storage (Contractors: Pirbright and Lelystad);
- Simple and safe sample transport methods (Contractor: ANSES).

On the last point, the EuFMD Research fund is the only dedicated money for FMD specific research and thus plays an ever more important role, despite its very limited total budget. The EuFMD programme with its field elements has also reduced the cost for testing new technologies in the field, and he gave the example of the opportunity of the Nepal training courses where sampling the environment on premises and markets had shown it is possible to detect FMD in almost every setting, including with pre-clinical (incubating) infections. The opportunities for synergy, working with other partners with their resources is apparent; funds had been provided under a US supported project to develop Guidelines for Field Trials for FMD vaccines, addressing a gap that is not covered elsewhere - but is increasingly requested in licensing novel FMD vaccines (in the US at least). The 4th Call for applicants to the FAR Fund had been launched and 12 projects submitted under six themes. The STC would report on the prioritization for Funding after 1st round technical reviews completed.

Finally, he reviewed the rationale for the Biorisk Management Network, and for a dedicated Special Committee - the area of Biorisk affects working practises and management in all 38 national laboratories even if only some 18 facilities handle live virus across Europe. The interest in the first webinars was strong and gives evidence that the group is desired by those working in this field, as well as important for confidence in biocontainment.

Discussion

More information on using penside tests (LFD) to transport virus was requested. Drs Ryan and King (WRL) replied to this question. Protocols had been developed and tested that enable FMDV RNA to be harvested from the LFD that can be used to confirm and sequence the strain, and rescue virus (from RNA to live virus) for biological tests including vaccine matching. The protocols demonstrate that treated samples are not infectious, unless rescued by advanced procedures only available to specialist centres. However, given that RNA is infectious, the UN3373 guidelines for transport remain applicable but the non-requirement for controlled temperature shipment greatly simplifies cost of shipment. The challenge remains as to using the advantage, within the regulations, to get the method into use and this is a theme in the 4th Call for piloting the new submission procedures.

Conclusion

The Chairman thanked Dr Ryan and the Standing Technical Committee for their work, which was greatly appreciated by the Executive. The Open Session in particular was important technically as well as being a tremendous event for coordination and understanding between research teams, regulators and the private sector.

Item 12. Technical guidelines and updated Standards presented for adoption Election of the Officers, the Executive Committee and Standing and Technical Committees

No Technical Guidelines on Standards were proposed for adoption at the 42nd General Session. The Item was presented under the Agenda of the Session in order to update the members on progress relating to Standards for laboratory Biocontainment (reviewed under Item 11) and the updating of the Progressive Control pathway for FMD (PCP-FMD) Guidelines. The Executive Secretary presented a short report (**Appendix 15**) on the updating of the PCP-FMD Guidelines, which had been first developed by EuFMD in 2008 and had been adopted by the EuFMD as official guidance in 2011 Session. They have remained unchanged since this period, although working practices have continued to develop and the need to have these clearly provided in the Guidelines is agreed between the three parties (EuFMD-OIE-FAO). The importance of the Guidelines for Member States relates to requirement under the 2015 revision of the Constitution that Member States not free of FMD have in place a plan for the progressive control of FMD, for which the Guidelines provide the template as well as set of process for Stage acceptance under the common GF-TADS acceptance process. Dr Sumption highlighted the significant changes expected to occur and for which eventual agreement by the three parties (EuFMD-OIE-FAO) will need to occur to finalize the updating.

These are:

- Abolition of Stage 5, since the requirements for this stage are covered in the OIE TAHC (this stage was a preparation stage in which OIE recognised free countries would prepare for cessation of vaccination).
- Introduction of Fast-track processes whereby countries should request to move to Stage 3 (control of circulation) without passing through Stage 2 (control of disease); as this has some risks relating to maturity of national risk management processes especially evidence of impact of measures), the need for countries to demonstrate compliance over time with the Stages below when applying for the higher Stage will be required;
- Proposal that the entry condition for Stage 4 be the OIE acceptance process for national Official Control Programmes, bringing the PCP-FMD pathway and OIE-TAHC into alignment rather than countries exiting the PCP when a OCP is agreed;
- Clear conditions for withdrawal of Stage acceptance, by the Regional Advisory Group (RAG) and/or GF-TADS Working Group, also bringing alignment with the OIE OCP;
- Updated process definitions on how assessment procedures will be managed, recognizing financial limitation have prevented Roadmap meetings being held sufficiently often to deal with the numbers of countries which have dossiers to present for assessment.

He brought to attention that Israel, Turkey and Georgia would be the countries affected directly within the membership, but in each of their cases the compliance requirements are neutral and should not require additional expenditure. The changes are likely assist in the process of upward movement from PCP Stage 3 to endorsed control programme, and clarify the position of neighbourhood countries, where withdrawal of the OC or PCP Stage occurs.

Conclusion

The Chairman thanked the Executive Secretary for the report and supported the continuation of the process of updating the Guidelines, and the necessity of EuFMD involvement as a co-owner of the PCP-FMD in any updating and publication.

Item 13. Technical Committees and their functions in the upcoming biennium*Proposal to the 42nd Session*

To endorse the proposal of the Executive Committee to establish a **Special Committee for Biorisk Management**, with the Terms of Reference as agreed by the 93rd Session of the Executive.

A proposal (**Appendix 16**) was tabled for decision at the Session, after its prior circulation to the Member States, on the establishment of a Special Committee on Biorisk Management (**SCBRM**). The proposal had been developed by the Secretariat together with the STC, and been approved by the Executive Committee at the Mödling Session. The proposal was presented by Dr Eoin Ryan, who outlined the importance of the standards for laboratory biocontainment of FMD and the need for sufficient critical mass to review potential changes and develop suitable updated sections, as well as provide advice to the STC and Member States in regard to technical aspects of implementation.

Conclusion

The Chairman asked for indications of support, and this being given, he considered the Terms of Reference adopted. The TOR for the STC, Special Committee on Research and Programme Development were left unchanged and for the 2017-19 biennium the Session approved the proposal for three subcommittees. The list of names for election was presented under Item 15.

Item 14. Financial Report, Budget and membership contributions biennium 2018-2019

The paper circulated for Item 14 proposed the following for decision

1. On the proposal to leave the annual contributions unchanged, as per the 41st General Session in 2015 at which an increase was adopted and which came into force for contributions in 2016 and 2017.
2. On the proposal for the budget (expenditure) from the Administrative Fund in 2017, 2018 and 2019.
3. To waive the membership contributions of Iceland for the period during which they had been considered to have withdrawn from membership, a period in which they did not add to the costs of the Commission activities.
4. On the proposal for the budget (expenditure) from the Emergency and Training Fund (004), on the basis of the expected income (voluntary contributions from Member States and Others).
5. To extend the “not-to-exceed” (NTE) date of the Emergency and Training fund (004) to 31st December 2019.
- 6.

The Chairman invited the Secretariat to report on the expenditure for the Funds under management and the proposal for Administrative, and Emergency and Training Funds, for the period to the end of 2019.

A proposal (**Appendix 17**) was tabled for decision at the Session, which had been circulated in advance to the Member States, concerning the membership contributions and use of the budgeted contributions, for the Administrative Fund.

Administrative Fund, MTF/INT/011/MUL

The Secretary took the Session through the proposal, after first having a short report on the status of contributions and outstanding commitments provided by Cecile Carraz, EuFMD.

The specific proposal was accepted to waive the contributions of Iceland, for the period when they had been deemed to withdraw from membership. The Chairman asked for evidence of support on this point from members and a majority were seen to support with none against. The Representative of Iceland spoke on the point and indicated the gratitude of the country for the decision and confirmed the firm intention of Iceland to continue in membership of the Commission, but the need to confirm in December 2017 the budget for this to be placed on the international commitments of the country for 2018 onwards.

Emergency and Training Fund, MTF/INT/004/MUL

Jenny Maud presented the financial report for this fund which in the period 2017-19 had received contributions from several sources. The Fund is managed as Multi-Donor Trust Fund, and has been so operated since the earliest days of the Commission, with a requirement to report income, expenditure at every Session, in place of specific reports to individual contributors; to and propose a budget for the expected future contributions in the biennium to follow. The systems in use allow for tracking expenditure of contributions from individual national contributors but FAO procedures permit only certified reporting of accounts on a multi-donor basis. The agreement of the donors (represented by the decisions of members at each Session) is needed to extend the duration of the Trust Fund beyond the time frame agreed at previous Sessions. Dr Maud reiterated the policy relating to accepting contribution to the Fund, and reported on an increasing number of contributions received from MS and others (notably Australia and New Zealand) for provision of specific types of training course. She indicated a moderate growth expected in this demand over the next two years and the proposal to maintain the Fund until at least the end of 2019.

The Item was closed with a brief report from Cecile Carraz on the position of the Financial Agreement with the EC (DG-SANTE) regarding Phase III (operationally closed 30th September 2015) and Phase IV (operationally open from 1st October 2015, until 30th September 2019). She indicated that for Phase III, a financial verification visit had occurred in March 2017, and a final settlement expected shortly following this. Regarding Phase IV, after 18 months of activities (1st Biennium 2015-2017), the financial report states 60% of the budget allocated for the initial 24 months of the workplan has been used, supporting the 16 workplan components.

On the activity report, 19 out of 40 Outputs (of these 16 components) exceeded their foreseen milestones indicators and the remaining 21 Outputs reached 100% of their milestone targets. The 2nd Biennium 2017-2019 Workplan and related budget plan by component and budget line will be provided for the 94th Executive Committee to be held in September in Dublin.

Conclusion

The Chairman put the proposals, as given in the paper for Item 14 to the Session. There were no objections and each point proposed was considered endorsed by the Session.

Item 15. Election of the Executive Committee

For this Item, Dr Berhe Tekola, Director, Livestock Division (AGA)-FAO, took the Chair, assisted by the Secretary and the procedures were supervised by personnel from the FAO Protocol and Legal Offices.

Officers of the Commission

Dr Tekola called first called for nominations for the Officers of the Commission, these being the Chair and two Vice –Chairpersons.

For the Position of Chairman:

Dr Jean-Luc ANGOT (France) was proposed by Sweden and seconded by Malta and Poland. There being no other candidates proposed, Dr Angot was endorsed unanimously.

For the 1st Vice-Chair:

Dr Martin Blake (Ireland) proposed by Croatia and supported by the UK, and seconded by Denmark.

For the 2nd Vice-Chair:

Dr Christianne Brusckhe (Netherlands); proposed by Belgium and seconded by Luxembourg.

There being no other candidates proposed, the candidates were endorsed unanimously, and each indicated their willingness to serve as Officers of the Commission.

Election of members of the Executive Committee

He called for nominations for the six positions, each of which had to have a proposer and be seconded by at least one other.

For the six members of the Committee, the following were nominated:

<i>Member proposed</i>	<i>Proposed by</i>	<i>Seconded by</i>
Lajos Bognar (HU)	Austria	Slovakia
Silvio Borrello (IT)	Spain	Malta
Krzysztof Jazdzewski (PL)	Estonia	Lithuania
Damian Iliev (BG)	Romania	Greece
Nihat Pakdil (TR)	Austria	Bulgaria
Zoran Popovski (The Former Yugoslav Republic of Macedonia)	Albania	Italy

He asked the Session if there were additional proposals for the six regular member positions. There were none for the member position but France proposed Dr Avaliani, Georgia, as Observer, and this was supported by Turkey, with no objections.

The Chair asked these persons to stand and confirm their willingness to serve as members, and each indicated they did so; the letter of Dr Popovski from The Former Yugoslav Republic of Macedonia was available to confirm his intentions.

Election of the Standing Technical Committee (STC)

The following were proposed by the outgoing Executive Committee to be the members of the STC:

- Dr Eoin RYAN (Ireland)
- Dr Stephan ZIENTARA (France)
- Dr Karin Schwabenbauer (Germany)
- Dr Sten Mortensen (DK)
- Dr Ron Bergevoet (NL)
- Prof. Katharina Staerk (SWI).

Dr Tekola asked the Session for indication of their support for the proposal and this was indicated; none were against.

Election of the Special Committee on Research and Programme Development (SCRPD)

The Secretary provided the list of the seven SCRPD members proposed by the outgoing Executive, asking all to take into consideration that the representatives of the four FAO Reference Centres for FMD that are within the EuFMD Member States are *ex-officio* members.

There being no additional proposals, the list was endorsed.

Special Committee on Research and Programme Development

Name	Expertise
Michael Eschbaumer (Ger)	FMD biorisk management, FMD lab services, vaccine evaluation
Aldo Dekker (NL)	FMD research, vaccine evaluation
Tsviatko Alexandrov (BG)	Contingency planning, wildlife surveillance
Michel Bellaiche (Is)	FMD surveillance and management, Israel/Mid-East
Naci Bulut (TUR)	FMD surveillance in West Eurasia, vaccine quality and production
JeanFrancois Valarcher (SWE)	FMD virology, vaccine QA, surveillance, epidemiology, global
Nick Lyons (UK)	FMD epidemiology and Vaccination effectiveness, Africa/Egypt
<i>Ex-Officio</i>	<i>From the FAO and OIE FMD Reference Centres</i>
Don King (UK)	WRL-Head
Labib Bakkali (Fr)	FMD Ref Centre; ANSES FMD surveillance in REMESA, RESOLAB
Emiliana Brocchi (IT)	FMD Ref Centre; IZSLER FMD surveillance in REMESA, multiple regions
Kris de Clercq (BE)	FMD Ref Centre – CODA-CERVA-VAR

Election of the Special Committee on Biorisk Management (SCBRM)

The Secretary provided the list of the nine SCRPD members proposed by the outgoing Executive, on the advice of the Chair of the STC and that of Dr Kathrin Summermatter, interim Leader of the Biorisk Management group, who had replaced Bernd Haas, Bernd Haas, after the sad loss of this outstanding contributor, during the biennium.

There being no additional proposals, the list was endorsed.

Special Committee on BIORISK MANAGEMENT

Douwe Kuperus	The Netherlands
Cesare Bernieri	Italy
Kathrin Summermatter	Switzerland
Kirsten Tjornehoj	Denmark
Boris Gelman	Israel
Sharon Webster	UK
Gonzalo Pascual	Spain
Ulrika Allard	Sweden
Jens Peter Teifke	Germany

Dr Angot gave a short speech concerning his election as president of the EuFMD.

“I would like to thank all 38 countries that gave me their confidence by re-electing me President of the European Commission for the Control of Foot and Mouth Disease (EuFMD). I would like to thank all members of the former Executive Committee for their participation, particularly the Past President Ulrich Herzog and Spiros Doudounakis who will leave the EC after 10 years, Christianne Bruscke re-elected Vice-chairperson and Martin Blake elected new Vice-chairperson. I congratulate every member of the new Executive Committee for their election; it will be my pleasure to work with you. I thank the Member States for their financial contributions and the European Commission for its continued important and indispensable support. My thanks also go to the EuFMD secretariat for its excellent work and the success of this 42nd GS.

A lot of activities were achieved during the last two years such as:

- The development of training and communication activities
- The reinforcement of regional EuFMD programmes and, in particular, the Mediterranean Animal Health Network (REMESA)
- The signing of a statement of intention by countries in the Caucasus region to control FMD and cross-border diseases in association with GFTAD and today by South-East Balkan countries.
- The organization of an Open session dedicated to research and innovation
- The creation of a special Committee of Biorisk Management
- The launch of a French-speaking network for combating foot-and-mouth disease, as many African countries include French as an official language
- The rise in popularity and influence of the EuFMD outside Europe
- The payment of arrears of financial contribution (e.g., by The Former Yugoslav Republic of Macedonia: 5 years).

Within the framework of the strategic plan and on the basis of the new statutes, I would like to consolidate the range of networks linked to the EuFMD, i.e. the training network, laboratory network, modelling network, contingency planning network, and vaccine network and also language network. These networks help create synergies and better coordination between the different players.

It is also necessary to continue to develop training activities, which are essential to the prevention and fight against the disease, by intensifying the use of new technologies (webinars, etc.) and the cascades, whilst continuing with on-going programmes.

We have to strengthen our collaboration with GFTADS and international organizations especially within the framework of the PCP, with the appreciated support of European Commission.

The role of research to develop new tools and vaccines is crucial, as demonstrated during the Open Session in Cascais.

In addition, seeking the membership of new countries and continuing our effort to secure the settlement of contribution arrears must be intensified.

EuFMD is a small body in international terms and number of staff but a great body in efficiency terms, dealing with big challenges!

On behalf of the new EC, I thank you in advance for your support and your commitment.”

Signing of the Statement of intentions between the Veterinary Services of territories within the south-east Balkans

Under the Framework of THRACE Programme of the Executive Committee of the EuFMD, the representatives of the official veterinary services of countries in this region agreed to “statement of intentions” concerning implementation of a risk-based surveillance for FMD and other exotic diseases in the neighbouring regions of Bulgaria, Greece and Turkey. These intentions include the activities to be regularly performed, and the analysis and sharing of information.

The statement of intentions (provided as **Appendix 18**), concerning cooperation in the control of Foot-and-Mouth disease (FMD) and other major epizootic transboundary diseases, was signed by Dr Iliev for Bulgaria, Dr Gulaz for Turkey and Dr Doudounakis for Greece. Dr Stone (OIE), Dr Tekola (FAO) and Dr Füssel (EC) witnessed the signing.

The intentions can be summarized as:

- To include the livestock populations in the region in a specific action of co-operation for the control of transboundary diseases;
- To undertake surveillance for FMD and other TADs and share regularly information on planning and outcomes of surveillance activities and control programmes;
- To participate at the level of the OIE delegate, Chief Veterinary Officer or Head of the Animal Health Service, in Tripartite Meetings to be held on yearly basis; and of National Focal points in Management Meetings every six months;
- To undertake training activities and participate in joint exercises, including cross-border simulation exercises.

Closing of the Session

The incoming Chairperson of the Commission, Dr Angot, presided over the Closing of the Session. He thanked the membership for their faith in him and the support expressed in the election, and in his speech of acceptance, indicated the areas of concern and priority for the biennium, and his commitment to working on these on behalf of all Member States of the Commission.

There followed speeches of appreciation for the work of outgoing Committee members, Dr Herzog (member or Officer since 2007), Dr Doudounakis (who also first entered as member in 2007), and Dr Pridotkas (member since 2015). The Secretary expressed the hope that the 10 years given to the Commission would not feel like 10 years taken from their lives, but give many professional satisfactions for the progress made under their supervision and guidance.

The Chairman and Secretary thanked all Member States present for their support to the continued work of the Commission and thanked those who had worked tirelessly over several months to prepare the 42nd General Session, particularly Nadia Rumich, for her work in ensuring the highest standard of communications and documentation, Cecile Carraz, Erica Tomat, Maurizio Licastro, Filippo Pedullà, Silvia Epps and Emanuela Pirrello who had worked tirelessly to deliver a very significant work programme at the same time as all arrangements for a successful Session.



www.fao.org/eufmd.html