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ROME, ITALY 22-24 APRIL 2013



Report and appendices

40TH GENERAL SESSION OF THE EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE (EuFMD)

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE (EuFMD)
Rome, 2015

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Recommendations of the 40th General Session of the EuFMD

Considering

1. The enormous potential economic consequences of even single FMD outbreaks in FMD free countries;
2. The extent and impact of the FMD epidemics in West Eurasia in 2011-12 and of the incursions of African serotypes of FMDV into parts of North Africa in 2012;
3. The uncertain environment for FMD prevention and management in parts of the Middle-East and North Africa, as a result of political developments and their impact upon the trans-border movements of people and animals;
4. The progress made to implement the West Eurasia Roadmap for FMD control and the need for benefit/cost assessments for further investments in FMD prevention and control;
5. The importance of managing the risk associated with working with samples or other materials containing foot-and-mouth disease virus;
6. The high level of progress made in implementation of the EuFMD four-year Strategy Plan adopted at the 38th General Session of the EuFMD commission;
7. 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;
8. The role of the EuFMD in the development and continual refinement, with FAO and OIE, of the Progressive Control Pathway (PCP) for FMD, and the contribution of the PCP to the development of sustainable national FMD control strategies for FMD;
9. The launch of the Global Strategy for FMD Control by FAO and OIE at the Bangkok Conference in 2012;
10. The need for socio-economics to be utilised in the evaluation of national strategies for prevention and control of FMD, at all stages of the PCP and in assessment of control options for incursions in free countries;
11. The changing global landscape for animal production, movement and trade, and the need for technical strategic guidance to the EuFMD Commission, its members and the international organizations, on issues and gaps that affect progress in FMD risk management;
12. The economic benefits, short and long term, of the development of new tools for FMD control and the vital importance of continuing with co-ordinated research programs on FMD in Europe.

Welcomes

1. The acceptance of the Constitution of the EuFMD by Georgia and the commitment shown by this means to the national control of foot-and-mouth disease, which will contribute to the European roadmap towards FMD freedom;
2. The offer of Croatia to host the Open Session of the Standing Technical Committee of the EuFMD at Dubrovnik in 2014.

Acknowledges

1. The support of the European Commission (DG-SANCO) for the work programme of the previous four-year Strategic Plan and the excellent working arrangements that have resulted in efficient and timely emergency responses to situations arising in the European neighbourhood, and welcomes the indications of support for the new EuFMD Strategic Plan as presented at the 40th General Session of the EuFMD.

Recognizes

1. The substantial achievements of the work programme implemented over the past biennium by the Secretariat and funded by the EC programme, especially as Secretariat to the West Eurasia Roadmap and in associated programmes of work, and *inter alia* in the excellence of the training programmes, the efficient delivery of emergency assistance to countries during the FMD crises in the past two years, and in the contribution of expertise to the international uptake of the Progressive Control Pathway (PCP);
2. The importance of reaching an understanding with the World Organization 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.

Agrees

1. The "Minimum Biorisk Management Standards for Laboratories working with foot-and-mouth disease virus, Sections I and II" as presented as paper GS40/4.2bis, as a replacement for the Standard adopted in 2009 at the 38th General Session of the EuFMD;
2. The four-year Strategic Plan (from today(2013) until 42nd GS(2017)) for the EuFMD Commission, as proposed in Item 8;
3. The work plan for the biennium, as proposed in Item 8, with the exception of the duties of the Secretariat of the West Eurasia Roadmap;
4. The proposed Administrative budget for the Commission for the period to the end of 2015;
5. The Terms of Reference for the Standing Technical Committee and Special Committee for Research, and the list of experts for each Committee for the two years until the next General Session of .

Recommends

1. That the Executive Committee develop a resource mobilisation strategy to ensure operational funds are found to adequately support the Work Plan 2013-16, including exploring options for cost sharing or establishing programmes of mutual interest with non-members and others;
2. That the scale of contributions of Member States be reviewed, with a view to presenting a revised set of categories in 2015;
3. That GfTADs Europe consider the need to support annual West Eurasia Roadmap meetings, including the use of the PCP to assess the progress of participating countries, as part of the regional strategy for the control of FMD.

Calls upon

1. FAO, OIE and countries in the Roadmap advisory group, to ensure that every effort is given to the successful continuation of the West Eurasia Roadmap and progress towards its vision of a region free of clinical FMD by 2020;
2. Research funding bodies, including the European Commission (EC), to ensure continuity in funding for co-ordinated research programmes on FMD, in response to the greater international risk and the transformative potential of the Global Strategy for FMD Control.

REPORT

Introduction

The 40th General Session of the EuFMD Commission took place in Rome, Italy, on the 22 to 24th of April 2013, and was attended by representatives of 31 member countries. Representatives from ten observer countries, from the invited observer institutions with special Constitutional status (EC, OIE, FAO), and from the European Medicines Agency (EMA) and civil society (industry) were registered and in attendance. There were in total around 100 persons.

On behalf of the Ministry of Health of the Government of Italy, Dr Romano Marabelli, CVO-Italy, welcomed the delegates of Member States and international organisations to Rome. The Ministry of Health was delighted to host the 40th Session and to offer its Headquarters in Rome as the venue for this important international meeting. Italy, as a Member State of the EuFMD and being close to the FMD affected countries in North Africa and Eastern Mediterranean, recognizes the valuable role and technical expertise of the EuFMD. Italy also welcomes the development of activities supporting FMD control in the neighbourhood, through joint work programmes with REMESA as an example. In the recent years the close work of EuFMD with the Italian national reference centre for vesicular diseases at Brescia (IZSLER), which is now an FAO Reference Centre, has been central in providing diagnostic kits and supplies to countries in the European neighbourhood, and was particularly important in rapidly developing diagnostics for supply in the emergency of the SAT2 crisis in the region. He also emphasised the good work and achievements of the Italian funded FAO project in five Central Asian countries that assisted to establish the co-operation in the region under the West Eurasia Roadmap. This should not be lost, and the EuFMD with EC/FAO/OIE should ensure a continuation of the West Eurasia Roadmap that was started as a joint activity of EuFMD and Italy (GTFS project). As a past President of the Executive, he knew the importance and difficulty of the work and thanked the Executive for their efforts. He concluded by wishing everybody an excellent time in the eternal city of Rome.

On behalf of the Director General of FAO, the Session was opened by Dr Berhe Tekola, Director, Animal Production and Health Division (AGA), Agriculture and Consumer Protection Department, FAO. His statement drew attention to the fact that in this year FAO celebrates 60 years since the first EuFMD member signed its pledge in December 1953 and that today, at the 40th Session, Georgia had delivered its instrument of acceptance of the Constitution and should become in time the 37th member. With 27 EU countries and a growing number of non-EU countries as members, the Commission provides a needed mechanism for countries to work together towards the same vision – in fact the Constitution is the basis for the European Roadmap to FMD Control. He recalled that the European progress in FMD control over 50 years has followed five stages -very like the five stages of the PCP-FMD, from strategy development to maintaining FMD freedom without vaccination, with the major progress in Western Europe being made in the first 15-20 years. However, FMD has not been eradicated from all of Europe – not all EuFMD members are free, and 11 of the immediate land neighbours are also not free. The end of the Road has not been reached – there is still work to be done, not only in Europe, but to sustain freedom through international action. He stated that FAO recognizes the work of the Commission in developing the PCP-FMD and believes that future development of the PCP-FMD is a joint work for EuFMD, FAO and OIE. He added that FAO also recognizes the work of the EuFMD in promoting the West Eurasia Roadmap, as it pledged to do in the 38th and 39th General Sessions of the EuFMD. FAO hopes to see further commitment of the EuFMD to continuing this work, together with FAO, in the framework of the GfTADS.
Given the discussion on the role of the EuFMD, FAO, at the highest level, recognizes the special nature of Article XIV bodies which have members at the heart of their ownership, in Governance and financing. The EuFMD is your Commission and FAO offers the advantages of the UN system and the FAO Global Offices in over 100 countries to extend the impact of new tools, and approaches such as the PCP-FMD for use in other regions. FAO can add to this partnership through its officers and offices.

He suggested that Member States should be proud of what the EuFMD has achieved in working together with FAO – and there are some good examples where the impact is positive well beyond Europe. For example, Ethiopia, a land with over 50 million cattle, has taken up the PCP-FMD approach in its national veterinary service planning, as has Kenya. In both cases the take up was spontaneous and occurred after EuFMD presentations at its Open Sessions. The Global Conference on FMD Control organized by FAO with OIE and the launch of the Global Strategy during the Bangkok conference is a recent and important development in the international history on FMD control. It has, at its heart, the PCP-FMD as a single framework in which the all countries can find their place and consider the stages of moving upwards, as well as the costs and difficulties. Continuing the regional work of the EuFMD is an important part of the Global Strategy – the West Eurasia Roadmap, for example, brings 14 countries together to address the challenge of one of the most important reservoirs of FMD viruses – Pool 3, from which infection spreads to Mid-East and Europe. This vital work must continue, and FAO encourages EuFMD to continue to partner together in this neighbourhood.

He was glad to see "future perspectives" on the Agenda and drew attention to the fact that change is happening quite fast, for example in Africa. Disease control in areas with extensive pastoralist traditions and borders will be a major challenge and these areas are already trading into the European neighbourhood. Some African countries are developing swiftly and, as mentioned, good ideas like the PCP can be adopted quickly where conditions are right. He therefore encouraged a new optimism that despite austerity in Europe, change is happening by itself and European technical assistance could make it happen more quickly and safely.

Finally, Dr Tekola assured the members that FAO is committed to supporting its Article XIV bodies and will strive to make the "enabling environment " of FAO work for the EuFMD and for all its Member States. FAO, with a new DG, with new strategic objectives, and with a focus on delivering outcomes, is changing too through greater decentralization to ensure that Member States are better assisted. So as the FAO work with countries at regional and national level grows, this means the technical support demands grow too – and FAO is glad to have within its house a dynamic partnership with the EuFMD. He therefore encouraged the members to use this opportunity to look at Strategy and partnerships and to continue building on the success of the past 50 and more years.

Item 1. Adoption of the Agenda

Dr Ulrich Herzog, Chairman of the EuFMD Commission, thanked the Ministry of Health, and FAO, for their support and welcomed their opening statements which re-iterate the important partnership of EuFMD with FAO and with its member countries.
The Agenda (**Appendix 1**) was adopted as proposed, with small changes to the running order.

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

*Document provided: Monthly report on the FMD situation in February 2013 from the EuFMD (***Appendix 2***).*

Dr Hammond, head of the World Reference Laboratory for Foot-and-Mouth Disease (WRL-FMD) Pirbright laboratory, summarized the global FMDV surveillance information (**Appendix 3**) gathered through the activities of the WRL for FMD at Pirbright as leader of the OIE/FAO FMD Reference Centres Network. This network had typed more than 1800 samples in 2012. No FMD samples were typed from South America and this region, for the first time, reported NO cases in 2012, which is a landmark event in FMD history.
WRL receives support from DEFRA, EC and EuFMD, and the report provided is part of the obligation to the EuFMD to report to international meetings and provide recommendation on priority antigens for the vaccine banks. The contract also covers the Proficiency Test Service (PTS) provided to EuFMD Member States and neighbourhood countries.

Risk situation

The most significant recent event is the movement of African SAT2, O and A viruses from sub-Saharan Africa into Egypt and Libya in early 2012. The Asia-1 epidemic in Turkey also continued through 2012. These occur once every ten years or so and studies on the Asia-1 Shamir in the vaccine bank had been conducted to determine potency against the field strains (Sindh-08 genotype). Vaccine matching carried out on representative isolates from each submission, and 2dm VNT carried out with a variety of Merial, Intervet (MSD) and ARRIAH bovine vaccinal reference sera. Around 1200 individual tests were carried out in 2012 by WRLFMD and results were presented as a “traffic light system”, for each virus pool.
He concluded that the most significant current threats relate to the topotypes circulating in West Eurasia (Pool 3) and East Asia (Pool 1), plus the SAT2 viruses in North Africa which are antigenically diverse (in 2012), and require more study and monitoring. For serotype O, the most important for concern are

- ME-SA topotype – PanAsia-2 strain
- SEA topotype – Mya-98 strain.

For Serotype A, the most important for concern are

- ASIA topotype – Iran-05 strain
- ASIA topotype – Sea 97 strain

The high priority antigens for the vaccine and antigen banks in Europe were stated as:

2011 Recommendation	2013 Recommendation
O PanAsia-2 O Manisa O BFS or Campos A-Iran-05 A24 Cruzeiro A22 Iraq Asia-1 Shamir SAT2 Saudi Arabia	O PanAsia-2 O Manisa supplemented with O4625 or O3039 A-Iran-05 Asia-1 Shamir SAT2 Eritrea

For countries that identify a higher risk associated with Pool 1 (East Asia), A Malaysia 97 is relevant. Dr Hammond brought attention to the reduced importance of South American antigens given the lack of cases in that continent in 2012.

Proficiency Test Service (PTS)

The PTS is implemented by Pirbright with financial support from EC for the 27 EU countries and from EuFMD for inclusion of all EuFMD Member States (MS) plus a set of other neighbourhood countries including North Africa (Morocco, Algeria, Tunisia, and Egypt), the OIE/FAO Reference Centres network and leading laboratories in the regional African lab networks.
Relating to the 2012 PTS:

- 59 labs took part in this study;
- 26 labs were from EU member countries;
- 33 labs were from Non-EU countries.

Participants were sent a package containing uniquely coded and labelled samples for testing. Information was collected on tests in use, strains of virus used in tests, extent of on-going testing, and quality accreditation status of tests.

In the European neighbourhood, several did not take part although invited: Albania, Bosnia (the *Velic* Lab which is one of the two Reference Laboratories), Kosovo, FYROM, Montenegro. The letters sent had been improved in 2013 to better clarify that the countries could participate without cost. Algeria, Tunisia and Morocco had participated, as well as the three Transcaucase (TCC) countries, Turkey, Iran, Israel and Belarus.

The Chairman thanked Dr Hammond for the report and for the services provided by the WRL.
In concluding this Item, he commented that:

- The PTS should continue to be supported as an essential part of European preparedness and could be considered part of the “Pillar I“ activities in the new work plan.
- The services provided by the WRL in a wider context of the Global Strategy would be considered under Pillar 3.
- The Monthly Reports produced by the Secretariat are valuable to the MS and should continue in the new programme.

The participants indicated their general agreement.

Item 3. FMD management in the European Neighbourhood –international co-ordination and capacity building after conflict

*Document provided: The paper on this Item prepared by the REMESA Chairpersons was not available in advance as planned but is provided as **Appendix 4** to this Report.*

The Item was presented by Dr Angot, CVO France (paper: **Appendix 4** and presentation: **Appendix 5**). Following the events in the North African region in 2012 -particularly the crisis with SAT2 incursions- and the security situation in the central Sahara, the risk of FMD entry into North Africa had been elevated in the past year. Countries in the region were grateful to the EuFMD for provision of training and technical support and for facilitating meetings. He reminded the Session that the countries of North Africa are a "barrier" against the risk of spread of FMD in REMESA region (including Europe), and that Algeria, Morocco and Tunisia have already invested considerable efforts that must be sustained for the prevention and the control of FMD. Some countries are less advanced in their efforts to prevent and control FMD despite the presence of the virus on their territory, and there is a need for coordination between REMESA and EuFMD (or other international structures) in order to increase control efficiency. Given the different status of the six countries, different types of support are needed across the region. He indicated these would include:

In the field of epidemiology

1. Harmonization of monitoring and control plans;
2. Regional Contingency Plan approach and contingency essays;
3. Continuous training Plan in epidemiology and Risk assessment.

In the field of vaccination strategy

1. Emergency supply of vaccines in case of outbreaks and antigens bank;
2. Common Regional vaccines strategies.

In the field of Socioeconomics and animal movements

1. Assessing the risks related to animal movements (study).

In the field of laboratory

1. Regional reference laboratory and laboratory network;
2. Organize inter-laboratory tests;
3. Reinforced cooperation (twinning).

The Chairman thanked Dr Angot and Dr Carbajo Goni for their work in preparing the paper on this Item. He reflected that the "SAT2 crisis" in 2012 had exposed the impact of the wider political events and that the risks of the extension of FMD from Egypt and Libya had been a very real one to which the Commission had responded strongly in 2012, in co-ordination with international partners. Now is a good time to reconsider what is needed and how to work with REMESA to ensure steps are taken together. As the EU members of REMESA are also EuFMD Member States; they make an important link and must play their role in identification of what is necessary from EuFMD compared to others. The point would be considered again in Item 8, the Strategy and Work Plan.

Item 4. Report of the Standing Technical Committee (STC)

Item 4.1 Report of the Chairman

This was provided (**Appendix 6**) by Professor Paton, Chairman of the Standing Technical Committee (STC). The STC had met several times in the biennium with the Executive and operated mainly by teleconferences. The Open Session in Spain (October 2012, Jerez) had been a major success, with over 240 participants and a new format of using the Session to have one day of invited "Standing Committee Items" and two days of offered research papers (Special Committee for Research Session). This had worked very well and with over 50 % of papers relating to FMD management and epidemiology, had resulted in a higher than previous attendance by policy makers as well as a continued global representation of technical experts.
The STC had also met in Rome in January 2013 and reviewed the proposed new Strategy ("3 Pillars") in relation to the programme of actions undertaken in the past four years, and lessons learnt in this period. The recommendations had been provided to the Executive at the 85th Executive Committee meeting in Chania, Crete.

The **major STC recommendations** were:

1. To repeat the Global Survey on FMD research but with improvements to ensure greater coverage of research active organizations surveyed;
2. To strongly recommend the continuation of the programme for funding small projects (Concept Notes) which had started in 2009 and had provided tangible outcomes that had been used by the MS;
3. To establish a Research Fund for the next two years, operated by the Secretariat;
4. To achieve a more transparent commissioning procedure – with clearer priorities but not specific research tendering;
5. To improve the reporting template and guidance for reviewers, and utilise the Special Committee expertise in the review process.

Relating to specific areas for activity by the STC, he concluded that there may be a need for attention to the issues surrounding the use of emergency vaccination and post-vaccination consequences, after the decision on a change in the waiting period has been reached by the OIE. After the May 2013 OIE conference, the Commission should consider if it needs the STC to:

1. Develop a revised position paper on dealing with seropositive animals found during surveillance after vaccination to live has been applied in a normally free country;
2. Clarify the issues where training or guidance to MS on their Contingency Plans is needed, including possible Workshops for MS.

Dr Gibbens who chaired the session, thanked David Paton and the STC for their report, and indicated how the Executive Committee had greatly appreciated their efforts and excellent technical guidance.

Item 4.2 Minimum Biorisk Management Standards (MBRMS) for Laboratories working with FMDV

Documents provided: MBRM Standard circulated in advance to MS for their response before the Session; and as version 4.2bis to the Session with changes incorporated after review of the responses from the MS ***(Appendix 7)****.*

The Item was Chaired by Dr Gibbens, UK, and introduced by Dr Bernd Haas, leader of the Biorisk Management Group in the Special Committee for Research.
Dr Haas reminded the Session of the history of the Standard, which had been adopted at the 38th General Session of the EuFMD on 29 April 2009, and which superseded the prior Standards (1993 and 1985). Following review by the Biorisk Working Group of the EuFMD Special Committee on Research of the "Minimum

Standards of Biorisk Management for Laboratories Undertaking Diagnostic Investigations of Low-risk samples during an Outbreak of FMD", a part of the 2009 Standard, revisions have been introduced into the new "MBRM Standards for FMD Contingency laboratories". The technical content of the "Minimum Standards for Laboratories working with FMDV in vitro and in vivo" had been left unchanged, except for minor clarifications and the now consistent use of the term "Restricted Zone" for all areas where infective FMDV is or might be handled.
He added that it had become clear since the adoption of the 2009 version of the "Minimum Standards" that the task of balancing risks and benefits of laboratory work has to be seen in wider perspective since not all EuFMD Member States are free of FMD. Any standard of bio-risk management should be proportionate to the prevailing disease situation in the country or zone where it is located. Therefore a four-tier system of minimum bio-risk management standards for FMDV is proposed and the MBRM standards outlined in the paper for Adoption refer to Tier D and C:

- Tier A: General diagnostic laboratories, in FMD endemic countries;
- Tier B: Laboratories working with infectious FMDV, in FMD endemic countries;
- Tier C: Laboratories undertaking diagnostic investigations for FMD in the framework of a national contingency plan, in FMD free countries;
- Tier D: (Inter) national FMDV reference laboratories working with infectious FMDV, in FMD free countries.

The recommendations for changes to the Standard were circulated in a consultation Phase through the Secretariat, involving Biorisk managers of the FMD reference laboratories which handle live FMDV in Italy, France, Netherlands, Denmark, Germany and the UK. Following their responses, the proposed Standard was sent out to the EuFMD Member States in April with request to return technical comments by the 17th April 2013.
Comments were received from five Member States (United Kingdom, Ireland, Sweden, Switzerland (CH) and Denmark); several of these were for explanations that were provided, and not for changes.

Specific points addressed following consultation with the MS:

a) As "Tier 1 – 4" may cause confusion with Risk Group 1-4 and BSL 1-4, the suggestion (UK) was followed to change it to Tier A,B,C, and D.
b) It was taken into account that in some facilities showering out is not possible and so this was changed into a recommendation (CH) ("should").
c) As pre-heating of serological samples will not be possible in some testing regimes and requires additional validation efforts (UK). A flexible wording was chosen: ("…should … as far as possible without impairing the intended testing regime or the validity of the tests used".)
d) Points to be considered in a future revision include:
    - a clause on a preventive maintenance (Romania);
    - the use of Safety Performance Indicators (UK);
    - clarification of the role of the Biorisk Officer (CH);
    - Comprehensive updating of the Glossary (DG SANCO);
    - work on Sections covering Tier A and B;
    - an Annex providing examples/guidelines for inactivation procedures for samples;
    - the use of vaporized hydrogen peroxide for FMDV inactivation, following validation;
    - on the need for a definition of required airtightness (Ireland);
    - clarification (to Ireland) on the Tier Level for 'large scale serological surveillance'; testing by ELISA falls under Tier C, unless a country decides it can carry it out in a high capacity Tier D lab. Confirmatory serological testing by VNT involves live virus so should only occur in a Tier D lab.

The paper was then discussed. The representative of Ireland asked for specific feedback on points raised, which were provided by Dr Haas. On the definition of airtightness, it was proposed, and accepted by Ireland, that the current wording could remain and the EuFMD biorisk expert group would review the potential definition and requirements in their workplan.

Item 5. Technical Items with policy importance for Member States (STC Items)

Four technical papers were then presented to the Session, with the titles selected by the Executive Committee after recommendation to the 85th Executive Committee meeting by the STC.

Item 5.1 FMD and wild boar: Implications for FMD management of recent findings

This was presented by Dr Khomenko, FAO **(Appendix 8)**, and based upon studies in Turkey and Bulgaria conducted with support from the EuFMD under the Concept Note funding mechanism.
He reviewed the project in Anatolia, which had been commissioned after the 39th General Session of the EuFMD and work completed in the winter of 2011-12. This had proven a successful project with important implications for disease surveillance and control.

1. Wild boar and livestock can easily exchange FMD viruses (sharing habitats, scavenging, Kurban, hunting);
2. The epidemiological role of wild boar is secondary both under endemic and epidemic conditions in livestock and correlated well (spatially, temporarily and serotype wise) with disease occurrence in small ruminants;
3. Different serotypes may perform (transmit) differently in wild boar. O and Asia-1 seem to be better adapted than A;
4. Winter is the highest risk period for horizontal transmission of FMD in wild boar population;
5. FMD in wild boar may develop into localised sylvatic epidemics (3-6 months) affecting up to 20 % of wild boar and resulting in virus spread for 15-20 km.

The difficulties with regaining disease freedom in Bulgaria and Turkey after the epidemic of 2011 led to proposals for developing non-invasive (NI) sampling methods to enable sampling of wild boar without hunting. A further study on dispersion of wild boar (telemetry) is underway to better understand (and model) likely local spread of FMD after an introduction, including the interface with domestic animals.
The implications of NI:

- Early-warning or emergency surveillance in at risk areas in European wild ungulates can be improved and made more flexible;
- There is a potential for commercialization of specifically designed for surveillance baits or salt licks;
- Could be applicable to domestic animals too (extensive farming systems, small ruminants).

The initial findings suggest a working system is quite possible and the next stages are further field trials of the NI surveillance methodology, including other countries and situations. Further work with spatial ecology studies (e.g. ASFORCE) should help define the spatial guidance on where to use the baits in a surveillance programme. Development of a manual for wild boar disease surveillance, management and control is needed, as well as training for Veterinary Services.

The Chairman thanked Dr Khomenko for this noteworthy work, which already had provided important information for risk management but promised some valuable practical outcomes for the Member States. Dr Füssel, EC, supported this view and considered this is an important area for further work which must be continued.

Item 5.2 Socio-economics and decision making on FMD control policies

This was presented by Dr Ron Bergevoet **(Appendix 9**). His paper illustrated that the partition of the losses relating to FMD control in the Netherlands under different control policy options, varied greatly between

public and private (producers) sectors even if the total loss was the same. This has big implications for cost sharing between public and private sectors. He concluded that economic evaluation of different FMD management options should integrated into the national decision making processes, and will be increasingly demanded by livestock industry where they are expected to bear a proportion of the costs and losses.
The Chairman thanked Dr Bergevoet for his paper, which has implications for all Member States and for the future EuFMD work programme. In a time of economic stress, how best to ensure this economic evaluation is included when changes to the capacity of Veterinary Services to perform emergency responses are being considered, or changes in policy? More will need to be done to support MS in this area.

Item 5.3 The implications of the decline in FMD research funding in Europe

Professor Paton **(Appendix 10)** brought to attention the decline in EC funding on FMD research and the likely negative impact for improving future FMD management options. In particular, the increase in funding after 2001 is now draining away and lack of research funding seems paradoxical when pressing for global FMD control. He considered there is an urgent need to create a European fund for FMD research. As FMD research is often a side-line to NRL functions, there is a need for more cooperation between MS to provide shared functions and to consider where the next generation of FMD experts will come from.
Professor Paton concluded by summarizing the areas where research funding decline would affect the needs of FMD free and non-free countries for the following:

"Non-free countries"

- Monitoring in complex epidemiological situations
- Simple diagnostics
- Understand epidemiology
- Cheap, stable vaccines that give long-term and broad protection
- Technology transfer

"Free" countries

- Early warning
- Safe trade
- Rapid detection
- Rapid onset vaccines/antivirals
- Safe and storable vaccines
- DIVA vaccines/tests
- Understand epidemiology
- Decision support tools

Item 5.4 The changing landscape for FMD epidemic management

Dr Christianne Bruschke, Chief Veterinary Officer Netherlands (CVO-NL) and member of the Standing Technical Committee, opened the discussion on how the changing national and international environment for the animal production and livestock trade, and different societal expectations and demands, may affect FMD management over the next ten or more years (**Appendix 11**). International trade in livestock, particularly export, is highly skewed, with countries like Denmark and the Netherlands having a disproportionately high involvement in international exports compared to the size of the country and the intensive nature of the livestock production systems also has issues. The further production increases by intensification need to be balanced against welfare and other concerns. Internationally, livestock trade is changing as populations grow in Asia, as African countries enter into international trade, and as South America is expected to become free of FMD across the continent. The pressure to reduce waste in food consumption also may re-open the issue of safe feeding of waste food to pigs.

A panel of the speakers from this Item was then formed and questions taken. The changing landscape for ruminant and pig production in Europe was discussed. Greater density of wildlife with wider issues of welfare and environmental impact of intensive production systems could have implications for management, with intensive systems and wildlife being two extremes but each with specific difficulties. The issues of vaccination to live had not been completely settled and a return to attention was needed. The issue of greater efficiency in production would mean re-opening discussion on use of feeding waste food to pigs, which the STC or EFSA may need to consider. There is a need for economic modelling but the complexity of doing this requires attention and capacity building if it is to be widely used and give confidence that policy changes are well considered at national or European level.

Conclusions

The work plan of the STC and Special Committee, in the biennium of the 41st Session, should include the following:

1. A repeat of the Global Survey on FMD research;
2. A position paper/guidance on managing the consequences of surveillance after application of a vaccination-to-live policy in response to outbreaks;
3. Biorisk Management Standards for Tier A and B laboratories, and attention to the remaining issues for the Tier C and D Standard;
4. Further development and field evaluation of surveillance methods for FMD in European wildlife, and development of a guidance paper (or Manual) for veterinary services;
5. Review the constraints to use of economic modelling in contingency planning in Europe and provide guidance on how these could be addressed;
6. Develop advocacy papers for investment in FMD research and on how the opportunities of the field programmes of EuFMD, FAO and others could be better used for research relevant to improving FMD management;
7. To further develop guidance on how "horizon scanning" could be brought into practise in the work of the STC, and the Commission with its Member States and European partners.

The STC was encouraged by the Chair to continue this work. The Chair also encouraged the Member States to participate in the 2014 Open Session where many of the priority topics would be on the Agenda for debate.

Item 6. Follow-up to the launch of the Global Strategy for FMD Control (Bangkok Conference)

Dr Domenech, OIE, presented a report on behalf of the FAO/OIE GfTADS working group on the state of play after the launch of the Global FMD Control Strategy which had occurred in June 2012 at the Bangkok Conference (**Appendix 12**). He reminded the Session of the three components of the Strategy, of the major tools of importance, the PCP-FMD, PVS and OIE Standards, and how these have been utilised in setting the expected progress over 15 years. He also mentioned the Action Plan for the first five years, with a particular focus on the virus pools in Eurasia and Africa. To convince countries to step up their FMD control activities and to enter or progress in the Pathway, Regional Meetings had been held:

- East Mediterranean countries (5) : 18th December 2012;
- Near-East and North Africa : 4-5th December 2012, Cairo;
- West Eurasia (10 countries attended) : 2-4th April 2013, Baku Azerbaijan;
- Gulf Co-operation Countries (GCC) +Yemen 8th April 2013, Dubai.

Upcoming Regional Roadmap events include a second regional workshop for South Asia (SAARC) countries planned to be held in India and to be organised by FAO. Specific OIE and FAO support actions to countries were listed, and he indicated OIE intends to open an FMD Unit for Central Asia in Kazakhstan. The Joint FAO/OIE FMD Working Group (WG) meets every two months and reports annually to the Global GfTADS Steering Committee on the implementation of the Strategy. On behalf of the Joint WG, he welcomed the new Strategic Plan of the EuFMD which provides potential support for progressive control in the European neighbourhood (in Pillar 2) and supports the Global Strategy in Pillar 3. The further development of the PCP guide and associated assessment tool would be a joint work with EuFMD and the WG encouraged the Member States to support the new EuFMD Strategy. The development of agreements between EuFMD and OIE, and with FAO, could only assist to ensure good understanding of responsibilities and to create a co-ordinated, efficient working relationship.

Dr Samia Metwally, FAO, then illustrated the current thinking of the Working Group on support to the Global FMD Surveillance Laboratory Network, an essential tool in the Global Strategy (**Appendix 13**). A project proposal has been developed aiming to strengthen and expand the global FMD laboratory network to better coordinate, harmonize and enhance the quality of the global diagnostic services. This should support co-ordinated development of the network services to better serve the needs in each region.

The network involves

- ✓ Global coordinating lab (GCL);
- ✓ FAO and OIE reference labs/centres (FORC);
- ✓ Fostering development of services by regional laboratories in virus pools 3,4 & 5;
- ✓ Better linkage of laboratory services and results to the PCP Stage needs, for assessment and development of risk-based control programmes.

The expected Outcomes are

- A strengthened global FMD laboratory network as proposed in the FAO/OIE global control strategy, that will have a close and continuous link with the global control agenda;
- Increased knowledge on circulating FMD virus in the regions where control measures are being developed, and improve vaccine selection for effective and immediate response to outbreaks;
- Pool-based FMD diagnostic services and associated expertise in virus pools 3, 4 and 5 through establishing regional leading laboratories (future FORC).

The Chairman thanked the OIE and FAO for their update and encouraged their continued fruitful co-operation to implement the Global Strategy. He concluded that:

- The PCP, as it had been developed by the EuFMD with FAO and applied in EuFMD programmes since 2008, remained an important responsibility for the Commission to develop in ways that will benefit the Member States and the neighbourhood, and this work should be contribution to the Global Strategy of FAO and OIE. This role would be indicated in the agreements to be concluded with FAO and the OIE;
- The support to the Global FMD Laboratory network proposal could not be concluded at this Session but would be decided after receipt of the proposal from FAO/OIE, with a view to a decision taken at the next Executive Committee Session on funding for Pirbright in 2014-15.

Item 7. Report of the Executive Committee on the actions since the 39th General Session of the EuFMD

*Documents provided to Session: 1) Summary of the EuFMD Actions implemented under the EC/EuFMD Agreement, September 2011-April 2013 (Paper 7.1) (**Appendix 14**); 2) Report of the Tripartite Meeting on control of FMD and other exotic diseases in the Southern Balkans (Paper 7.2) (**Appendix 15**).*

The Report on the Actions since the 39th General Session in 2011 was divided into two parts. The first concerning the six components that relate directly to emergency preparedness in the Member States, and the second on the three components that support FMD risk reduction in the areas immediately neighbouring to MS. During the Session, the Report on the Action under each Pillar was followed by the Item on the proposed work programme for the Pillar in the upcoming biennium.

Pillar 1: Report on activities undertaken to support emergency preparedness in the EuFMD Member States

The Report on Pillar 1 activities, in which the Veterinary Services of the Member States are direct beneficiaries, was given by Dr Ryan (**Appendix 16**). The Main achievements were summarised in **Appendix 14** and are listed below. This was immediately followed by a Report from Dr Sharon Turner, Director of the FMD Task Force, DAFF, Australia, on the Australian collaboration with EuFMD in the field of training in fmd (**Appendix 17**). The training helps fulfil Australia's commitment to improving earlier recognition and response to FMD, but also meets obligations to supply trained veterinarians in the case of an FMD outbreak in the UK and Ireland and four other countries that participate in the international animal heath reserve arrangement. The EuFMD provides the trainers and Australia covers all costs and travel. Dr Turner mentioned that the training has had a very positive effect on the livestock industry leaders, as these have been trained alongside veterinarians and the interests and technical/policy issues faced by Australia are very similar to Europe. Australia therefore hoped to explore possibilities for synergy. A report was also provided by Dr Jef Hammond on the International Vaccine Banks Network (**Appendix 18**), as this complements the work of the Commission in FMDV intelligence gathering and communication, aimed to support Member States decision making on national antigen/vaccine banks.

Discussion

The representative of Norway congratulated the Secretariat on the training programme, which had had a positive impact in developing expertise among national trainers in the countries participating and was widely appreciated; Sweden supported the comment. The co-operation with Australia was supported by Norway but caution was needed to ensure that the EuFMD does not lose the efficiency for which it is known and to maintain a strong focus on services. A positive outlook would be if the co-operation would increase services provided while avoiding unnecessary bureaucracy.
The representative of Greece proposed that the Balkan countries needed CVO meetings on a regular basis for not only FMD but other major diseases. Dr Füssel indicated the EC supported the principle of extending invitation to other countries to the Tripartite Meetings and that parts of the meetings could cover ruminant epizootic diseases other than FMD, as these spread through similar risk pathways that need management. He also thanked the Secretariat for the training programme, and drew attention to the efficient emergency management procedures which had been utilised in the past two years and before then. Dr Füssel added that these must be maintained in the new programme.

Achievements since the 39th Session, under the EuFMD/EC agreement:

Pillar I – activities directly involving or benefitting member states

1. ***Field based FMD Training Programme***
   - Re-establishment of a European cadre of veterinarians with experience of FMD outbreak investigations through training in the real-time field training programme; >200 Europeans trained, from 36 Member States.
2. ***Strengthening FMD laboratories in the Balkan Region***
   - Trained personnel from each West Balkan country in FMD recognition and sampling in the field.
3. ***Improved Contingency Planning through use of decision support tools***
   - Eight countries trained in use of animal disease spread models to assess their contingency plans.
4. ***World Reference Laboratory (WRL) contract – FMD surveillance support activities***
   - Importance of the Proficiency Test Service (PTS) understood by most non-EU neighborhood OVS. The PTS offered to ALL Member States AND European neighborhood countries in 2009-12, with greater take up in 2012 than in 2008.
5. ***Technical studies***
   - Several supported studies have given immediate benefits;
   - The full genome sequencing tools were used in the Bulgarian FMD tracing in 2011;
   - The support for African serotype PCR tests gave rise to diagnostic advice to NRLs in the 2012 serotype SAT2 crisis;
   - The wild boar studies have contributed to design of surveillance for freedom, and generated new potential tools for surveillance (non-invasive sampling to enable earlier proof of infection or freedom);
   - Global FMD research reviews commissioned through GFRA to identify research gaps and overlaps.
6. ***Response to FMD Emergencies***
   - Delivery in 2011 of emergency vaccines and supplies to Turkey, and diagnostics for Bulgaria;Mission teams on the ground in Turkey, Bulgaria and Egypt within 10 days of each crisis, coordinated with the EC.
   - Response to "non political crises" such as the Asia-1 epidemic where no other agency recognized the scale of the problem, and provided technical support to field assessment of vaccination effectiveness.

Pillar 2: Report on activities undertaken to reduce risk from the European neighbourhood

The Session received reports on the actions undertaken under the 2009-13 Strategic Plan which aimed at reducing the FMD risk from the countries in the European neighbourhood through supporting progressive control in the neighbourhood regions. The major one of these was the Component "Risk reduction in South-East Europe through support to FMD control in West Eurasia" and a report on this programme was given by Dr McLaws (**Appendix 19**). The other two components were reported by Dr Ryan (**Appendix 20**) - "Activities to reduce FMD risk in the South and East Mediterranean countries" and "FMD surveillance in the African proximity". The latter being an action agreed at the 38th and 39th General Sessions of the EuFMD, with the aim of creating an information base for East and Southern Mediterranean countries likely to be first affected by movements of FMD through trade or informal channels from sub-Saharan Africa.

The major achievements of the programme are given below (from **Appendix 14**).

Pillar II – activities in the European neighbourhood to reduce the threat of FMD incursions into member states

Achievements since the 39th General Session, under the EuFMD/EC agreement:

7. Risk reduction in South-East Europe through support to FMD control in West Eurasia

- Establishment of the West Eurasia Roadmap as a regular platform for regional risk assessment, information sharing, Roadmap progress review, and better co-ordination of assistance and prevention measures, in support of regional and global GfTADS FMD control strategies;
- Progressive Control Pathway (PCP) based national prevention and control measures in place in Georgia, Armenia and Azerbaijan, with full handover to national responsibilities of vaccination programme maintenance in 2013;
- Significant progress in Iran, with a PCP based national FMD control strategy developed, improved management capacity in the borders with Turkey, and full participation in regional efforts through establishing capacity for local FMDV typing for early warning, and progress towards a national animal movement system;
- Establishment of a program in Thrace for surveillance to assure neighbors of confidence in disease freedom (a first).

8. Activities to reduce FMD risk in the South and East Mediterranean countries

- Introduction into Egypt of a PCP based national strategy development process (partially completed PCP Stage 1), with training of staff to complete the Stage; established capacity for rapid diagnosis of exotic FMDV strains;
- Establishing trained and equipped (kits) diagnostic capacity for SAT2 and other serotypes in NRLs in countries bordering to Egypt and Libya in mid-east and North Africa, within two months of SAT2 diagnosis, working through REMESA in North Africa.

9. FMD surveillance in the African proximity

- Establishment of FMD laboratory networks for sharing of FMD laboratory surveillance information and expertise, under the FAO led regional laboratory networks, in Eastern Africa (*EARLN-FMD*) and West/Central Africa (*Resolab-FMD*). These did not exist before 2010 and now receive support for surveillance from others (e.g. US IDENTIFY programme for early detection).

EuFMD actions in the European neighbourhood: viewpoints of member countries and neighbours

Statements were given by Dr Irfan Erol, Director General, GDFC Turkey (**Appendix 21**), Dr Nadav Galon, CVO) Israel (**Appendix 22**), Dr Tamilla Aliyeva, Azerbaijan (**Appendix 23**) and Dr Angot, CVO-France.

Dr Erol indicated that **Turke**y considered the West Eurasia Roadmap to have made good progress even though the challenges faced by Turkey, and others, to control FMD were enormous. The Roadmap had started only in 2008 but had brought countries together under a common vision, and as a result there was

- better awareness of the FMD risks;
- identification of "new epidemic events" at an earlier point;
- better capacity for national FMD diagnosis and epidemiology;
- good platform for co-ordination of projects and technical support carried out by EUFMD, FAO and others;
- development of the process and guidance for PCP assessment and review of the progress;
- increasing national use of the PCP as tool in identification of gaps and for planning FMD control.

However, there are some gaps where regional as well as national attention is essential. Turkey would like to note:

- earlier warning of FMD through more attentive reference laboratory services – the regional lab network (WELNET) must be supported in the next two years;
- each country must have expertise in epidemiology and disease control programme development, and further training, such as the PEPC courses, must continue for the region;
- international support to countries to improve their PCP progress and FMD management, improving communication and co-ordination. Turkey was willing to host such support.

Dr Galon, **Israel**, illustrated the challenge to Israel, which has some of the highest yielding dairy farms in the world. It has however a complex position with most FMD outbreaks associated with the northern region and with the international borders, so mixed strains come from West Eurasia virus pool. In 2012 and 2013 FMD in the neighbouring Gaza Strip appeared to have come from the south, with SAT2 and now type A, whereas type O predominates in Israel in the past. This means that vaccination programmes are more complex with potentially four serotypes and multiple strains covering African and Middle-East/West Eurasia viruses. Faced with the challenges, Israel would like more support from EuFMD for On-site training(Israel, Gaza Strip and West Bank, neighbouring countries) on clinical signs and sampling, lab skills, Active surveillance including risk based and hot spots" - Rafah, northern border.
He considered there would be increased efficiency in the training being organized by a 3rd party involvement, such as EuFMD, helping communication and bridging political difficulties. The issue of vaccine banks and funding for preventive and emergency actions was a substantial topic and an international platform enabling regular meetings could assist with the dialog needed. He thanked EuFMD/FAO for the recent mission and training provided.

Dr Aliyeva, **Azerbaijan**, thanked the EuFMD for the support given and the EC for financial support over the past four years, which had helped to achieve a regional coordinated to FMD prevention and control in the Trans Caucasus. This had been fundamental for TCC countries and the three countries had been able to meet regularly for close coordination and cooperation which were critical for progress. Azerbaijan was concerned that without supervision and support from EC/EuFMD, these achievements could be lost, including loss of political support for prevention and control.
Azerbaijan intended to become a member of the EuFMD, and was committed to national FMD control, but asked for the following to be supported to continue by EuFMD:

- Share information between neighbouring countries (using regional database developed under the EuFMD project);
- Financial support for FMD surveillance (field survey and diagnostic equipment, reagents);
- Assistance in design and analysis of FMD surveillance, for monitoring national prevention programmes;
- Assistance in the development and implementation of national and regional risk-based FMD control strategies;
- Assistance in vaccine selection;
- Organisation of regional simulation exercises;
- Assistance for socio-economic impact analysis;
- Trainings for improvement of professional skill both for laboratory specialists, and for epidemiologists (PEPC).

Relating to North Africa, Dr Angot mentioned the needs of the **REMESA** countries differed widely, and that the next REMESA meeting planned in Portugal in June would have on the Agenda an item relating to the request to EuFMD for technical support.

The discussion on the above is reported under Item 8, Pillar 2 work programme.

Item 8. Strategic Plan and Work programme

Documents provided: The EuFMD Four Year Strategic Plan and 24 month Work programme (Item 8.1, ***Appendix 24****)*

The Chairman introduced the proposed Strategic Plan, explaining that it had been developed over the past year by the EuFMD Executive Committee. Immediately following the launch of the FAO/OIE Global FMD Control Strategy in Bangkok in June 2012, work began to identify the elements where EuFMD could most effectively place its efforts in the European region while remaining consistent and supportive to the Global Strategy and its likely implementation through GfTADS. The Session of the Executive Committee held in October 2012 had been devoted to this topic and led to identification of three major sets of actions which have the common aim of reducing the FMD risk and consequence to Member States. The "Three Pillars" approach arose from this Session and was further developed and discussed at the Executive Committee meeting held in February 2013 in Crete, leading to the Strategic Plan proposed for adoption at the current Session. In line with the Constitution and Rules of Procedure, the Executive must also propose a work programme for the biennium that indicates how to implement the Strategic Plan and this is also outlined in the paper provided.
He further explained that the activities in the 24 month Work Programme that should take place with non-member countries (that is, parts of Pillar 2 and Pillar 3) where the activities relate to FMD management in those non-Member States, would be agreed in advance with FAO and OIE using the GfTADS calendar and modalities according to the principles indicated in the understandings reached with FAO and OIE (Item 13).
The current financing agreement with the EC would end in September 2013 and preparation for a new agreement has been undertaken by the Executive working closely with the EC. The Secretariat had developed the work programme based on the assumption of the same level of continuation of funding but with priorities redefined to ensure greater attention and support to Pillar 1 actions. The Pillar 2 actions would receive reduced share of the funding, mainly through omitting direct support to vaccination in the Trans-Caucasus. The reduced funding for Pillar 2 would not mean fewer activities and the call for supportive response to the situation in the Southern Mediterranean cannot be ignored. Strategic use of the support will be essential, working with willing partners who are also showing evidence of their own commitment.

The proposed Work Programme under Pillar 1 was presented by Dr Torres, EuFMD (**Appendix 25**) and for Pillar 2 and 3 by the Secretary (**Appendix 26** and **27**).

Pillar 1 Work programme

Dr Torres outlined the proposed work programme in the six actions identified as priorities by the Executive Committee under Pillar 1. Four of these actions have a training component. Furthermore, some of the training may also be relevant to Pillar 2 "neighbourhood" countries and therefore a "menu" of training will be developed based on a questionnaire survey conducted after the 40th General Session, as a first step. The use of online training to enhance the field training is being explored and is likely to open a new opportunity for ensuring participants can receive pre- and post-course exercises. These exercises may include "proficiency testing" and further development of the trainee network that will assist "trainees to become national trainers".
Pillar 1 also involves the THRACE initiative, aimed at maintaining confidence in FMD freedom through risk based surveillance. The Risk Based Surveillance (RBS) experience may be relevant to extend in future years to other high risk common borders. Relating to the Balkan region plus Moldova, the first step would be a co-ordination meeting organised by the incoming Executive Committee. The support that could be provided would include assistance with organising a simulation exercise, support to contingency planning and required laboratory services, as decided at the onset.
The Research Fund, to be managed by the STC with the Secretariat, would function with procedures agreed with the Executive Committee and EC. The Emergency Response Capacity of the EuFMD, which comprises the technical capacity of the Secretariat and its network of experts, rapid procurement and supply of

materials including vaccines which will be maintained ready for action. In this component, although emergencies cannot be predicted, they can be planned for, and further work will take place on the co-ordination procedures. The need for European national antigen reserves and access in emergencies and contingency planning for emergency vaccination will be assessed in the training survey.

Discussion

Interest was expressed by members in the programme and supportive comments given. Questions related to the e-learning initiative were raised and this encouraged a demonstration of the initiative to CVOs (which was given at the end of the Session on the 24th April). The profile of trainees in the modelling courses was clarified and the survey would help define the interest and profile proposed by MS. It had, so far, followed the "intelligent customer" approach advised by the Executive in 2012. In-country training to establish modelling linked to GIS/information systems may be offered but the cost of this would impact upon the "training budget allocation" for the country. Language versions for training were mentioned. So far, development is in English but demand (and support) for other versions would be considered. Some countries (e.g. Libya) had already translated training into Arabic for their own use, a potential gain for the neighbourhood.

Conclusions

The Chairman thanked the MS for comments and there being no objections to the programme, thanked the Session for its endorsement.
Relating to training, the initial step would be the training survey in May 2013. He encouraged the e-learning initiative and a report on this to the next Executive and suggested the Executive should also consider if a "Training Advisory Group" from the MS might be formed given the ideas and suggestions received during the Session.
On the other elements, he concluded that the:

- Emergency fund will be retained and the budget for routine actions will be set in such a way as to retain an emergency fund;
- THRACE initiative must proceed and the parties would meet separately during the General Session to initiate the actions;
- West Balkan emergency preparedness network is important and the new Executive member from that region had a particular responsibility to lead this;
- Research Fund will be important to retain and to use strategically for outcomes of practical value to the MS, some priorities had been identified by the STC in earlier Item.

Pillar 2 Work programme

Dr Keith Sumption presented the proposed Work programme, which has three major sub-regional components and a component of surveillance in support, all with the overall aim of reducing the FMD risk to European Member States through progressive control in the neighbourhood countries.

1. South-East Europe (West Eurasia);
2. South-East Mediterranean;
3. North Africa (REMESA);
4. Surveillance in support.

The programme of activities is shown in the Work plan circulated in the papers of the meeting. It had been costed on the assumption of the type of technical support usually requested from the countries at certain stages of the PCP and which require some regional co-ordination with countries concerned and with GfTADS.

Component 2.1 South-East Europe: promote better management in Turkey and neighbours

The special position of Turkey, as an infected Member State with borders with six non-free countries, is given attention in this component. The proposed programme will support:

- collation, analysis and application of epidemiological data, including spatial data, from the area;
- training in the practical application of epidemiology to control FMD and advance along the FAO/OIE Progressive Control Pathway (PCP);
- engagement with national veterinary services in Turkey and its neighbours to support them in the detection, management, and control of FMD and in the identification of circulating viruses.

This also includes secretarial and coordination support for the West Eurasia roadmap for progressive control of FMD, in coordination with FAO and OIE, and includes developing specific country projects in line with the PCP, designed to improve national capacity to manage and control FMD and assist progress in cooperation with regionally coordinated GF-TADs programs and roadmaps.

Component 2.2 South-East Mediterranean: support better management in the neighbourhood of Cyprus and Israel

The work programme includes holding workshops and training sessions for neighbour countries of Cyprus and Israel to support laboratory diagnosis, contingency planning and vaccination strategy development; support to develop laboratory capacity in those countries; regional coordination of FMD control strategies, and if required by the situation, includes developing specific country projects in line with the PCP designed to improve national capacity to manage and control FMD and assist progress in cooperation with regionally coordinated GF-TADs programs and roadmaps.

Component 2.3 North Africa: technical support to REMESA actions.

This includes actions conducted at the request of those EuFMD Members participating in REMESA and other associated actions in Mediterranean countries of North Africa which pose a risk of FMD virus incursion into the REMESA area.

Component 2.4 Supporting surveillance to provide information needed by risk managers in the European neighbourhood

This includes a continuation from the previous programme of support for existing FAO or joint FAO/OIE surveillance networks (RESOLAB in West Africa, EARLN in East Africa, WELNET in West Eurasia, and those under REMESA), where such actions provide information to support the veterinary services in the neighbourhood (early warning and vaccine selection).

Discussion

The representative of Armenia thanked the EuFMD and EC for the support provided to the TransCaucasus and to the West Eurasia Roadmap, which enabled extremely valuable co-ordination meetings with neighbouring countries of Turkey and Iran.

The representative of Georgia supported this comment and indicated their strong support for the programme. He requested that regional meetings for planning control measures be supported.

Relating to West Eurasia, the EC indicated that the Roadmap is important for the region and mechanisms must be found for its continuation, but in the current situation the priority should be to support Turkey as a Member State and the Roadmap Progress meetings should be funded by other sources than the EC Trust Fund. Dr Lubroth, for FAO, indicated that he was confident that funding could be found by FAO to support the Roadmap to continue and to ensure the 2014 meeting, and would work with OIE to ensure this.

The representative of Turkey welcomed the indication of support and indicated willingness to enter into more detailed planning of activities with EuFMD, and recalled the need for support for early warning.

Conclusions

The Chairman summarized, after comments received:

- On Component 2.1 West Eurasia: the emphasis would be placed on ensuring information management for FMD decision making, in particular to assist Turkey ad Georgia as Member States. Other Roadmap support would be on the Agenda for the next Executive and needs to be solved with GfTADS;
- On 2.2 South-East Mediterranean: a specific proposal would be formulated, and Agenda and timetable for co-ordination meetings established;
- On 2.3 REMESA countries: the Executive would respond to a proposal from REMESA following their next meeting;
- On 2.4 surveillance networks: these have generated important information for risk management in Europe and the immediately affected countries in the neighbourhood, so should continue to be supported.

Pillar 3 Work Programme: Promote the global strategy of progressive control of FMD

The programme proposed had three components, with the third of these including the support for international reference laboratories services provided by Pirbright (WRL for FMD Contract).

Component 3.1 Support FAO FMD Unit in collating information for review of progress of regional programmes on FMD control

This includes collation, analysis and dissemination of relevant information on regional FMD control programmes worldwide; support for workshops to coordinate this process and other associated actions. The proposal was to support this with an EuFMD Professional officer under the Short Term Professional (STP) programmes (seconded from Member States).

Component 3.2 Technical support to develop the EuFMD/OIE/FAO FMD progressive control pathway (PCP) methods and guidelines

This includes the on-going development of the PCP, providing training in the application of the PCP at national and regional level and for the international agencies; supporting the development of associated tools and activities to integrate relevant fields with PCP applications; support for the development of regional PCP roadmaps. The work plan for PCP development would be jointly agreed with FAO and OIE, and costs in this component relate to the provision of expertise while the cost of any missions and participants in training would be found by the FAO projects/funding agency.

Component 3.3 Support the global system for improved FMD reference lab services (World Reference Laboratory Contract, supporting FAO/OIE Strategy and Gf-TADs)

This includes supporting the FAO FMD World Reference Laboratory to provide services to the European neighbourhood and globally, including diagnostic service, vaccine matching, molecular epidemiological analysis of worldwide and regional FMD patterns. The work programme may include support for the OIE/FAO network of reference centres, as EuFMD had in the past. It was likely that support for the full proposal indicated by Dr Metwally could not be found from the EC/EuFMD programme without impact on the rest of the programme and the balance between the Pillars would be discussed after the extent/duration of the funding agreement was known.

Conclusions

The Chairman summarised his position as follows:

- On Component 3.1: this activity will benefit the MS as well as contributing to the Global effort, through support to information on risk management actions being undertaken in FMD affected countries, and he asked this be supported;
- On 3.2 the PCP: as it had been developed by the EuFMD with FAO and applied in EuFMD programmes since 2008, remained an important responsibility for the Commission to develop in

ways that will benefit the Member States and the neighbourhood. The work in Component 3.2 should be a contribution to the Global Strategy of FAO and OIE. This role would therefore be indicated in the agreements to be concluded with FAO and the OIE;

- On 3.3 the support to the WRL: had been agreed under the previous Sessions as important and should be continued, subject to EC agreement. However, the Global FMD Laboratory network proposal could not be concluded at this Session until receipt of the proposal from FAO/OIE, with a view to a decision taken at the next Executive Committee Session on funding for Pirbright in 2014-2015.

He asked if the Session agreed with his conclusions, and received positive indications. The Work programme was thus endorsed.

Item 9. Report on the status of FMD antigen and vaccine banks in the European Neighbourhood

The Report was presented by Dimitrios Dilaveris, EuFMD STP officer (**Appendix 28**) and had been undertaken in fulfilment of the Function IV.7 in the EuFMD Constitution which requires that the Commission keeps a record of the vaccine and antigen stocks available in the Member States in case of need for co-ordination of an emergency response by MS or others. The survey was sent to 47 countries, with 31 replies of which 25 from the MS. Nine countries indicated they held antigen or formulated vaccine and three of these were non-MS. A further two countries are known to hold banks but did not reply in time. Of those that reported, ALL high priority strains identified by the WRL in the 85th Executive Committee meeting report were included in one or more banks, including five which hold SAT2 Saudi Arabia. In total, about 65 million doses are held, which is a reduction compared to 2011, even though a new bank had been established. The investments in antigen banks in the region remain therefore significant. Given the usual five-year turn over between replacement of antigens, it is perhaps surprising to see some older stocks being maintained (A 22 Iraq), although potent type A vaccines can give good cross-protection. Relating to coverage, 80% of doses would appear highly suited to Pool 3, West Eurasia, so this emphasises how MS view this region as pre-eminent risk. The percentage of doses suitable for other pools was between 0 and 20%, although these cannot be viewed as a precise indication as some type A and O in Africa are likely to be covered by potent formulations, but does indicate that a focus on risk from one region may lead to an issue of doses available for strains from other regions.
In conclusion, in an emergency situation Member States may wish to contact other MS or non-MS to procure vaccine for emergency. The modalities need to be kept simple and legal issues solved in advance. The EuFMD Secretariat could assist either as a contact point, or in developing in advance the financial compensation mechanism for those releasing antigens.

The Chairman thanked Dr Dilaveris for his report and work with EuFMD, and proposed that the emergency arrangements for countries willing to release FMD stocks should be on the programme for the Executive for the coming biennium, to avoid a repeat of the difficulties that arose with the SAT2 response.

Item 10. Changes in Membership of the Commission

The Chairman welcomed the official instrument of acceptance of the EuFMD Constitution by Georgia. The letter indicating this had been signed by the Minister of Agriculture and a copy was provided by the national representatives at the 40th General Session. He also welcomed the statements by the representatives of Azerbaijan and Armenia to the Session of their intentions to become members of the Commission and confirmed that membership was an important signal to the European countries of their serious intent to manage the FMD risk in their countries. Membership provides the rationale for committing Commission attention and efforts to supporting their actions, in a similar way as is provided for other Member States. He also took the opportunity to invite Moldova to consider membership, as a country with an important position neighbouring a member state with an important ruminant population (Romania). He asked the Secretariat and incoming Executive to give attention to follow-up with each country mentioned.

Item 11. Financial Report, Budget and membership contributions for the biennium 2014-2015

*Documents provided: 1) Financial Report from FAO on the Income and Expenditure in Trust Funds administered by the Commission (**Appendix 29**); 2) Administrative Budget and Membership Contributions (**Appendix 30**)*

Summary of the Financial Position

The Financial Statements prepared by the Finance Division of FAO, were summarized by Dr Keith Sumption. The funding of the administrative activities of the Secretariat of the EuFMD Commission and of the mandated activities required under the Constitution, for which no other sources of funding are available, is derived from the annual contributions of member countries to Trust Fund MTF/INT/011/MUL, with the Budget and Contributions agreed every two years at the General Session. The administration of the Commission is wholly supported from the members' contributions from MTF/INT/011/MUL. FAO provides office space, lighting and heating, which in the past were a contribution to the Commission but are now charged to the Commission budget. The balance in this Fund was US$532,505 at the close of December 2012, with a total expenditure almost exactly equal to the agreed annual contributions (US$545,986 against agreed contributions of US$ 547,352). However, he asked to keep in mind that with the recruitment of the P3 Animal Health Officer in 2012, made possible by a shift of the WRL Contract from the 011/MUL Fund to the EC Trust Fund, salaries were the principal expenditure and the balance had been achieved only by fact of the block on recruitment of the vacant Clerk position for over ten months. In 2011 the Commission had started the "short term professional officer" scheme, with the funds for supporting living allowances in Rome coming under the Travel Budget line. Actions had been taken to follow-up outstanding contributions and progress had been made, particularly with Serbia.

Relating to program funds, under a separate financial agreement between FAO and the EC, activities on FMD control are financially supported through an eight m€ agreement (current agreement for 48 months from September 2005) which is handled through Trust Fund MTF/INT/003/EEC. The reporting on this Fund is made according to the terms of the agreement, and is summarized in **Appendix 14** in the Report on the EC funded actions. A third TF (004/MUL), for additional contributions by Member States for specific actions, is maintained and has been used in 2012 for the funding of training programme contribution from Australia. This TF could be useful should MS or non-members wish to support certain actions, parallel to the situation of activities supported by the EC.

On the Administrative Budget

The Chairman then guided the discussions through the major questions posed in the paper on the Administrative Budget. During the 85th meeting of the Executive, the financial position and difficult choices to be made had been considered. It was clear that although the balance in the Fund was at a good level, this would be rapidly eroded and be in overdraft before the next Session and the economic climate would present difficulties for asking for greater contributions. The Executive were therefore in favour of the solution proposed that would involve significant cost savings while maintaining core staff. Although a reduction in the balance would be inevitable, there would be sufficient reserve to cope with possible exchange rate fluctuations and contingencies. It would also allow time to find other sources of financing to assist implementing the programme and maintaining core staff.
On the first question, the proposal for an unchanged annual budgetary contribution by the Member States in 2014 and 2015, was unanimously accepted by the Member States, as was the proposal that new Member States could be exempted from requests for contributions in their first calendar year of membership.

It was further agreed that the Executive should review the categories for contributions and given that the contributions had remained the same for six years, he drew attention of the members to the expectation that requests would need to be raised in 2015 for application in 2016-17. Several members indicated they appreciated the early warning of this and asked the Executive to ensure that the rise, if proposed, would be officially notified well in advance of the 41st General Session of the EuFMD (April 2015).

On the question of cost-sharing of administration, the Chairman indicated that the Commission received no funds from the regular programme of FAO and that full time professional positions are funded from the administrative programme and not the EC Trust Fund. Activities with other partners, such as Australia, would be considered on their merits for increasing the overall level of services provided by the Secretariat to members states and could share costs of professional services to ensure these are maintained by the Secretariat.

He also indicated that since FAO administrative rules that apply to the whole of FAO, such as appointing of clerical staff and travel, are set by FAO and impose difficulties for the EuFMD programme, the issues that arose in the past biennium need to be addressed. The FAO Finance Committee paper provided to the Session provided an important review of Article XIV bodies, which clearly indicates that the Commission, as an entirely self-financing body, fulfilled the criteria for recognition within FAO as eligible for greater autonomy in the administration of its programme while remaining in the framework of FAO. Given the tight financial position, the Executive would therefore give attention to supporting the Secretariat in their efforts to streamline administrative procedures and to ensure the timely recruitment of clerical and other staff.

The proposed budget for expenditure from the MTF/INT/011/MUL as in Table 2 of the paper circulated and the contributions as proposed in Table 3 were proposed for adoption and unanimously endorsed.

Item 12. Technical Committees and their functions in the upcoming biennium

Document provided: Technical Committee, ***Appendix 31***

The Chairman asked Dr Gibbens, as the Vice-Chair who had led the discussions with the Standing Technical Committee over the past two years on technical issues, research commissioning and the roles of the Technical Committees, to present the paper on the Special Committee. Dr Gibbens thanked the Standing Technical Committee (STC) for their important contribution over the past two years and particularly David Paton for his leadership. He also thanked Aldo Dekker for his work over the past four years with the Research group and recently with the Special Committee. He indicated that the need for these subcommittees was stronger than ever, given that the work programme of the Commission is larger and wider than before, and the Executive draws upon the seniority and experience of the STC for guidance in technical issues. It however recognises that the complexity of some of these issues requires them to be addressed by experts who have a regular working experience of the particular field. Therefore, for these issues, a wider set of experts are needed to follow the activities implemented under the 3 Pillars – and may take on specific tasks if commissioned. An example is the Biorisk Management Standards, prepared by a working group within the Special Committee – a highly dedicated team and specific for the particular task. Given the above, the solution of having a separate STC and Special Committee had merits, with the latter with revised Terms of Reference that reflect the new Strategic Plan and the need for experts who can follow the progress, review reports, and provide guidance on further development or changes in direction to the STC and Executive.

Discussion

Questions relating to selection and election procedures were raised. In response Dr Gibbens indicated that the most recent Executive Session was in agreement that the future system should include an Open Call procedure and a clear and transparent process. The incoming Executive would need to develop this and consider if changes to the EuFMD Rules of Procedure were needed before the process could be applied at the 41st Session.

Conclusions

1. The Terms of Reference (ToR) for the Standing Technical Committee, and Special Committee for Research and Development of the FMD programme, as proposed by the Executive in Paper GS40/12.1 were endorsed.
2. A transparent process for the identification of experts for the Committees, and Rules of Procedure for their selection and election should be developed by the Executive before the 41st Session in 2015.

Election to the Standing Technical Committee and Special Committee on Research

Dr Gibbens, on behalf of the outgoing Executive Committee, presented a proposal for membership of the Committees. These were elected unanimously, as follows:

Standing Technical Committee

David Paton	United Kingdom
Christianne Bruschke	Netherlands
Preben Willeberg	Denmark
Matthias Kramer	Germany

Special Committee on Research and Development of the FMD Programme

Dr Sumption presented the list of proposed members (table below), indicating the expertise that was considered relevant to the functions of the Special Committee. The representatives of the three FAO Reference Centres for FMD that are within the EuFMD Member States were proposed as below, as *ex-officio* members. The list was endorsed by the Session without further proposals.
Representatives of the three FAO Reference Centres for FMD which are located in the EuFMD Member States are as follows: Kris de Clercq (FAO FMD Reference Centre, VAR), Emiliana Brocchi (FAO FMD Reference Centre, IZSLER) and Jef Hammond (FAO-WRL FMD, Pirbright).

	Expertise	Pillar/ SubGroup
Bernd Haas (Ger)	FMD biorisk management, FMD lab services, vaccine evaluation	Group 1: European MS
Aldo Dekker (NL)	FMD research, vaccine evaluation	Group 1: European MS
Tsviatko Alexandrov (BG)	Contingency planning, wildlife surveillance	Group 1: European MS
Kate Sharp (UK)	Surveillance, risk management	Group 1: European MS
Sten Mortensen (DK)	Crisis management, contingency planning; epidemiology PhD	Group 1: European MS
Labib Bakkali (Fr)	FMD surveillance in REMESA, RESOLAB, European neighbourhood risk	Group 2: European neighbourhood risk
Giancarlo Ferrari (IT)	FMD surveillance and epidemiology, Progressive Control Pathway (PCP) expert	Group 2: Epidemiology and surveillance -West Eurasia, Mid-East, PCP progress
Michel Bellaiche (Is)	FMD surveillance and management, Israel/Mid-East	Group 2: European neighbourhood risk
Naci Bulut (TUR)	FMD surveillance in West Eurasia, vaccine quality and production	Group 2: European neighbourhood risk
Gregorio Torres (SP)	Epidemiology, surveillance systems, REMESA Mid-East	Group 2: European neighbourhood risk
Jean Francois Valarcher (SWE)	FMD virology, vaccine QA, surveillance, epidemiology, global	Group 3: surveillance and monitoring progress
Ron Bergevoet (NL)	Veterinary economist/FMD	Group 3: surveillance and monitoring progress
Katharina Stark (Swi)	Veterinary epidemiology, surveillance, management; FMD field research wide international experience	Group 3: global issues/ PCP progress
Stephan Zientara (Fr)	Epidemiology, surveillance systems, Europe/Africa/REMESA/Wes Eurasia	Group 3: surveillance and monitoring progress
Don King (UK)	Global FMD surveillance, diagnostics	Group 3: surveillance and monitoring progress

Item 13. Constitutional and legal matters

Documents distributed: 1) Review of the Article XIV bodies undertaken with a view to greater autonomy (**Appendix 32**); 2) On the understanding to be reached between the EuFMD Commission with FAO (**Appendix 33)** and with the OIE (**Appendix 34**)

The Chairman guided the Session through the work that had taken place to develop a formal understanding with FAO and OIE on issues relating to mainly to the scope and implementation of the EuFMD activities where they occur outside of the territory of the Member States. There being no geographical restriction on EuFMD activities in the Constitution, a few issues had arisen where activities had taken place as a result of Session decisions, and clarification of how EuFMD activities can be co-ordinated with the relevant regional and Global GfTADS actions was needed.

Relating to FAO, the recent reviews by FAO Governing Bodies of the position of the Article XIV Commissions within the framework of FAO had been undertaken with a view to reducing the bureaucratic obstacles to effective function, and the paper (**Appendix 32**) once adopted by FAO Conference in June 2013 should assist with several administrative difficulties, including reporting lines. These reviews made clear that the programme of the Commission is for the MS to decide at the regular Sessions and through the Executive; the administrative rules remain those of FAO. In areas such as recruitment of clerical staff there remained difficulties, and areas such as GfTADS, which are joint agreements between FAO and OIE, a common understanding is needed, since the programme is for the EuFMD members to decide but co-ordination is important.
On the FAO side, an exchange of letters with the Assistant Director General (ADG) of the Agriculture and Consumer Protection Department will occur after the FAO Conference and adoption of the FAO position on the autonomy of Article XIV bodies.

On the agreement with the OIE, the principles included in the draft agreement (**Appendix 34**) can be considered the principles that guide the Executive until an agreement is formally reached. There exists an agreement on co-operation between FAO and OIE, and the agreement on working arrangements between the EuFMD and OIE may be considered under this over-arching agreement.

In the discussion, the OIE indicated its appreciation of the expertise of the EuFMD and welcomed the opportunity to reach an agreement that would enable fruitful future co-operation. The OIE will open an office in Kazakhstan, and it will help to reach agreement with the EuFMD in areas where mutual activity could be advantageous.

Item 14. Elections

Election of the Executive Committee and Subcommittees

Ms Marta Pardo, from the Legal Office of FAO, presided over the Elections of the new Executive Committee. The Secretary reminded the Member States and candidates for election of the need to ensure that candidates accepted the serious responsibilities of the Executive Committee. Members are elected to represent the entire group, and as individuals, not states. Sessions of the Executive must have a quorum (5 of the 8) for decisions to be valid, and the use of alternates in place of the elected member should only occur in exceptional circumstances, since the member is elected individually by all Member States, not their alternate. The workload of the Chairpersons has been heavy in the past four years and it will help the quality of the Sessions to have a consistent presence of the elected members. He reminded the candidates that it is the Executive, not the Secretariat, who have the official duty to report in two years' time on the progress made and asked the members to ensure they keep space in their diaries to ensure participation in the Sessions, at the least, and to assist the Chair in the other work that is required.

Nominations for the position of Chairman and two Vice-Chairpersons were first called for, thereafter for the five other members of the Executive Committee.

The following were elected:

Position	**Elected**	**Proposed by:**	**Seconded by:**
Chairman	U.Herzog (Austria)	United Kingdom	Norway
Vice-Chairman	N Gibbens (UK)	Italy	Germany
Vice-Chairman	P Naasens (Belgium)	Sweden	Malta
Member	D. Iliev (Bulgaria)	Spain	Romania
Member	N Pakdil (Turkey)	Austria	Hungary
Member	JL Angot (France)	Belgium	Norway
Member	J Milius (Lithuania)	Germany	Poland
Member	Z. Novakovic (Serbia)	Lithuania	Belgium

There were no further proposals of names. The Executive Committee was unanimously accepted, and the elected members stood to receive the acclamation of the delegates, and to indicate their willingness to take on their responsibilities. Dr Herzog, having been re-elected, thanked the members for their confidence in him and in the new Executive to undertake the responsibilities placed upon them.

Item 15. Any Other business

The Chairman indicated that Croatia had provided a letter of invitation to host the 2014 Open Session in Dubrovnik. The Session indicated it welcomed the proposal to hold the Session in a new Member State of the EU and in a historic, attractive and accessible city.

Reading of the report

The Secretariat presented the draft final report, which was endorsed subject to the inclusion of the corrections and changes proposed during the reading by the Member States, EC and OIE, to be included in the version to be circulated for comments.

Closing ceremony

The Chairman, Dr Herzog, thanked the participants for their support and interest in the programme of the Commission, the EC for their support to the activities and active participation at all levels, and thanked the Secretariat and FAO for the organization and arrangements. He paid tribute to the members of the Executive who had served in the outgoing Executive for their generous contribution of time and energy, and in particular thanked Dr Lucio Carbajo Goni, Spain, Dr Leif Denneberg, Sweden, and Dr Spiros Doudounakis, Greece. Finally, he thanked the Secretariat, and especially Nadia Rumich, Cecile Carraz, Manuela Zingales and Leonardo Leon, for their perfect work over many months to prepare the Session, while maintaining the main tasks of the Commission in supporting FMD control continued at field level.

Day 3
24th of April 2011

Time	Item		Presenter
9:00	9	**Report on the status of FMD Antigen and vaccine banks in the European Neighbourhood**	
	9.1	Vaccine/Antigen Banks	D. Dilaveris
	10	**Changes in Membership of the Commission** *(for information)*	
	11	Financial Report, Budget and membership contributions for the biennium 2014-2015 *(for decision)*	K. Sumption
10:15		*Coffee break*	
10:45	12	**Technical Committees and their functions in the upcoming biennium - Role, Terms of Reference** *(for decision)*	K. Sumption
	13	**Constitutional and legal matters, agreements for ratification** *(for decision)* in the presence of Legal Office • Legal Matters arising • Paper on the Draft Agreement with the OIE • Paper on the Memo of Understanding with FAO	
	14	**Election of the Executive Committee** *(for decision)*	
13:00		*Lunch break*	
14:00	15	Any other issues	
		Reading of the draft report	
15:00		Closure of the meeting	

EXECUTIVE COMMITTTEE AS ELECTED AT THE 39TH GENERAL SESSION

Position	Elected	Proposed by:	Seconded by:
Chairman	U. Herzog (Austria)	United Kingdom	Estonia
Vice-Chairman	N. Gibbens (UK)	Sweden	Netherlands
Vice-Chairman	L. Denneberg (Sweden)	Germany	Finland
Member	Z. Micovic (Serbia)	Croatia	United Kingdom
Member	N. Pakdil (Turkey)	Austria	Bulgaria
Member	S. Doudonakis (Greece)	Bulgaria	Turkey
Member	R. Chetan (Romania)	Greece	Germany
Member	L. Carbajo Goñi (Spain)	Portugal	Austria

THE STANDING TECHNICAL COMMITTEE AS ELECTED AT THE 39TH GENERAL SESSION

David Paton	United Kingdom
Christianne Bruschke	The Netherlands
Preben Willeberg	Denmark
Matthias Kramer	Germany

ROME, ITALY 22-24 APRIL 2013



Agenda

40TH GENERAL SESSION OF THE EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE (EuFMD)

Italian Ministry of Health
Via Ribotta, 5
Rome, Italy

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

Day 1
22nd of April 2013

Time	Item		Presenter
10:30		Registration	
11:00	**1**	**Opening of the Session** • Italy • FAO • EuFMD	
	1.1	Adoption of the Agenda *(for decision)*	U. Herzog
	1.2	Introduction to EuFMD (video)	K. Sumption
11:30	**2**	Global Foot and Mouth Disease (FMD) surveillance report *(for information)*	J. Hammond
12:00	**3**	**FMD management in the European Neighbourhood** International co-ordination and capacity building after conflict *(for information)*	REMESA
12:45		*Lunch break*	
	4	**Standing Technical Committee (STC)**	
14:00	4.1	Report *(for information)*	D. Paton
14:20	4.2	Update to the "Minimum Standards for FMD laboratories" *(for adoption)*	B. Haas
	5	**Technical items with policy importance for Member States (STC items)**	
14:40	5.1	**STC 1** FMD and wild boar: Implications for FMD management of recent findings *(for information)*	S. Khomenko
15:10	5.2	**STC 2** Socio-economics and decision making on FMD control policies *(for information)*	R. Bergevoet
15:40		*Coffee break*	
16:00	5.3	**STC 3** The implications of the decline in FMD research funding in Europe *(for information)*	D. Paton
16:30	5.4	**STC 4** The next ten years – a changing environment for FMD epidemic management (future perspectives paper; panel discussion) *(for information)*	C. Bruschke; Panel
17:00		Closure of the plenary Side meeting: T.H.R.A.C.E initiative	GR/BG/TUR/ EuFMD/EC
18:00		Departure for social event **COCKTAIL** **Villa Malta** – Via di Porta Pinciana, 1 *Kindly offered by MSD*	

Day 2
23rd of April 2013

Time	Item		Presenter
9:00	**7**	**Report of the Executive Committee on the actions since the 39TH Session**	
	7.1	EuFMD Chairman's Report and Introduction to the New Strategic Plan	U. Herzog
9:20	**7-8**	**Report on Pillar 1 activities**	E. Ryan
10:00	1	Capacity Building for FMD risk management – position of Australia	S. Turner
10:20		Discussion	
10:30		*Coffee break*	
	7-8	**Pillar 1**	
11:00	1	Proposed Work programme	G. Torres
11:30	2	Vaccine banks Network	J. Hammond
11:45		Discussion on the Work programme	
	7-8	**Pillar 2**	
12:15	1	Report on activities • West Eurasia • South-East Mediterranean including Lessons learnt for PCP/FMD management	M. Mclaws E. Ryan
12:45		Discussion	
13:00		*Lunch break*	
14:00	**7-8**	Statements/Viewpoints on future priorities and actions in Pillar 2: • Turkey • Israel • Azerbaijan • REMESA	Representatives
14:45		Proposed Work programme – Pillar 2	K. Sumption
15:15		*Coffee break*	
	6	**Global Strategy**	
15:45	6.1	Follow-up to the launch of the Global Strategy *(for information)*	J. Domenech; S. Metwally
	6.2	Global FMD surveillance – laboratory network	
	8	**Pillar 3**	
16:15	8.1	Workplan	K. Sumption
16:30		Discussion	
17:00		Closure of the plenary	
		EU MS Co-ordination	
19:00		**COCKTAIL** Coffee House at **Palazzo Colonna** – Piazza SS. Apostoli, 66 *Kindly offered by MERIAL*	

Appendix 2

Foot-and-Mouth Disease situation

Food and Agriculture Organization of the United Nations

Monthly Report

February 2013

INFORMATION SOURCES USED:

Databases:

OIE WAHID World Animal Health Information Database

FAO World Reference Laboratory for FMD (WRLFMD)

Other sources:

FAO/EuFMD supported FMD networks

FAO/EuFMD projects and field officers

ACKNOWLEDGEMENT:

Indian Council of Agricultural Research

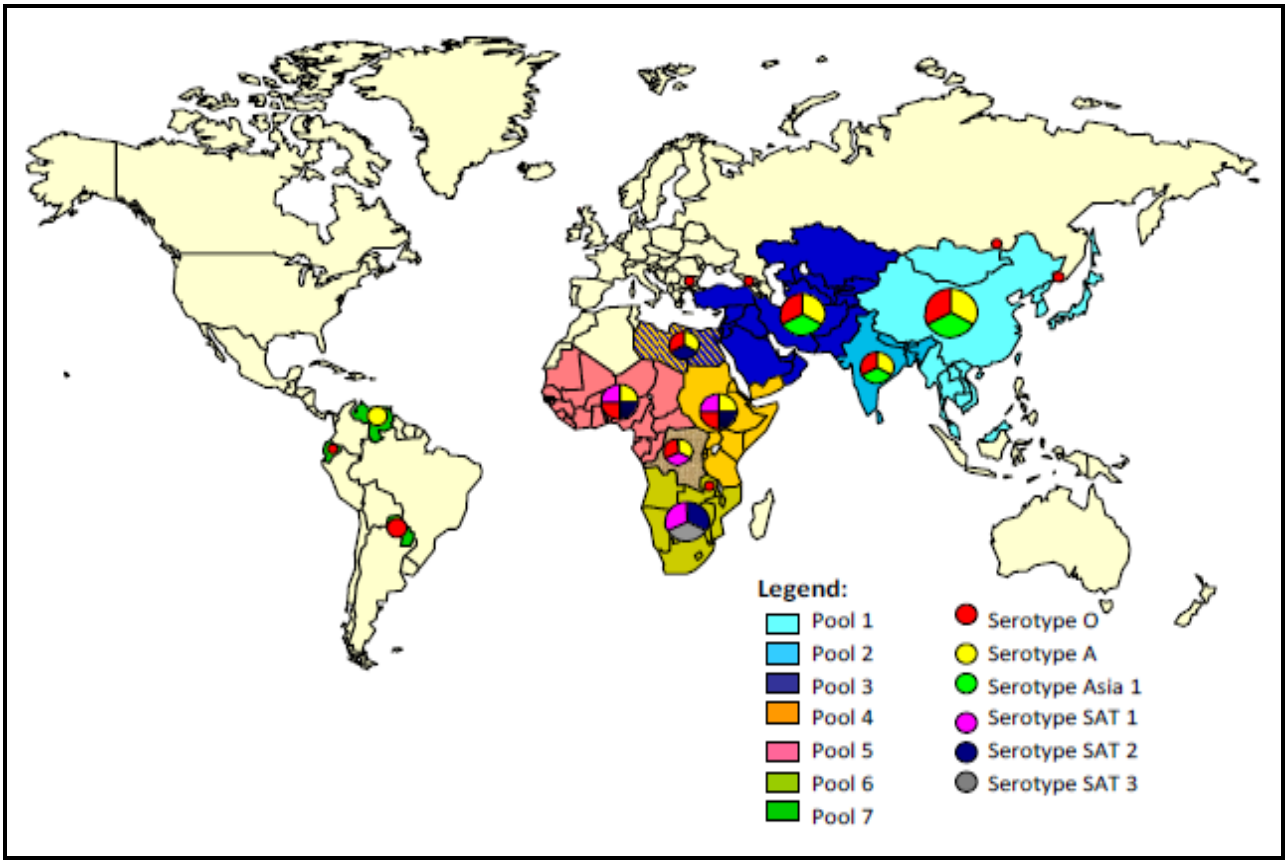
The sources for information are referenced by using superscripts.
The key to the superscripts is on the last page

Please, note that the use of information and boundaries of territories should not be considered to be the view of the U.N. Please, always refer to the OIE for official information on reported outbreaks and country status.

I. GENERAL OVERVIEW

Foot-and-mouth disease (FMD) distribution by Serotype and the seven virus pools, 2010-2013 (Map 1)

Pools represent independently circulating and evolving FMDV genotypes; within the pools, cycles of emergence and spread occur that usually affect multiple countries in the region. In the absence of specific reports, it should be assumed that the serotypes indicated below are continuously circulating in parts of the pool area and would be detected if sufficient surveillance was in place (Table 1).



Map 1: Foot-and-mouth disease virus pools distribution, 2010-2013

Table 1: List of countries representing each virus pool

POOL	REGION/COUNTRIES	SEROTYPES
1	**CENTRAL/EAST ASIA** (Cambodia, China (People's Rep. of), China (Hong Kong, SAR),China (Taiwan Province), Japan, Korea (DPR), Korea (Rep. of), Laos PDR, Malaysia, Mongolia, Myanmar, Russian Federation, Thailand, Viet Nam)	**O, A, Asia 1**
2	**SOUTH ASIA** Bangladesh, Bhutan, India, Nepal, Sri Lanka	**O, A, Asia 1**
3	**WEST EURASIA & MIDDLE EAST** (Afghanistan, Armenia, Azerbaijan, Bahrain, Bulgaria, Egypt, Georgia, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Oman, Pakistan, Palestine Autonomous Territories, Qatar, Saudi Arabia, Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, Uzbekistan)	**O, A, Asia 1**
4	**EASTERN AFRICA** (Burundi, Comoros, Congo D. R., Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Rwanda, Somalia, North Sudan, South Sudan, Tanzania, Uganda, Yemen)	**O, A, SAT 1, SAT 2**
5	**WEST/CENTRAL AFRICA** (Benin , Burkina Faso, Cameroon, Cape Verde, Central Afr. Rep., Chad, Congo D. R., Congo R., Cote d'ívoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea Biss., Guinea, Liberia, Mali, Mauritania, Niger, Nigeria, Sao Tome Principe, Senegal, Sierra Leone, Togo)	**O, A, SAT 1, SAT 2**
6	**SOUTHERN AFRICA** (Angola, Botswana, Congo D. R., Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe)	**{O, A}*, SAT 1, SAT 2, SAT 3**
7	**SOUTH AMERICA** (Ecuador, Paraguay, Venezuela)	**O, A**

* ONLY IN NORTH ZAMBIA AS OVERSPILL FROM POOL 4

Egypt and Libya are indicated as being in multiple pools, since they have evidence of FMDV originating from 2 or more pools in the recent past (4 years).

II. HEADLINE NEWS

POOL 1

***China*[1] –** FMD outbreak in cattle, in Deji Village, Qushui, Lasha, TIBET.

***Viet Nam*[9] –** 3 FMD outbreaks in January 2013, 2 FMD outbreaks in February 2013 were reported.

***Malaysia*[9] –** 1 FMD outbreak was reported in January 2013.

POOL 2

***Nepal*[2] –** FMD serotype O outbreaks in Kathmandu districts were reported in all susceptible species.

***India*[15] –** 25 outbreaks of FMD were reported in February 2013, caused by FMD virus serotypes O (23), and Asia 1 (2)

POOL 3

***Iran*[2]** - During February 2013, 67 FMD outbreaks were reported.

Turkey[2] – In Anatolia region, serotypes O, A and Asia 1 are still circulating.

POOL 4

***Tanzania*[2]** - FMD outbreak confirmed in Ngara District.

POOL 5

Democratic Republic of the Congo[14] – FMD has been continuously reported in Ruzizi plain (South-Kivu).

POOL 6

South Africa[17] **–** the proposed FMD-free zone in South Africa does not fulfill the relevant international requirements as defined in the Terrestrial Animal Health Code of the OIE.

POOL 7

No new events have been reported for this reporting period.

COUNTER

****** 14 MONTHS SINCE LAST OUTBREAK IN SOUTH AMERICA HAS BEEN REPORTED***

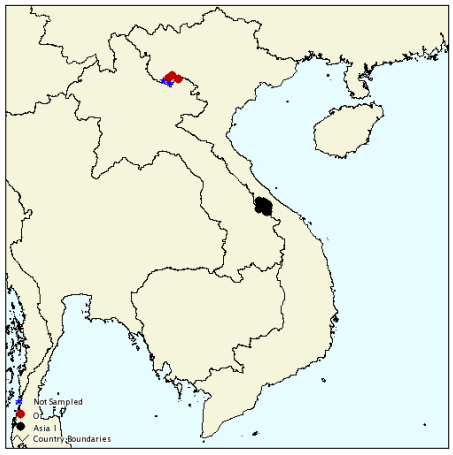
****** 101 MONTHS SINCE LAST C SEROTYPE OUTBREAK HAS BEEN REPORTED***

III. DETAIL POOL ANALYSIS

POOL 1
CENTRAL / EAST ASIA

China[1] **–** Reported FMD outbreak is continuation of the event which started in February 2012 with morbidity rate 35.14%. In response to outbreak, vaccination of susceptible species in several divisions were conducted. FMDV was confirmed by ELISA, RT-PCR and virus isolation at Lanzhou Veterinary Research Institute (National laboratory) (OIE's Reference Laboratory).

Viet Nam[9] **–** 3 FMD outbreaks in January 2013 were caused by serotype O. Samples from outbreaks in February 2013 were not taken and the disease was not confirmed by laboratory tests (Map 2).

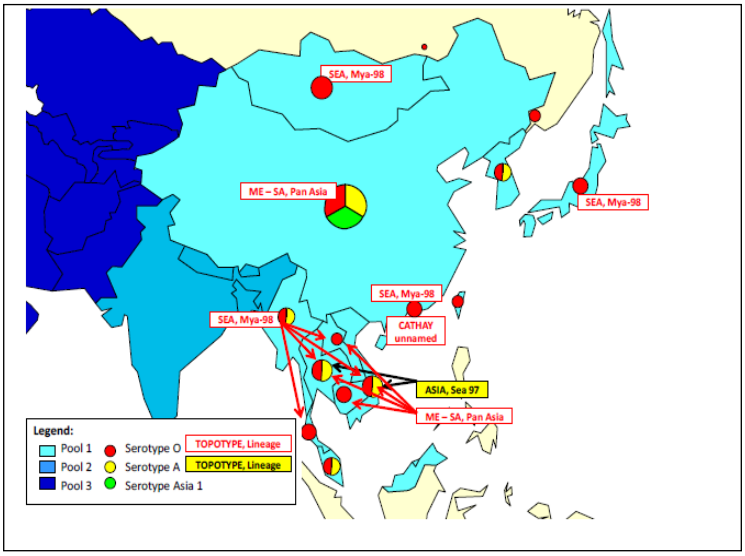


Map 2: FMD outbreaks in Viet Nam

Malaysia[9] **–** 1 FMD outbreak was reported in January 2013 (Map 3). The serotype of involved FMDV was not determined.

Map3: FMD outbreaks in Malaysia

FMD in most central and eastern Asia countries is endemic (Map 4). Brunei and Japan are the only countries in this region with the free FMD status where vaccination is not practiced.



There is a zone covering the provinces of Sabah and Sarawak in Malaysia which is designated as FMD free without vaccination. In China, the main threat comes from O/Mya-98 strain and PanAsia strain. The O/Mya-98 strain mainly affects pigs, although cattle and goat/sheep can also show clinical signs in some field cases. However, the type O PanAsia strain mainly affects cattle.

Map 4: FMD distribution by serotypes 2010 – 2013

Epidemiological analysis indicates that animal movements associated with trade are the main factors for the spread of the FMD and for transmission between provinces in China. Both Mya-98 and PanAsia strains of FMDV sequences from PR China had a close relationship with those sequences from outbreaks in Southeast Asian nations[6]. FMD history in past 2 years is given in Table 2.

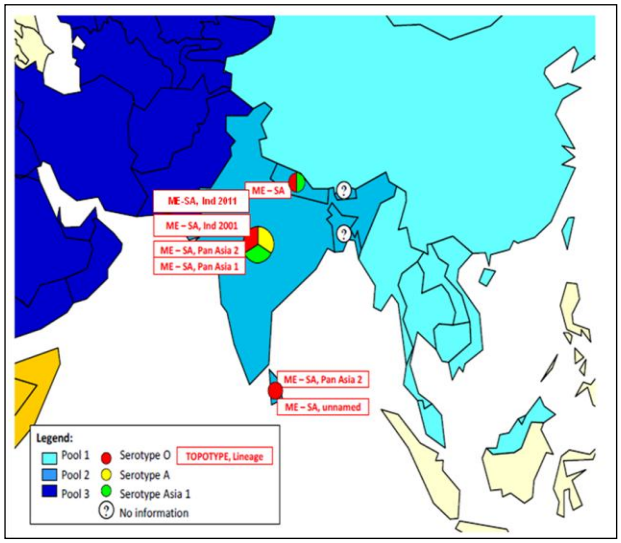
Table 2: Pool 1 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
CAMBODIA, 2011	2011, 2012 – NOT TYPED[1]	OCT 2012/NOT TYPED[1]	DISEASE PRESENT
CHINA (PEOPLE'S REP. OF), 2011, ½ 2012	2011, 2012, 2013 – O[1, 16]	FEB 2013/O[1]	DISEASE PRESENT
CHINA (HONG KONG, SAR) , 2011	2011 – O[1, 5] 2012 – O[3]	NOV 2012/O[3]	DISEASE PRESENT
CHINA (TAIWAN PROVINCE), NO OIE DATA	2011 - 2011 – O[5] 2012 – O[1]	NOV 2012/O[1]	UNKNOWN
JAPAN, 2011	2011, 2012 - NO REPORTED OUTBREAKS[1]	JULY 2010/O[1, 5]	FREE WITHOUT VACCINATION
KOREA (DPR), 2011	2011 – O[1, 5]	MARCH 2011/O[1]	½ 2011-PRESENT 2/2 2011 – NOT REPORTED
KOREA (REP. OF), 2011	2011 – O[1, 5]	APR 2011/O[1]	½ 2011-PRESENT 2/2 2011 – NOT REPORTED
LAOS PDR, NO SUBM. REPORTS	2011, 2012 - O[9]	DEC 2012/O[9]	UNKNOWN
MALAYSIA, 2011, ½ 2012	2011 – O, A[1, 5] 2012 – O, A[1, 5] 2013 – NOT TYPED[9]	JAN 2013/NOT TYPED[9]	FMD FREE ZONE WHERE VACCINATION IS NOT PRACTISED
MONGOLIA, 2011	2012 - O[10]	2012/O[10]	½ 2011 – LIMITED ON ONE OR MORE ZONES, 2/2 2011 -NOT REPORTED
MYANMAR, 2011	2011 – O[1]	FEB2012/O[9]	DISEASE PRESENT
RUSSIAN FEDERATION, 2011	2011 – O[1] 2012 – O[1]	MAR 2012/O[1]	½ 2011 – NOT REPORTED, 2/2 2011 - DISEASE PRESENT
THAILAND, 2011, ½ 2012	2011 – O, A[1, 5] 2012 – O, A[1, 5]	OCT 2012/A, O[1]	DISEASE PRESENT
VIET NAM, 2011	2011 – O[1, 5] 2012 – A, O[5]	NOV 2012/O[5]	DISEASE PRESENT

II P O O L 2
SOUTH ASIA

Nepal[2] – FMD outbreaks, causing severe lesions in pigs, have been continuing to appear in Kathmandu district. FMDV serotype O was confirmed by Ag ELISA.

India[15] **–** During February 2013, 25 outbreaks of FMD were reported: in West Bengal (6), Madhya Pradesh (3), Bihar (2), Kerala (1), Odisha (2), Arunachal Pradesh (3), Assam (2), Manipur (1) and Karnataka (5). These outbreaks were caused by serotypes O (23) and Asia 1 (2), FMD virus. The direct economic loss during the period of outbreaks in West Bengal, Madhya Pradesh, Bihar, Kerala, Gujarat, Odisha, Arunachal Pradesh, Assam, Manipur and Karnataka was ~ 200.000,00 USD (loss of milk, mortality, cost of treatment and loss of draught power).



South Asia is known to be an FMD endemic area but very limited data on serotypes is available (Map 5).

The PD-FMD at Mukteswar (FMD Reference laboratory for South Asia) is active in this region and is requested to provide information on FMD circulation that will assist improved understanding of virus circulation.
FMD history in past 2 years is given in Table 3.

Map 5: FMD distribution by serotypes 2010 – 2013

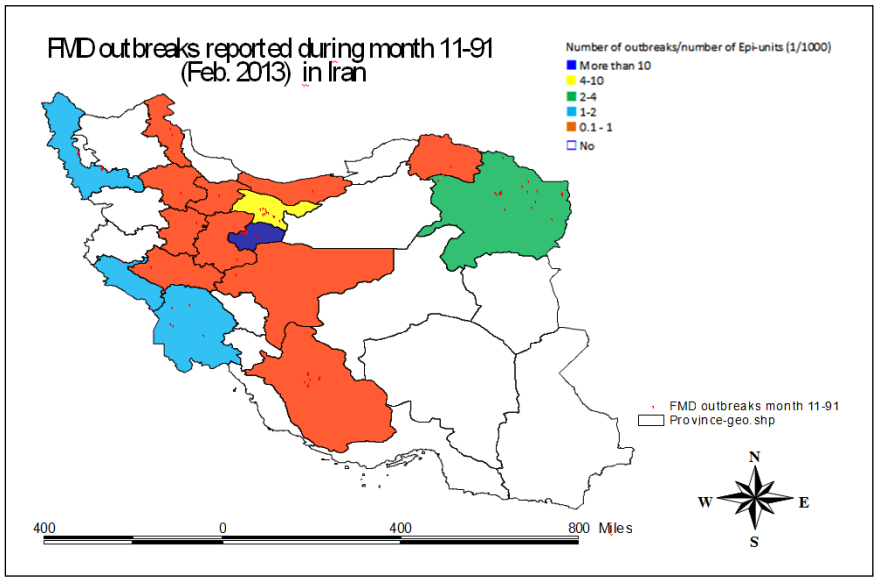
Table 3: Pool 2 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
BANGLADESH, 2011	2011 – O, A, Asia 1[6]	NOT AVAILABLE	½ 2011DISEASE PRESENT, 2/2011-LIMITED TO ONE OR MORE ZONES
BHUTAN, 2011	2011, 2012 – O[5]	NOV 2012/O[5]	DISEASE PRESENT
INDIA, 2011	2011, 2012, 2013 – O, A, Asia 1[1, 15]	FEB 2013/O, Asia 1[3, 15]	LIMITED TO ONE OR MORE ZONES
NEPAL, 2011	2011 – O, A, Asia 1[1, 6] 2012[2]	DEC2012/O[2]	DISEASE PRESENT
SRI LANKA, 2011	2011, 2012 – O[1, 5]	2012/O[5]	½ 2011 - DISEASE PRESENT 2/2011 – NOT REPORTED

POOL 3

WEST EURASIA & MIDDLE EAST

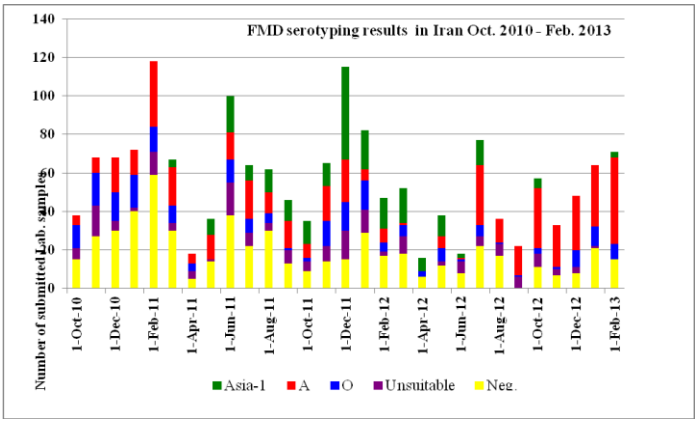
Iran[2] - During February 2013, 67 FMD outbreaks were reported (Map 6, Table 4) with evident dominance of serotype A. Serotyping results are shown in graph 1. Qom province is the major hot point area in the country.



Map 6: FMD outbreaks February 2013

Table 4: FMD outbreaks February 2013

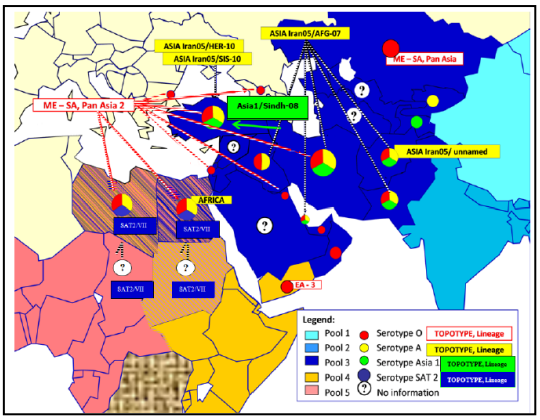
				POSITIVE			
	NO OF SAMPLES	NEGATIVE	UNSUITABLE	TOTAL POSITIVE	A	O	ASIA 1
FEB `13	71	15	0	56	45	8	3



Graph 1: Serotyping results October 2010 – February 2013.

In samples collected during the period October 2012 – January 2013 from Alborz and Neyshabour, serotype A was confirmed, presented by two sublineages, A/ASIA/Iran-05^{SIS-10} and A/ASIA/Iran-05^{AFG-07}. From samples taken in January 2013 in Qom, serotype O was derived, presented by O/ME-SA/PanAsia-2^{FAR-09} and O/ME-SA/PanAsia-2^{ANT-10}.

The both, serotype A and O isolates, were less than 2% divergent from viruses isolated from this region in last 2 years.



Map 7: FMD distribution by serotypes 2010 – 2013

FMD history in past 2 years is given in Table 5 and Map 7.

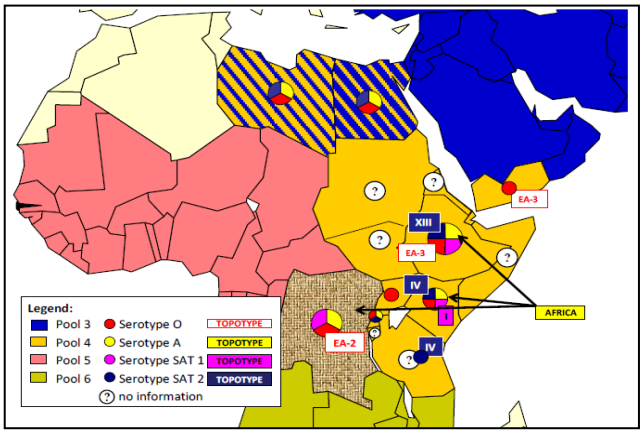
Table 5: Pool 3 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
AFGHANISTAN, 2011	2011 – O, A, Asia 1[1, 5]	DEC 2011[1]	DISEASE PRESENT
ARMENIA, 2011 MONTHLY REPORTS REGULARLY SUBMITTED TO EUFMD	2011, 2012 – NO REPORTED OUTBREAKS[1]	NOT AVAILABLE	NOT REPORTED IN THIS PERIOD
AZERBAIJAN, 2011 MONTHLY REPORTS REGULARLY SUBMITTED TO EUFMD	2011, 2012 – NO REPORTED OUTBREAKS[1]	JUN 2001[1]	NOT REPORTED IN THIS PERIOD
BAHRAIN, 2011	2011 – O, A, Asia 1[5] 2012 – O[5]	MAR 2012/O[5]	LIMITED TO ONE OR MORE ZONES
BULGARIA, 2011, ½ 2012	2011 – O[1, 5]	JUN 2011/O[1]	½ 2011 – DISEASE PRESENT, 2/2 2011, 2012 - NOT REPORTED IN THIS PERIOD
EGYPT, 2011, ½ 2012	2011 – A, O[1, 5] 2012 – O, A, SAT 2[1, 5]	JUN 2012/SAT 2[1]	2011 – NOT REPORTED, 2012 - DISEASE PRESENT
GEORGIA, 2011 MONTHLY REPORTS REGULARLY SUBMITTED TO EUFMD	2011, 2012 – NO REPORTED OUTBREAKS[1]	2002[1]	NOT REPORTED IN THIS PERIOD
IRAN, 2011	2011, 2012, 2013 – O, A, Asia 1[5]	FEB 2013/O[5], A[2], Asia 1[5]	DISEASE PRESENT
IRAQ, 2011	2011 – O,A[1] 2012 – A[5]	2012[5]/A	DISEASE PRESENT
ISRAEL, 2011	2011 – O[1] 2012 – O[5]	MAR 2012/O[5]	DISEASE PRESENT
JORDAN, 2011	2011, 2012 – NO REPORTED OUTBREAKS[1]	2006[1]	NOT REPORTED IN THIS PERIOD
KAZAKHSTAN, 2011	2011 – O, A[1] 2012 – O, A[5]	MAY 2012/O[10]	DISEASE PRESENT
KUWAIT, 2011	2011, 2012 – O[5]	FEB 2012/O[5]	DISEASE PRESENT
KYRGYZSTAN, 2011	2011 – O, A[1]	NOV 2011/O, A[1]	LIMITED TO ONE OR MORE ZONES
LEBANON, 2011	2011, 2012 – NO REPORTED OUTBREAKS[1]	03/2010[1]	NOT REPORTED IN THIS PERIOD
LIBYA, NO SUBM. REPORTS	2011 – O[5] 2012 – O, SAT 2[5]	APR 2012[1, 5]	DISEASE PRESENT
OMAN, 2011	2011 - NO DATA AVAILABLE	DEC 2011[1]	DISEASE PRESENT
PAKISTAN, 2011	2011 – Asia 1, O 2012 – O, A, Asia 1[5, 13]	JUN 2012/O, Asia 1, A[5, 13]	LIMITED TO ONE OR MORE ZONES
AUTONOMOUS TERRITORIES PALESTINE, 2011	2011 – O, A, Asia 1[1] 2012 – SAT 2[1, 5]	APR 2012/SAT 2[5]	LIMETED TO ONE OR MORE ZONES
QATAR, 2011	NO DATA AVAILABLE		½ 2011 – NOT REPORTED, 2/2 2011 DISEASE PRESENT
SAUDI ARABIA, 2011	2012 – O[5]	JULY 2012/O[5]	DISEASE PRESENT
SYRIAN ARAB REPUBLIC, 2011	2011, 2012 – NO REPORTED OUTBREAKS[1]	03/2002[1]	NOT REPORTED IN THIS PERIOD

TAJIKISTAN, 2011	2011 – Asia 1[1]	NOV 2011/Asia 1[1]	½ 2011 – NOT REPORTED, 2/2011 - DISEASE PRESENT
TURKEY, 2011, ½ 2012 **MONTHLY REPORTS REGULARLY SUBMITTED TO EUFMD**	2011 – Asia 1, A, O[5,1] 2012 – Asia 1, A[5], O[1]	DEC 2012/O, A[5], Asia 1[1]	DISEASE PRESENT
TURKMENISTAN **NO SUBM. REPORTS**	NO DATA AVAILABLE		UNKNOWN
UZBEKISTAN **NO SUBM. REPORTS**	NO DATA AVAILABLE		UNKNOWN

POOL 4
EASTERN AFRICA

Tanzania[2] - FMD outbreak confirmed in Ngara District. The outbreak in Tanzania followed FMD in neighbouring Districts of Kibungo (Rwanda) and Muyinga (Burundi).



East Africa is known to be FMD endemic area but with limited available data (Map 8).

FMD history in past 2 years is given in Table 6.

Map 8: FMD distribution by serotypes 2010 – 2013

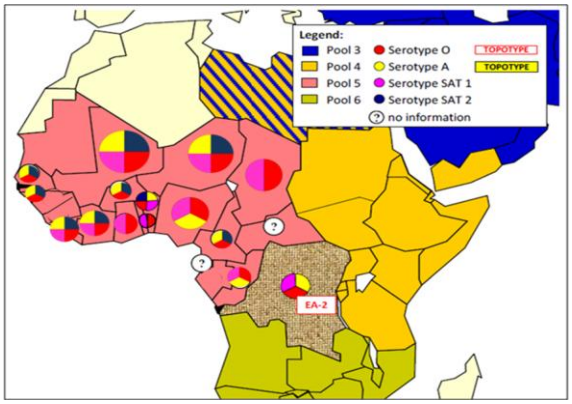
Table 6: Pool 4 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
BURUNDI, 2011	2011 – O, A, SAT 1, SAT 2[7]	2011[7]	UNKNOWN
COMOROS, 2011	2011 - DISEASE SUSPECTED BUT NOT CONFIRMED[1]	2010[1]	SUSPECTED NOT CONFIRMED
CONGO D. R. , 2011	2011, 2012 O, A, SAT 1[7]	2011/2012[7], NO PRECISE DATA	LIMITED TO ONE OR MORE ZONES
DJIBOUTI, 2011	2011 – ABSENT[1]	NOT AVAILABLE	NOT REPORTED IN THIS PERIOD
EGYPT , 2011, ½ 2012	2011 – A, O[1, 5] 2012 – SAT 2[1, 5]	JUN 2012/SAT 2[1]	2011 – NOT REPORTED, 2012 - DISEASE PRESENT
ERITREA, NO SUBM. REPORTS	2011 – O[5]	DEC 2011/O[5]	UNKNOWN
ETHIOPIA, 2011	2011 – A, SAT 1, O[5, 7] 2012 – O[5]	2012/O[5]	DISEASE PRESENT
KENYA, 2011	2011 – O, SAT 1, SAT 2[1, 5] 2012, 2013 – SAT 2, A[7]	JAN 2013/A, SAT2[7]	DISEASE PRESENT
LIBYA , NO SUBM. REPORTS	2011 – O[5] 2012 – O, SAT 2[5,7]	APR 2012[1, 5]	DISEASE PRESENT
RWANDA, NO SUBM. REPORTS	2011 – ABSENT[7] 2012 – NOT TYPED[2]	NOV 2012/NOT TYPED[2]	UNKNOWN
SOMALIA, 2011	2011 – NO DATA AVAILABLE	2011[1]	DISEASE PRESENT
NORTH SUDAN, 2011	2011 – A, O[1]	DEC 2011[1]	DISEASE PRESENT
SOUTH SUDAN, 2011	2011, 2012 – O, SAT 1, SAT 2, A[7]	2011[7]	DISEASE PRESENT

TANZANIA, 2011	2011 – SAT 1(buffalo), SAT 2 (cattle), O[7], SAT3[1, 5] 2012 – A, O, SAT 1, SAT 2[5]	MAY-JULY 2012/A, O, SAT 1, SAT 2[5]	DISEASE PRESENT
UGANDA, 2011	2011 – O, A, SAT 1, SAT 2, SAT3[7, 2, 1] 2012[11]	NOV 2012[11]	DISEASE PRESENT
YEMEN, **NO SUBM. REPORTS**	NO AVAILABLE DATA		

POOL 5
WEST/CENTRAL AFRICA

Democratic Republic of the Congo[14] – The epidemic which started at beginning of November 2012, in Ruzizi plain and around Uvira city, is still continuing. FMD was not confirmed by laboratory tests.



Map 9: FMD distribution by serotypes 2010 – 2013

Foot and mouth disease is endemic in West Africa (Map 9). In Gabon, Sierra Leone, Mauritania, Guinea, Guinea Biss. FMD has not been reported at least in the last 3 years.

FMD history in past 2 years is given in Table 7.

Table 7: Pool 5 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
BENIN, 2011	2011 – A, O, SAT 1, SAT 2[4, 1]	DEC 2011/O, A, SAT 1, SAT 2[1]	DISEASE PRESENT
BURKINA FASO, 2011	2011, 2012 – O, A, SAT 2[4]	NO PRECISE DATA, DEC 2011[1]	DISEASE PRESENT
CAMEROON, 2011	2011 – O, A, SAT 2[4,1]	2012[4]	DISEASE PRESENT
CAPE VERDE , NO SUBM. REPORTS	NO DATA AVAILABLE		
CENTRAL AFR. REP. 2011	NO DATA AVAILABLE		DISEASE PRESENT
CHAD, NO SUBM. REPORTS	2011, 2012 – A, SAT 1[4]	2011/2012[4], NO PRECISE DATA	UNKNOWN
CONGO D. R. , 2011	2011, 2012 O, A, SAT 1[4]	DEC 2012[14]/NOT TYPED	LIMITED TO ONE OR MORE ZONES
CONGO R., NO SUBM. REPORTS	NO DATA AVAILABLE		
COTE D'ÍVOIRE, 2011	2011 – SAT 1, A[1], O, SAT 2[4]	2011[4]	LIMITED TO ONE OR MORE ZONES
EQUATORIAL GUINEA, 2011	NO DATA AVAILABLE		DISEASE SUSPECTED, NOT CONFIRMED
GABON, 2011	2011 – ABSENT[1]	NO IN 2006-2012 PERIOD[1]	NEVER REPORTED
GAMBIA, NO SUBM. REPORTS	2011, 2012 –O, A, SAT 2[9]	2012[4]/O	DISEASE PRESENT
GHANA, 2011	2011 – O, A, SAT 1, SAT 2[4, 1]	2012/O[1]	DISEASE PRESENT
GUINEA BISS., 2011, ½ 2012	2011, 2012 – ABSENT[1]	NO IN 2009-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD

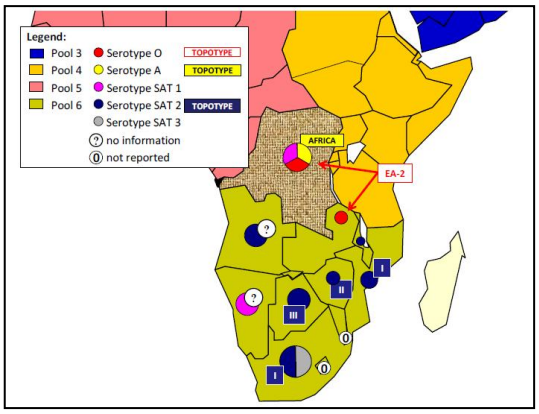
GUINEA, 2011, ½ 2012	2011, 2012 – ABSENT[1]	NO IN 2007-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD
LIBERIA, NO SUBM. REPORTS	2011, 2012 – A, SAT 2[4]	2011/2012[4], NO PRECISE DATA	UNKNOWN
MALI, 2011	2011/2012 – O, A, SAT 1, SAT 2[4, 1]	2011/2012[4], NO PRECISE DATA	LIMITED TO ONE OR MORE ZONES
MAURITANIA, 2011	2011, 2012 – ABSENT[1]	NO IN 2007-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD
NIGER, 2011	2011/2012 – O, A, SAT 1, SAT 2[4, 1]	NO PRECISE DATA, OCT 2011[1]	LIMITED TO ONE OR MORE ZONES
NIGERIA , 2011, ½ 2012	2011/2012 – O, A[4, 1]	OCT/NOV 2012/A, O, SAT 1, SAT 2[4]	DISEASE PRESENT
SAO TOME PRINCIPE, NO SUBM. REPORTS	NO DATA AVAILABLE		
SENEGAL, 2011	2011/2012 – O, A, SAT 1, SAT 2[4, 1]	2012/O, A, SAT 1[4]	DISEASE PRESENT
SIERRA LEONE, 2011	2011, 2012 – ABSENT[1]	OCT 1958[1]	NOT REPORTED IN THIS PERIOD
TOGO, 2011	2011, 2012 – O, SAT 1[1, 4, 1]	2012/O[4]	DISEASE PRESENT

POOL 6

SOUTHERN AFRICA

South Africa[17] - the Scientific Commission of the OIE concluded that the proposed FMD-free zone in South Africa does not fulfill the relevant international requirements as defined in the Terrestrial Animal Health Code of the OIE.

The main concerns raised by the OIE include aspects of the application including the consistency of the area defined as free, the test used for the surveillance and, the vaccine used in the handling of the outbreak in KwaZulu-Natal.



Map 10: FMD distribution by serotypes 2010 – 2013

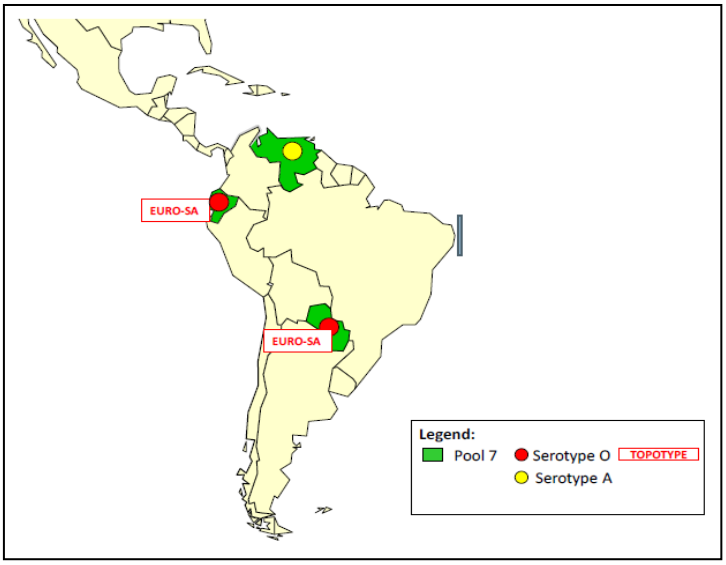
Swaziland and Lesotho are free from FMD without vaccination. Also, there is a zone in both Botswana and Namibia which is FMD free without, since 2010 and 1997 respectively (Map 10).

FMD history in past 2 years is given in Table 8.

Table 8: Pool 6 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
ANGOLA, **NO SUBM. REPORTS**	NO REPORTED OUTBREAKS	DEC. 2010/ SAT 2[1]	UNKNOWN
BOTSWANA, 2011	2011 – SAT 2[5] SAT 2[1] 2012 – SAT 2[1]	OCT 2012/ SAT 2[1]	FMD FREE ZONE WHERE VACCINATION IS NOT PRACTISED
CONGO D. R. , 2011	2011, 2012 O, A, SAT 1[4]	2011/2012[9], NO PRECISE DATA	LIMITED TO ONE OR MORE ZONES
MALAWI, 2011	2011 – SAT 2[1]	OCT 2011[1]	DISEASE PRESENT
MOZAMBIQUE, 2011	2011 – SAT 2[1]	JUN 2011/SAT 2[1]	DISEASE PRESENT
NAMIBIA, 2011	2011 – SAT 1[1] 2012 – SAT 1[1]	JAN 2012/SAT 1[1]	FMD FREE ZONE WHERE VACCINATION IS NOT PRACTISED
SOUTH AFRICA, 2011	2011 – SAT 1[1] SAT 2[1] 2012 – SAT 2[1]	APR 2012/SAT 2[1]	DISEASE PRESENT
ZAMBIA, 2011	2012 – SAT 1[5], SAT 2[1]	JUN 2012/SAT 1[5]	DISEASE PRESENT
ZIMBABWE, 2011	2011 – SAT 2[1] 2012/NOT TYPED[12]	2012/NOT TYPED[12]	DISEASE PRESENT

POOL 7
SOUTH AMERICA



Most South America countries are FMD free with (Uruguay)/without (Chile, Guyana) vaccination or with free zones with/without vaccination. Small areas of the continent are considered as endemic but clinical cases are rare (Map 11).

FMD history in past 2 years is given in Table 9.

Map 11: FMD distribution by serotypes 2010 – 2013

Table 9: Pool 7 FMD history 2010-2013

COUNTRY/6 MONTHS REPORTING TO OIE	FMD HISTORY (past 2 years)	LAST REPORTED/TYPE	COUNTRY FMD STATUS[1]	CONTROL MEASURES
ECUADOR, 2011, ½ 2012	2011 – O[1, 8]	AUG 2011/O[1, 8]	2011 – DISEASE PRESENT, 2012 – NOT REPORTED	ROUTINE VACCINATION - CATTLE
PARAGUAY, 2011	2011 – O[1, 8]	DEC 2011/O[1, 8]	½ 2011 – NOT REPORTED, 2/2011 - LIMITED TO ONE OR MORE ZONES	ROUTINE VACCINATION – CATTLE, BUFFALOES
VENEZUELA, NO SUBM. REPORTS	2011 – O[8] A[8]	2011/O, A[8]	UNKNOWN	

The key to the superscripts is below:

1. WAHID Interface – OIE World Animal Health Information Database http://web.oie.int/wahis/public.php?page=home
2. Reports from FAO/EuFMD projects and field officers
3. Dr. Esther TO: Foot and Mouth Disease Hong Kong Situation, Update; Animal Management Division Agriculture, Fisheries and Conservation Department, 10 August 2012
4. FAO/EuFMD supported FMD networks (RESOLAB-FMD West Africa)
5. World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD), www.wrlfmd.org
6. Conference on Scientific Developments and Technical Challenges in the Progressive Control of FMD in South Asia, New Delhi, India, 13-15 February 2012.
7. FAO/EuFMD supported FMD networks (EARLN-FMD Eastern Africa)
8. SENASA, Argentina
9. SEAFMD
10. Open session of the EuFMD, Jerez de la Frontera, Spain. 29-31 October 2012.
11. Ministry of Agriculture Animal Industry and Fisheries. National Animal Disease Diagnostics and Epidemiology Centre (NADDEC) P.o. BOX 513, Entebbe, Uganda
12. Dr C Njagu (Division of Veterinary Field Services):
Current status of the livestock sector in Zimbabwe, ACWG MEETING OF 31STMAY 2012
13. Pakistan – FMD Bulletin, Vol 1 (1-2), January-June, 2012
14. Laboratorie veterinarie de Goma, DRC
15. Project Directorate on Foot and Mouth Disease, Indian Council of Agricultural Research, Mukteswar Nainital Uttrakhand, 263138
16. OIE/China national FMD reference laboratory
17. Republic of South Africa, Department of agriculture, Forestry and Fisheries

FMD : Global Surveillance

OIE/FAO FMD Reference Laboratory Network

EuFMD April 2013

The World Reference Laboratory for FMD






Dr Jef M. Hammond WRLFMD®

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  - Global surveillance and threat recognition
  - Reference Laboratory Network of OIE/FAO FMD Labs

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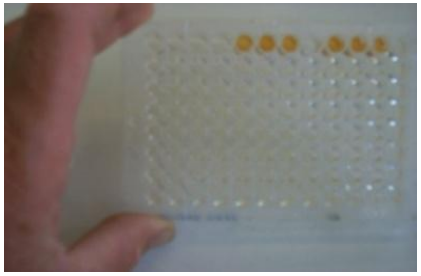
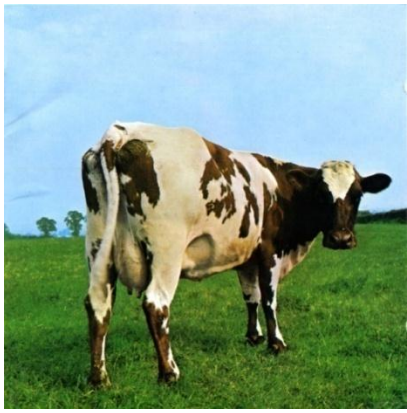
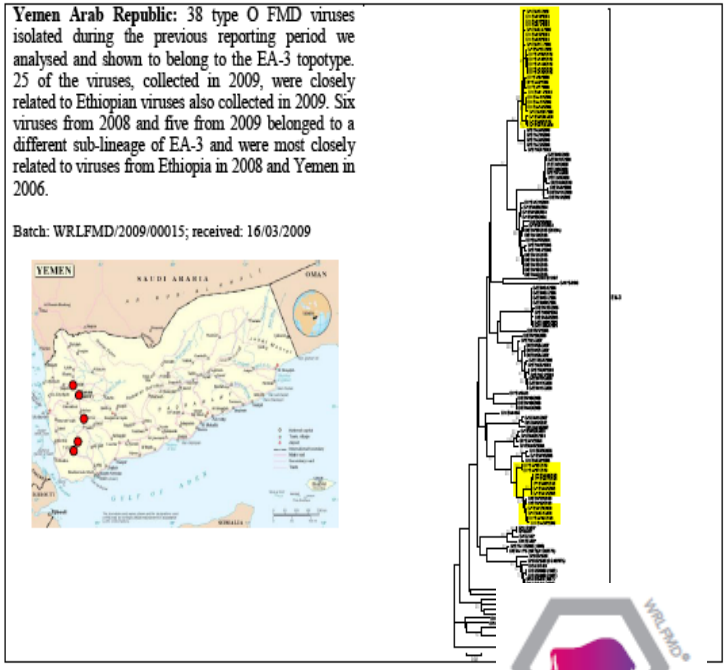
FAO, OIE, EU and National Responsibilities





- 24/7 Diagnostic Service
- Global surveillance
- Strain characterisation (China, Russia, Egypt
- Vaccine matching (Bulgaria, South Korea, Egypt)
- Extensive library of isolates
- Test improvement & Development, validation,
- Quality assurance
- Reagent supply
- Training
- Advice & Reports



WRLFMD

WRLFMD Quarterly Report
April-June

World Reference Laboratory Report

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Visualization of Regional Virus Pools as an Aid to Global Control

Divides the Globe into 7 pools each with

- Multiple serotypes but topotypes mainly confined to that pool
- Each pool may need tailored vaccines and strategies

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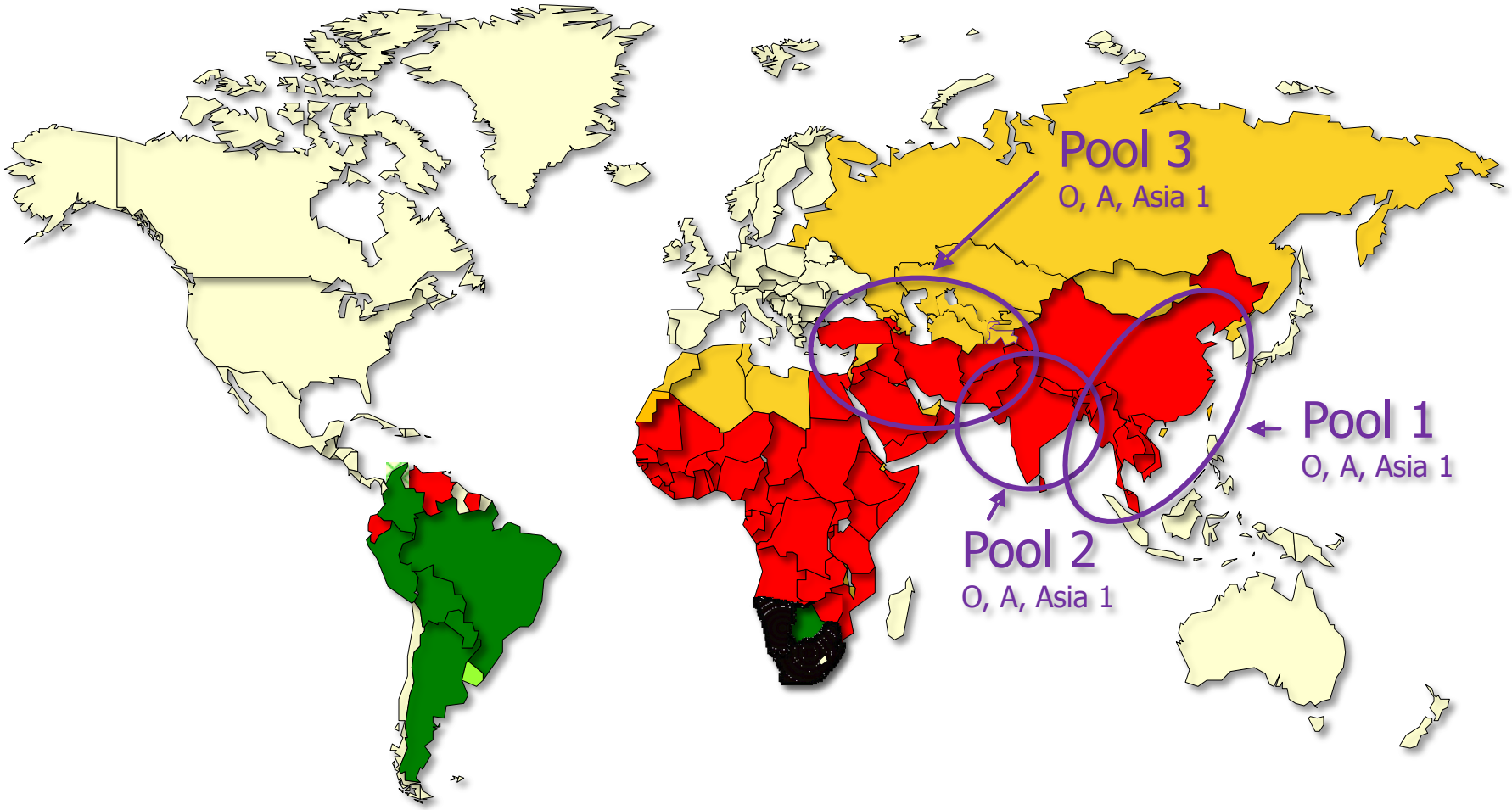
WRLRAD

The conjectured status of FMD showing approximate distribution of regional virus pools.



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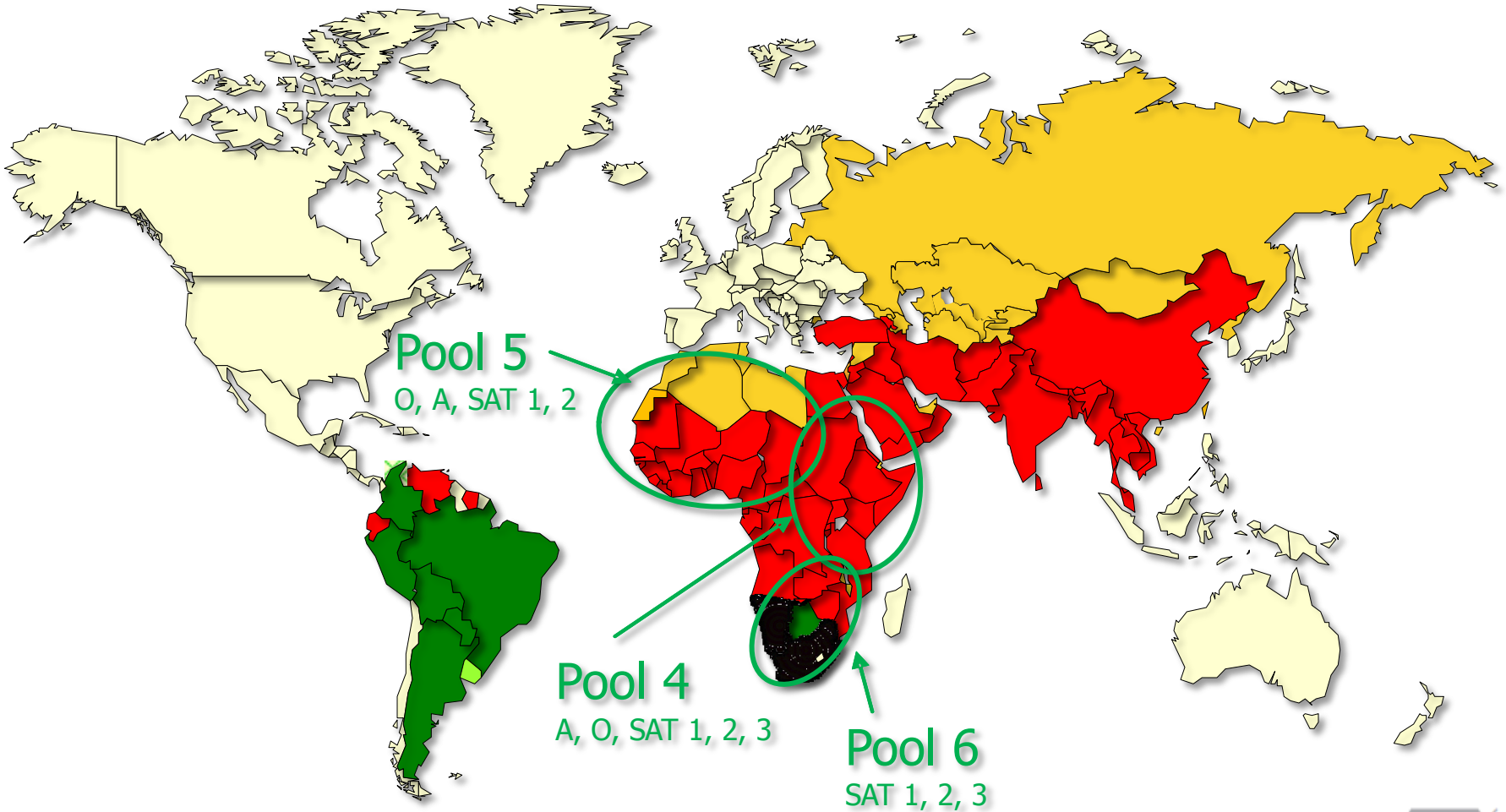
WRLFMD

The conjectured status of FMD showing approximate distribution of regional virus pools.



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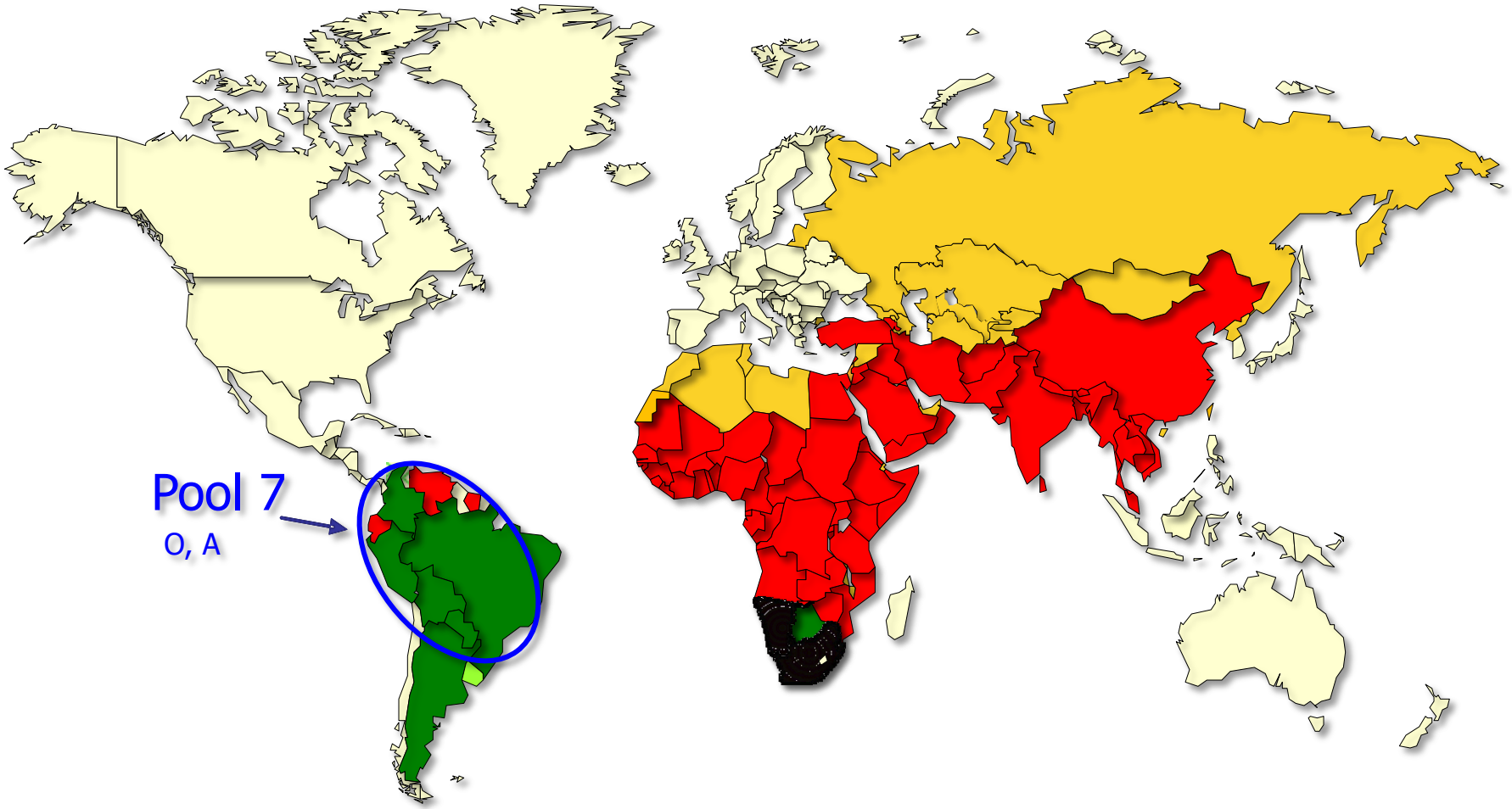
The conjectured status of FMD showing approximate distribution of regional virus pools.



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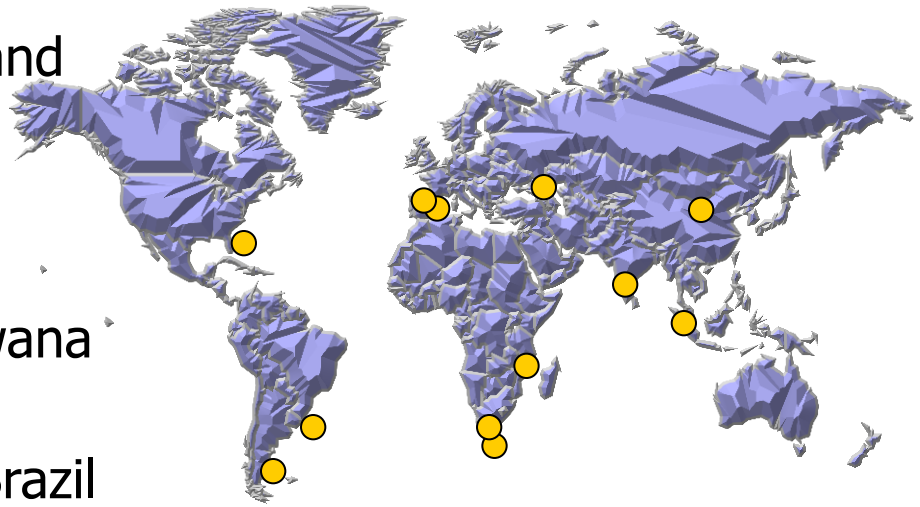
Enhanced Surveillance: OIE/FAO Lab network

- WRLFMD: Pirbright, UK
- RRLSEA: Pakchong, Thailand
- LVRI: Lanzhou, China
- FGI ARRIAH: Vladimir, Russia
- PDFMD: Mukteswar, India
- RRLSSA: Gabarone, Botswana
- FMD-Laboratory: Embakasi, Kenya
- PANAFTOSA: Rio de Janeiro, Brazil
- LFADLCT: Argentina
- ARC-OVI: Onderstepoort, RSA
- PIADC: Plum Island, USA
- CODA-CERVA-VAR: Ukkel, Belgium



Approximately ~1800 samples tested during 2012

Hot off the press

OIE/FAO FMD Reference Laboratory Network

Annual Report 2012

Compiled and Edited by Dr Jef Hammond, WRLFMD®,The Pirbright Institute, UK.

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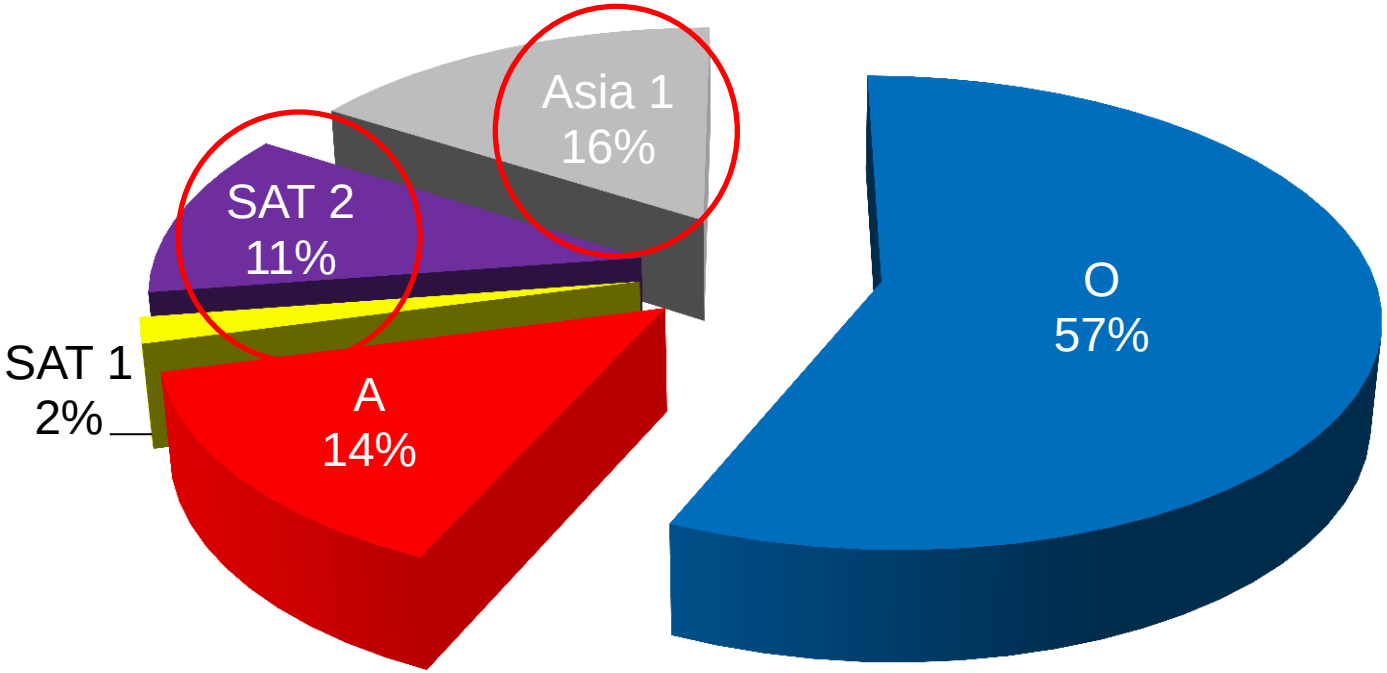
Serotyping results for 2012

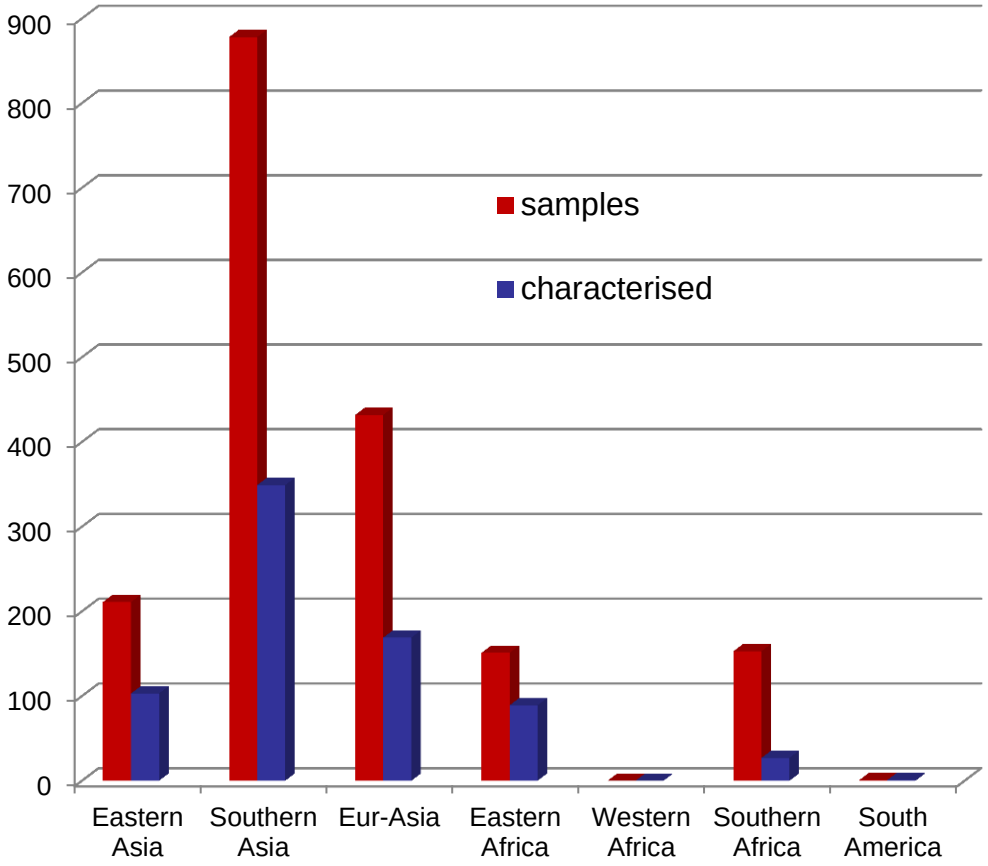


The network laboratories received and characterised more than 1800 samples in 2012 from 35 countries.
Almost 60% of the samples were serotype O.
However, the proportion of serotype A has reduced and the proportions of serotype Asia 1 and serotype SAT 2 have increased.

Increased Asia 1 activity
Increased SAT 2 activity

Still No Serotype C ***(not reported since 2004)***

Samples Characterised in 2012



Laboratory	Samples	Countries
WRLFMD®	764	27
PANAFTOSA	1	1
FGI-ARRIAH	15	3
ARC-OVI	123	1
LVRI	84	1
PDFMD	790	1
RRLSEA	49	3
Total	**1,826**	**37#**

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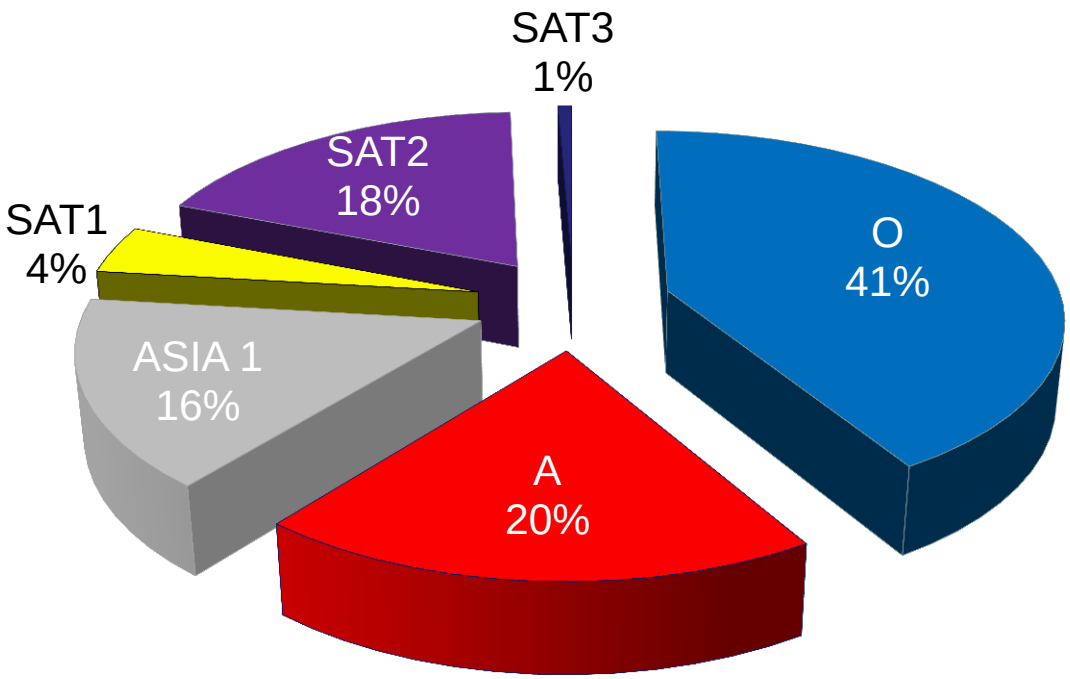
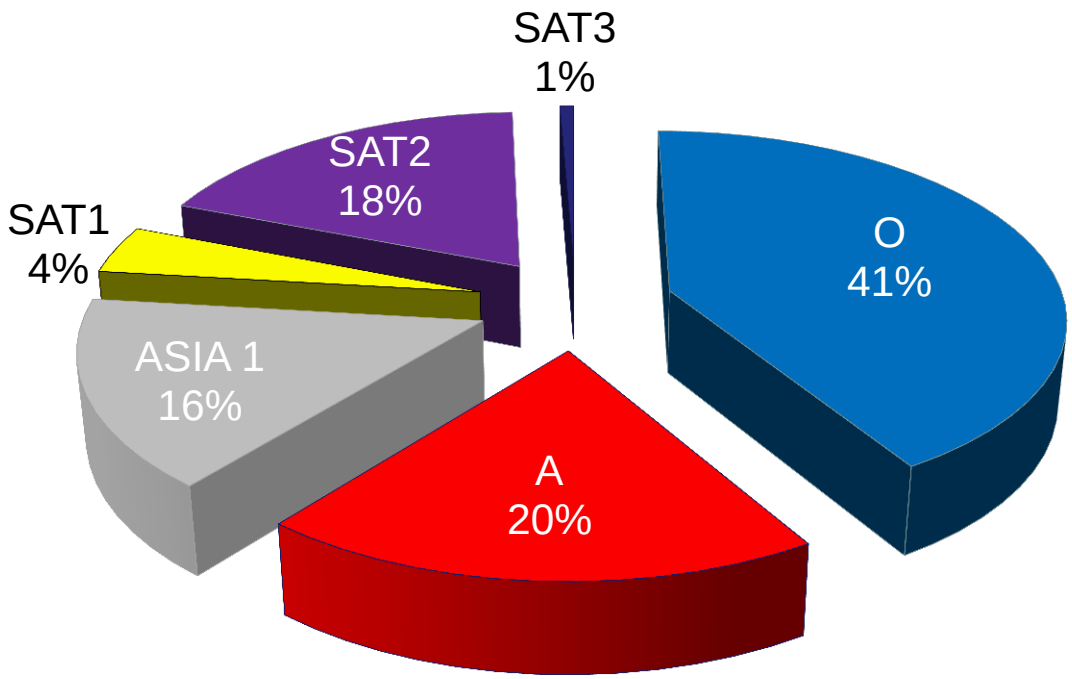
Samples Sequenced in 2012

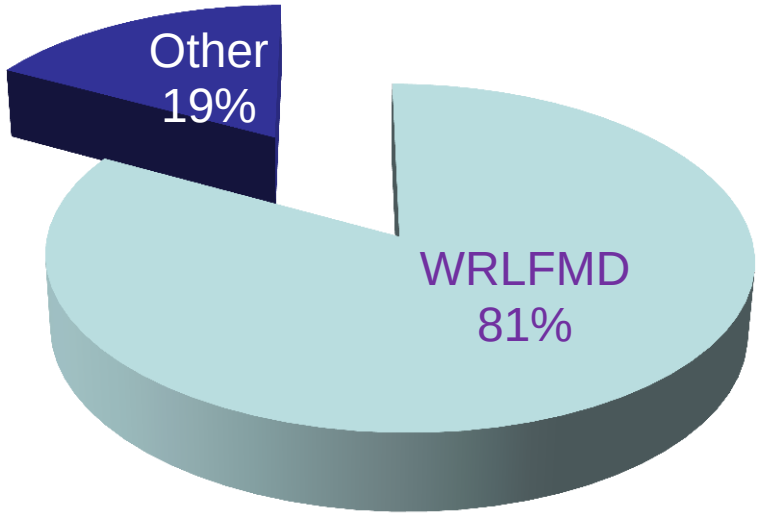


.

In total **537** VP1 sequences were characterised in 2012 by the Network Laboratories:

Samples Sequenced in 2012



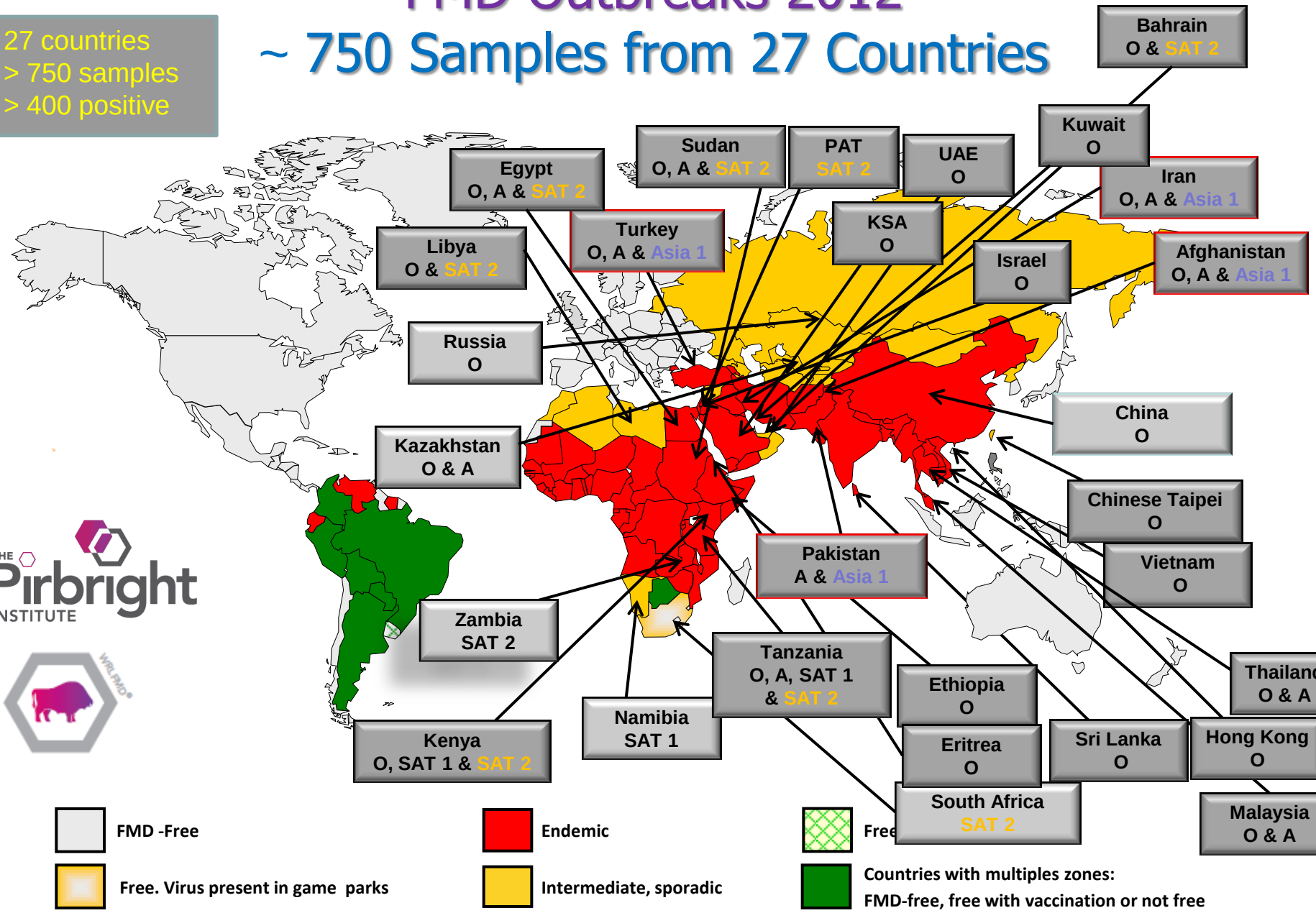


.

In total **537** VP1 sequences were characterised in 2012 by the Network Laboratories: **435 (81%)** came from WRLFMD® while the remaining **102 (19%)** came from other laboratories

FMD Outbreaks 2012
~ 750 Samples from 27 Countries

27 countries
> 750 samples
> 400 positive



FMD Outbreaks 2012
~ 750 Samples from 27 Countries

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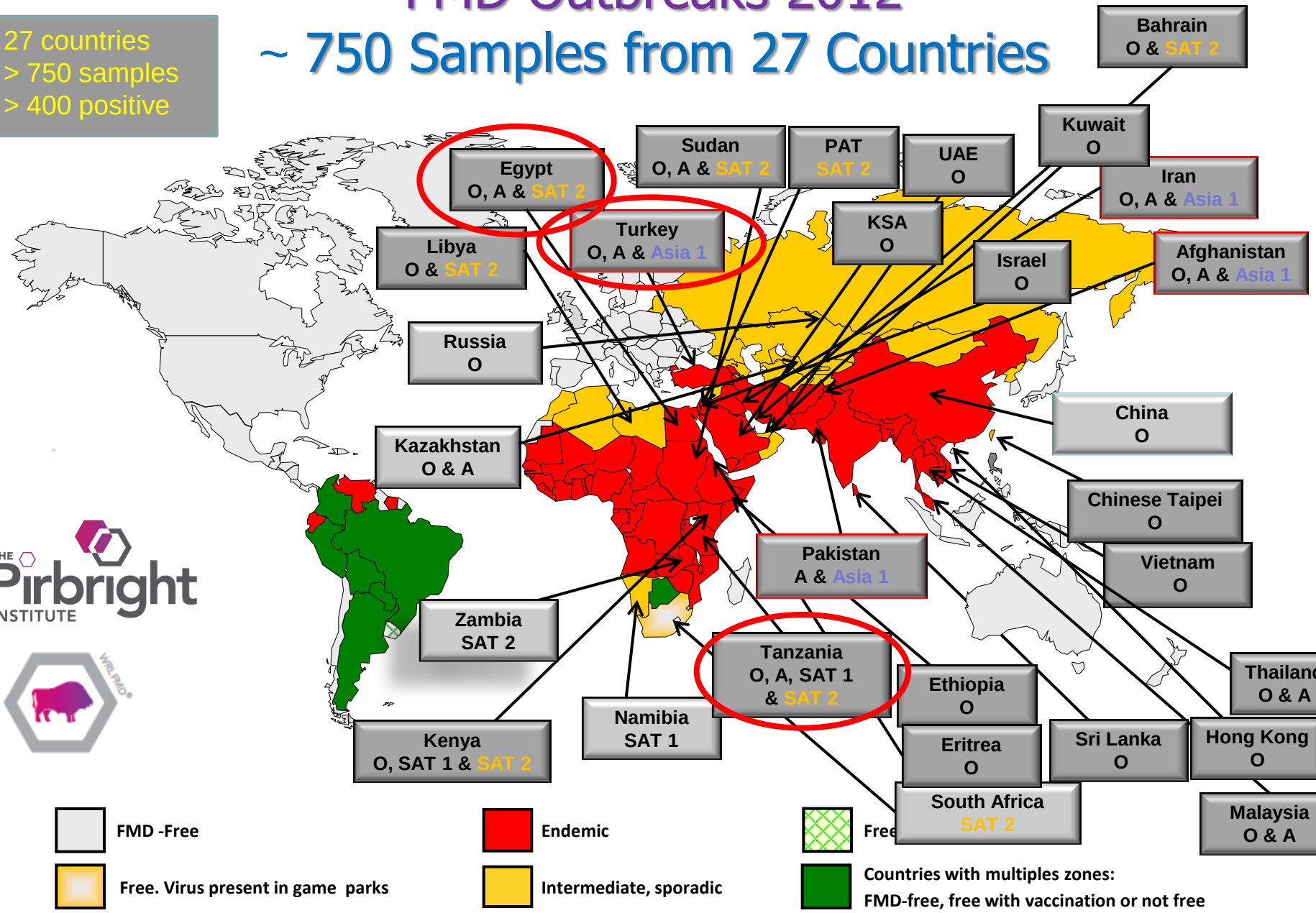
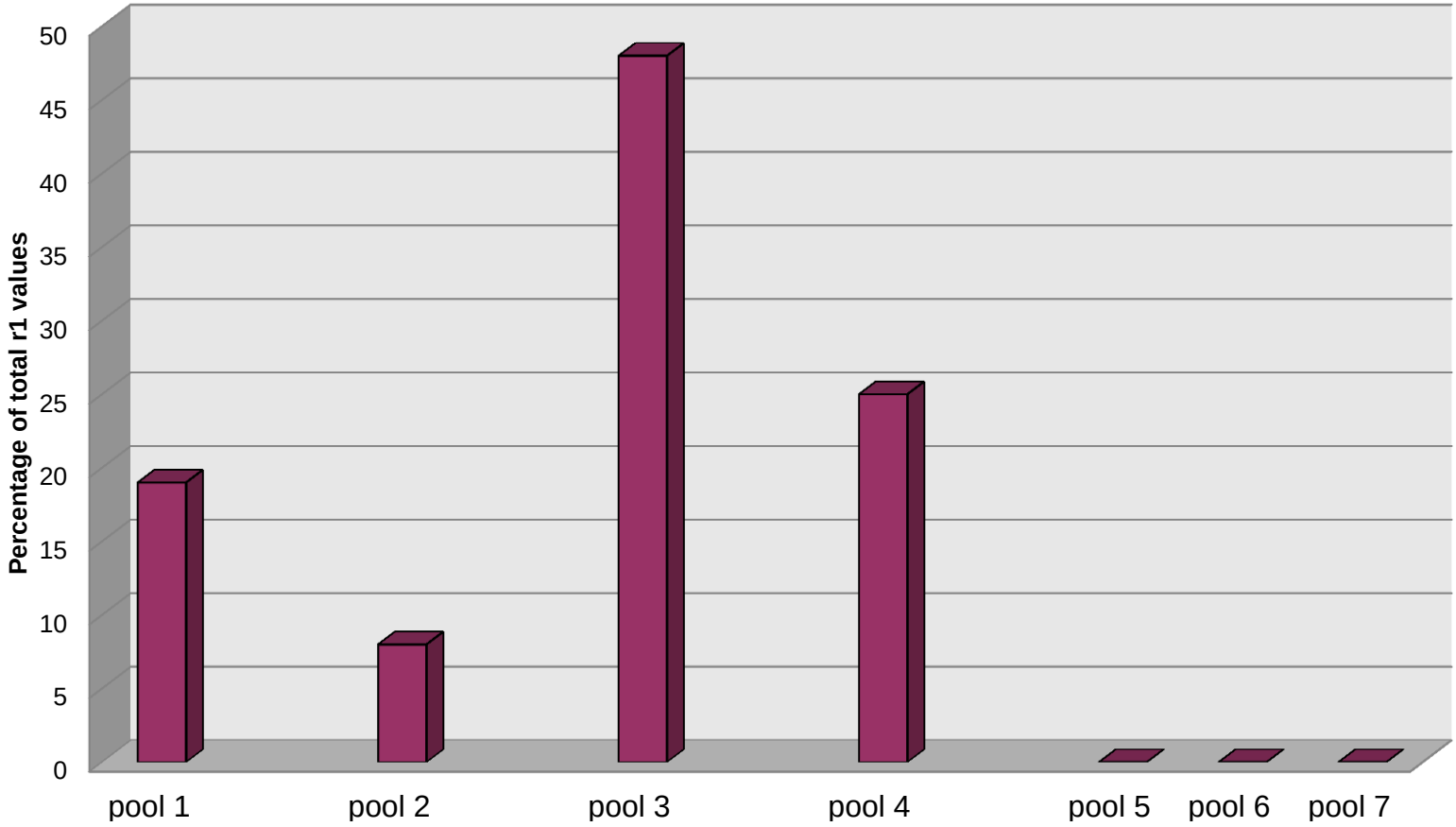


Vaccine Matching in 2012



WRLFMD® carried out individual vaccine matching tests on 1192 samples from 24 countries in 2012. The majority were for isolates from pool 3 with almost 50% of total. Isolates from pools 1, 2 and 4 were also tested by vaccine matching.

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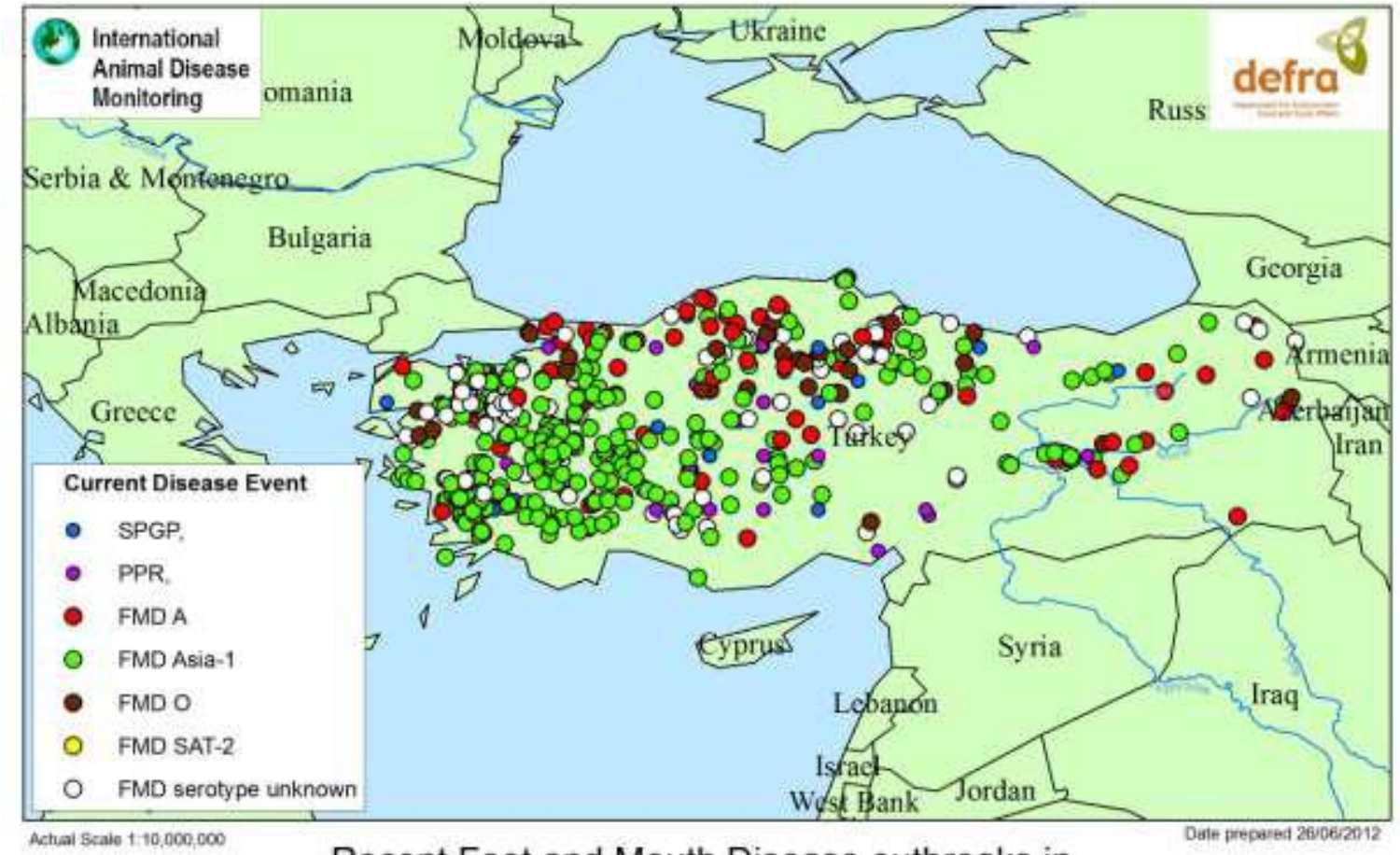
Turkey 2012- Distribution >1000 Outbreaks

The majority of these have been Asia-1.



Recent Foot and Mouth Disease outbreaks in Turkey in 2012

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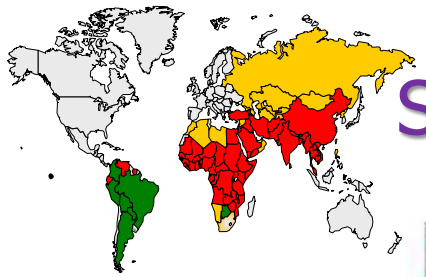
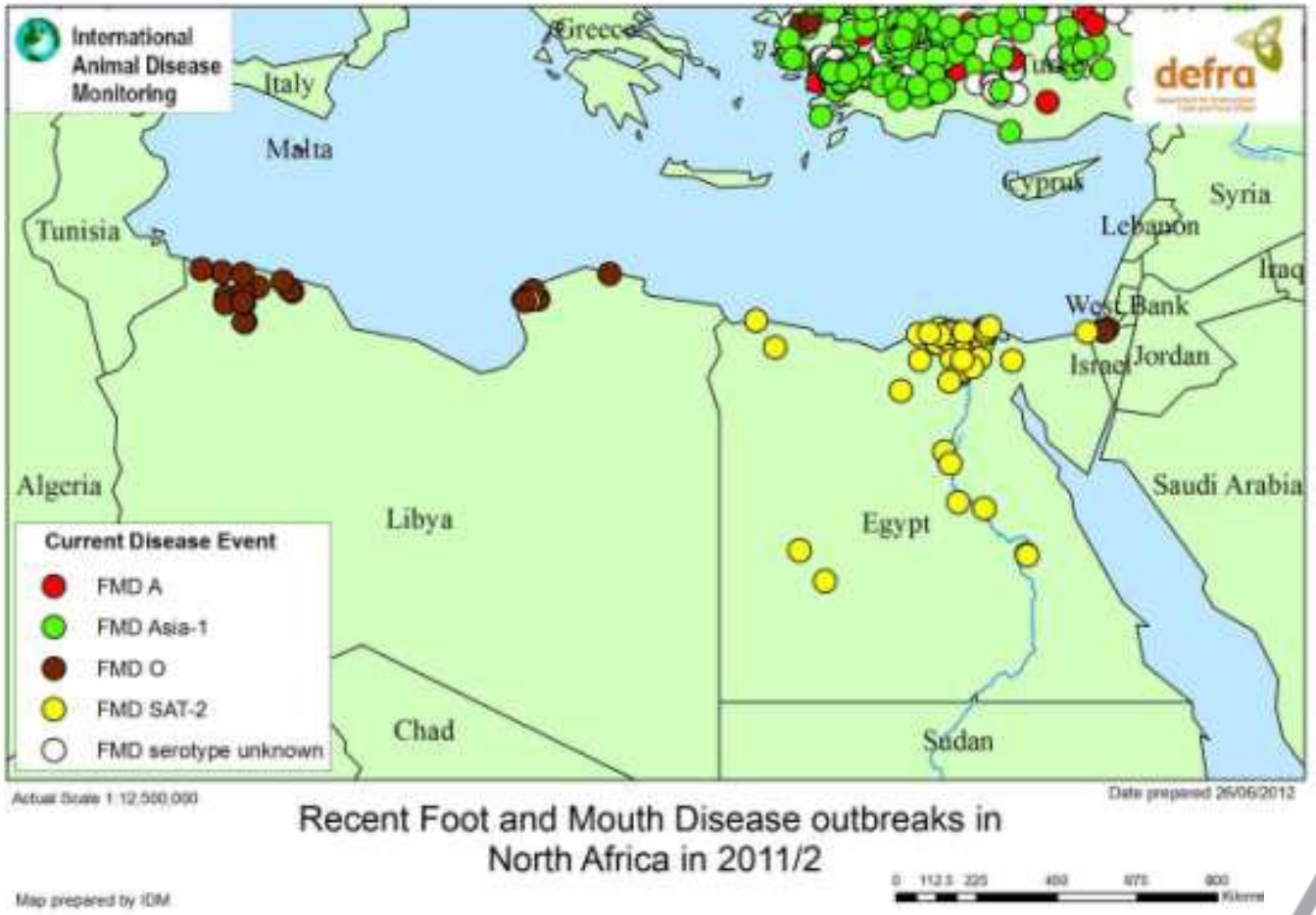


FMD Outbreaks 2012
SAT 2 in North Africa and Middle East



Recent Foot and Mouth Disease outbreaks in North Africa in 2011/2

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Egypt- Recent FMD Outbreaks

Egypt has at least 3 serotypes of FMDV and a number of topotypes

1. O/ME-SA/Egy-72 (2006-2009)
2. O/ME-SA/PanAsia 2 (Egy-09) (2009 & 2011
3. A/Africa/G-VII (Ken-05) (2006 & 2009)
4. A/Asia/Iran-05 (Bar-08) (2010-2011)
5. A/Africa/G-IV (ISM-12) (2012)
6. SAT2/VII/Alx-12 (2012)
7. SAT2/VII/Ghb-12 (2012)

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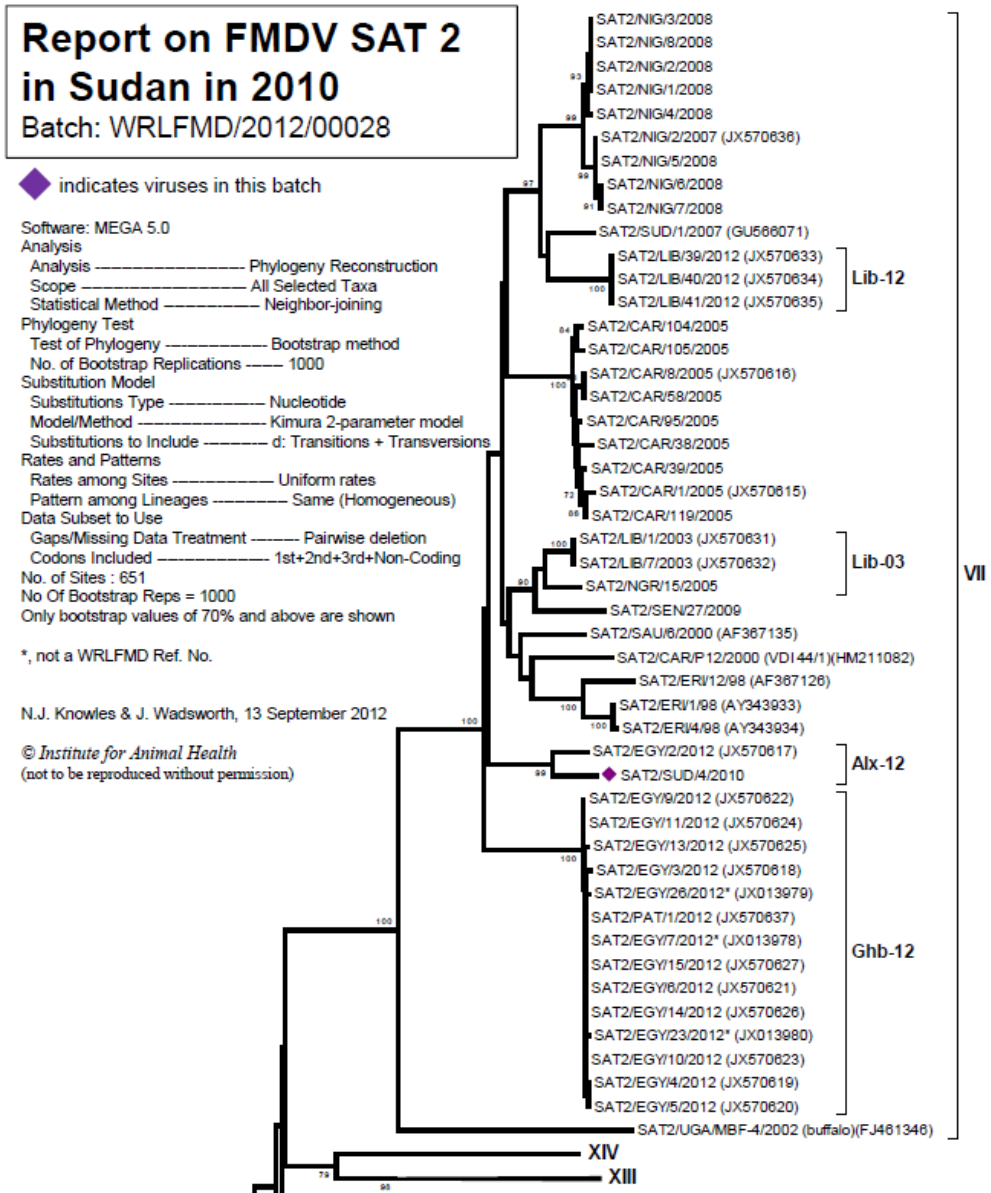
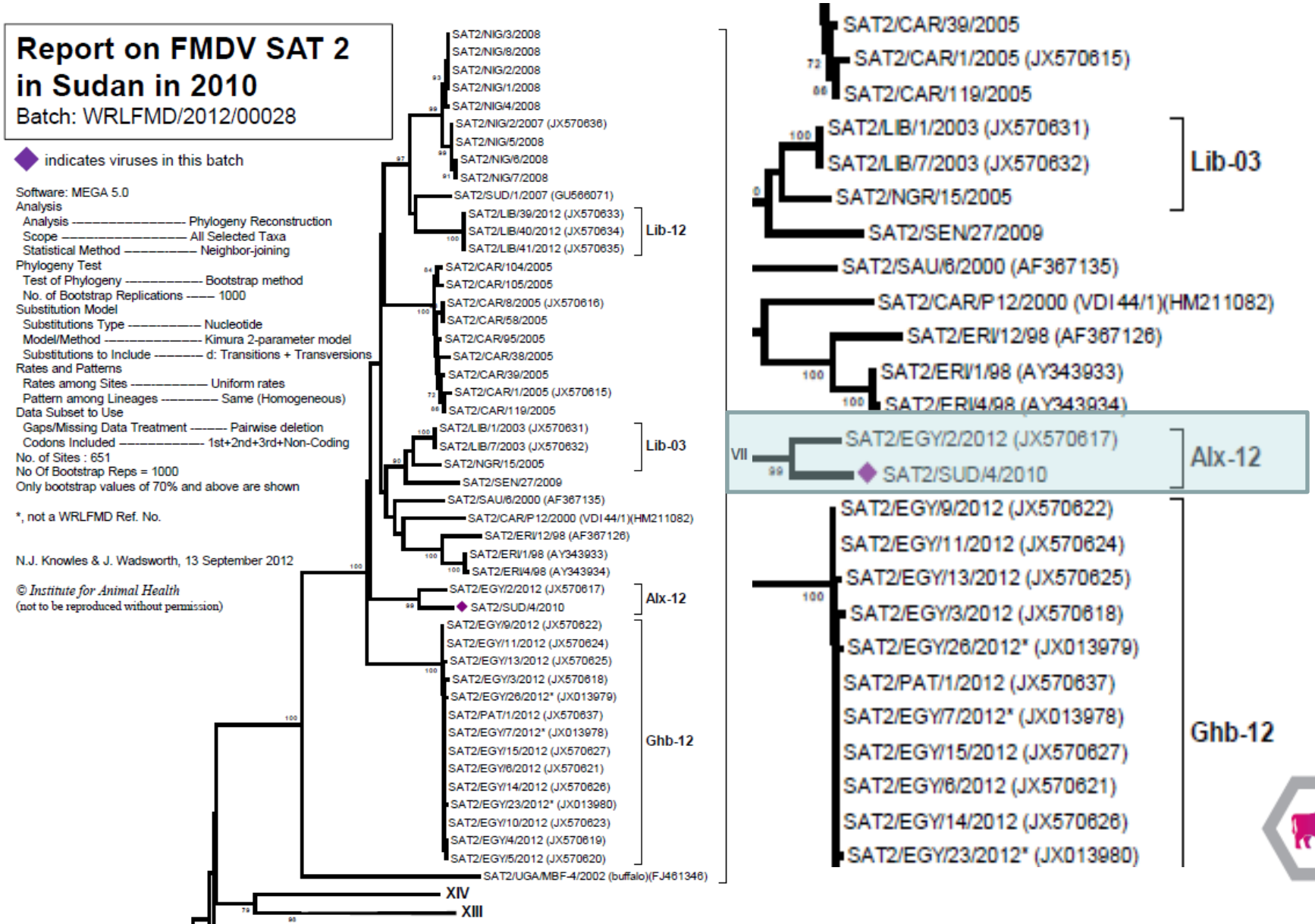
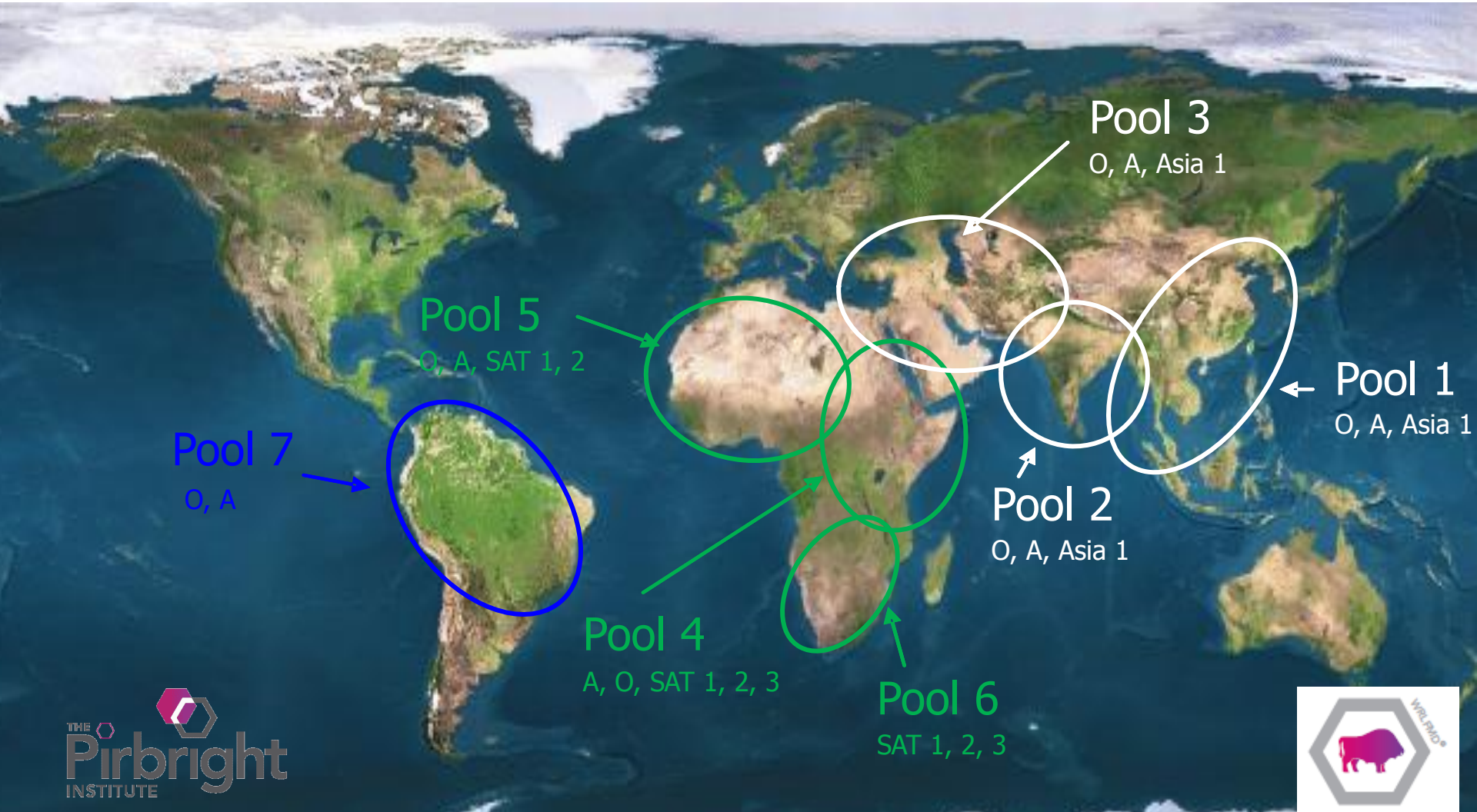
Recent Observations- SAT 2 in Sudan 2010



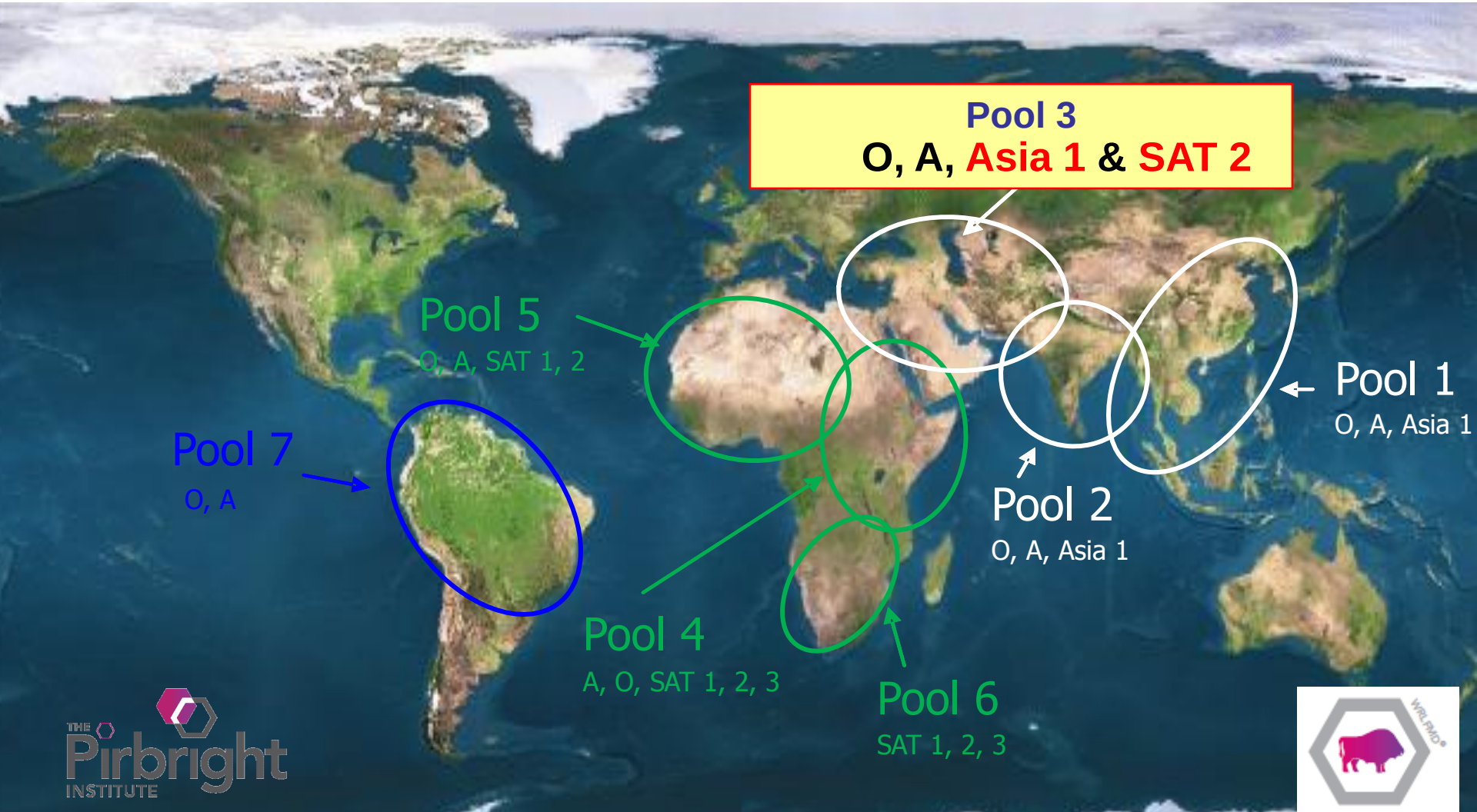
Recent Observations- SAT 2 in Sudan 2010



WRLFMD® Regional Analysis- 2012



WRLFMD® Regional Analysis- 2012
Asia 1 and SAT 2 on the move



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WRLFMD® Regional Analysis- 2013

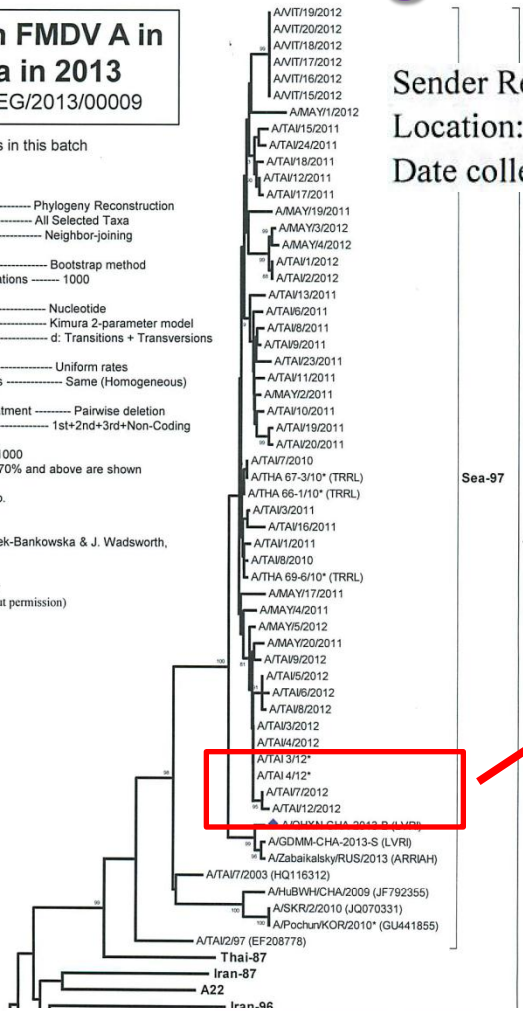
Report on FMDV A in P.R. China in 2013
Batch: WRLMEG/2013/00009

◆ indicates viruses in this batch

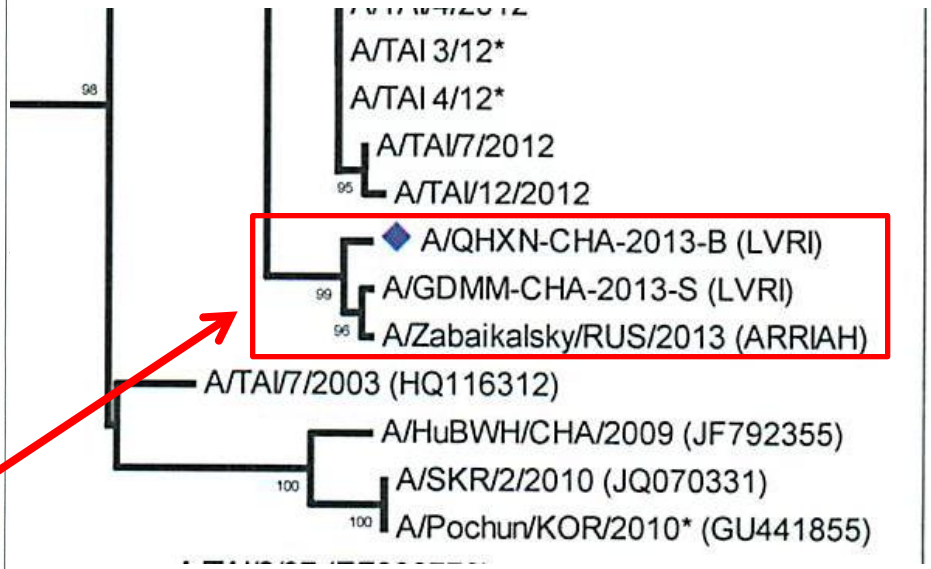
Software: MEGA 5.1
Analysis
Analysis ---------- Phylogeny Reconstruction
Scope ---------- All Selected Taxa
Statistical Method ---------- Neighbor-joining
Phylogeny Test
Test of Phylogeny ---------- Bootstrap method
No. of Bootstrap Replications ------- 1000
Substitution Model
Substitutions Type ---------- Nucleotide
Model/Method ---------- Kimura 2-parameter model
Substitutions to Include ---------- d: Transitions + Transversions
Rates and Patterns
Rates among Sites ---------- Uniform rates
Pattern among Lineages ---------- Same (Homogeneous)
Data Subset to Use
Gaps/Missing Data Treatment --------- Pairwise deletion
Codons Included ---------- 1st+2nd+3rd+Non-Coding
No. of Sites : 639
No Of Bootstrap Reps = 1000
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles, K. Bachanek-Bankowska & J. Wadsworth,
09 April 2013



Sender Ref: A-QHXN-2013-B_LVRI
Location: Chengbei district, Xining, QingHai, China
Date collected: ~15/03/2013
Topotype: ASIA
Genotype/strain: Sea-97



Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/GDMM-CHA-2013-S (LVRI)	CHA13-AA	633	627	0	99.05	0.95	ASIA	Sea-97
2	A/Zabaikalsky/RUS/2013 (ARRIAH)	RUS13-AA	633	627	0	99.05	0.95	ASIA	Sea-97

Current FMD Threat Analysis: Vaccine matching 2012

- Vaccine matching carried out on representative isolates from each submission
- 2dm VNT carried out with a variety of Merial, Intervet (MSD) and ARRIAH bovine vaccinal reference sera
- **~ 1200 individual tests carried out in 2012 by WRLFMD**
- Results presented as traffic light system

Result	WRLFMD® Pirbright vaccine matching by 2dm VNT
	Good match
	Some matches
	No match

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Current FMD Threat Analysis: Vaccine matching 2012

Pool 1 Eastern Asia

Serotype O vaccine matching

Country of Origin	Serotype	Topotype	Lineage/ strain	Sub Lineage
Malaysia	**O**	SEA	Mya-98	-
Thailand	**O**	SEA	Mya-98	-
	O	ME-SA	PanAsia	-
Vietnam	**O**	ME-SA	PanAsia	-

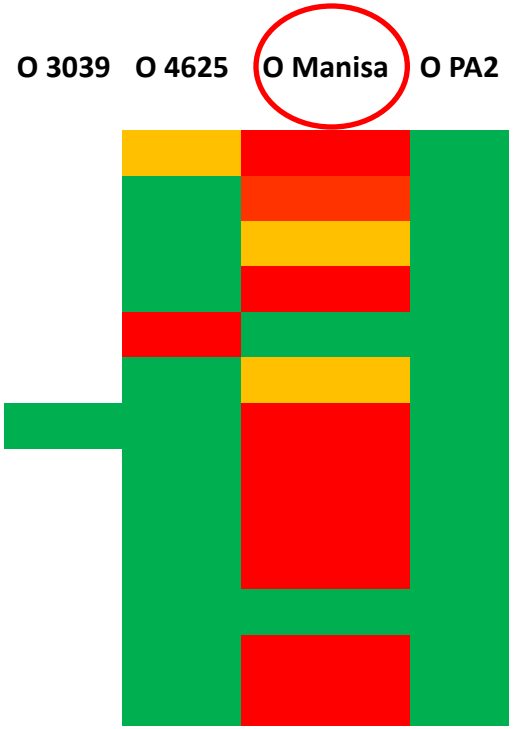
	Good match
	Some matches
	No match

Current FMD Threat Analysis: Vaccine matching 2012

Pools 3 Eur-Asia (*and 4 Eastern Africa)*

Serotype O vaccine matching

Country of Origin	Serotype	Topotype	Lineage/ strain	Sub Lineage
Afghanistan	**O**	ME-SA	PanAsia-2	ANT-10
Bahrain	**O**	ME-SA	PanAsia-2	ANT-10
Egypt	**O**	ME-SA	PanAsia-2	-
Iran	**O**	ME-SA	PanAsia-2	ANT-10
	O	ME-SA	PanAsia-2	FAR-09
Israel	**O**	ME-SA	PanAsia-2	ANT-10
Kuwait	**O**	ME-SA	PanAsia-2	ANT-10
Libya	**O**	ME-SA	PanAsia-2	ANT-10
	O	EA-3	-	-
Kingdom Saudi Arabia	**O**	ME-SA	PanAsia-2	ANT-10
Sudan	**O**	EA-3	-	-
Turkey	**O**	ME-SA	PanAsia-2	ANT-10
UAE	**O**	ME-SA	PanAsia-2	ANT-10



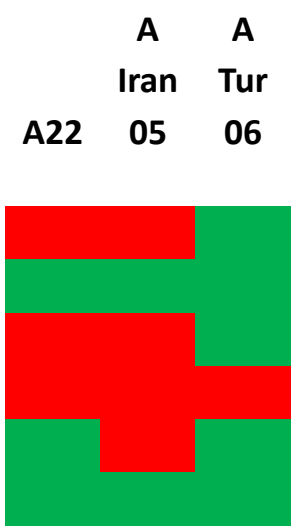
	Good match
	Some matches
	No match

Current FMD Threat Analysis: Vaccine matching 2012

Pool 2/3 Eur-Asia

Serotype A vaccine matching

Country of Origin	Serotype	Topotype	Lineage/ strain	Sub Lineage
Afghanistan	**A**	Asia	Iran-05	HER-10
Iran	**A**	Asia	Iran-05	SIS-10
	A	Asia	Iran-05	HER-10
	A	Asia	Iran-05	AFG-07
Pakistan	**A**	Asia	Iran-05	HER-10
Turkey	**A**	Asia	Iran-05	SIS-10



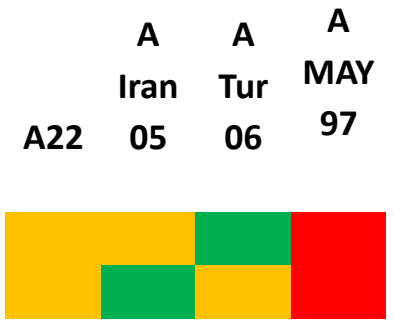
	Good match
	Some matches
	No match

Current FMD Threat Analysis: Vaccine matching 2012

Pool 1 Eastern Asia

Serotype A vaccine matching

Country of Origin	Serotype	Topotype	Lineage/ strain	Sub Lineage
Malaysia	**A**	Asia	Sea-97	-
Thailand	**A**	Asia	Sea-97	-



	Good match
	Some matches
	No match

Current FMD Threat Analysis: Vaccine matching 2012

Pool 2/3 Eur-Asia

Serotype Asia 1 vaccine Matching

Country of Origin	Serotype	Topotype	Lineage/strain	Asia 1 India	Asia 1 Shamir	Asia 1 Shamir >6PD50
Afghanistan	**Asia 1**	Asia	Sindh-08			
Iran	**Asia 1**	Asia	Sindh-08			
Pakistan	**Asia 1**	Asia	Sindh-08			
Turkey	**Asia 1**	Asia	Sindh-08			

	Good match
	Some matches
	No match

Current FMD Threat Analysis: Vaccine matching 2012

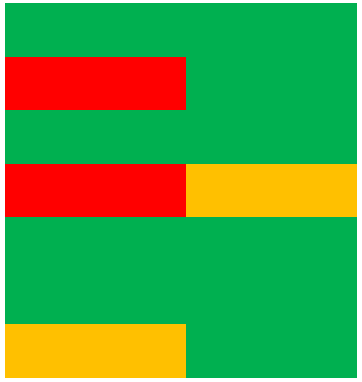
SAT Serotypes Vaccine Matching

Pool 4 Eastern Africa

Country of Origin	Serotype	Topotype	SAT 1 Rho
Kenya	**SAT 1**	I (NWZ)	

Pool 3 Eur-Asia Pool 4 Eastern Africa

			SAT 2 Zim	SAT 2 Eri
Bahrain	**SAT 2**	IV		
Egypt	**SAT 2**	VII		
Kenya	**SAT 2**	IV		
Libya	**SAT 2**	VII		
PAT	**SAT 2**	VII		
Sudan	**SAT 2**	VII		
Tanzania	**SAT 2**	IV		



	Good match
	Some matches
	No match

Current FMD Threat Analysis: 2013

Serotype O- widespread circulation - 2 most common strains

- ME-SA topotype – PanAsia-2 strain
- SEA topotype – Mya-98 strain

Serotype A- widespread circulation 2 most common strains

- ASIA topotype – Iran-05 strain
- ASIA topotype – Sea 97 strain

Serotype Asia 1 – more limited circulation- BUT risk of further spread

-Only 1 topotype and recent dominant strain Sindh-08

Serotypes SAT – restricted circulation

Have not established outside of Africa

But recent spread of **SAT 2** into North Africa and Middle East being monitored

Serotype C - No reports since 2004

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Vaccine Recommendations (National & European Antigen Banks)

HIGH PRIORITY	O Manisa* supplemented with O 4625 or O 3039 O PanAsia -2* A-Iran-05 Asia 1 Shamir* SAT 2 Eritrea O BFS or Campos A24 Cruzeiro and A22 Iraq
MEDIUM PRIORITY	A Argentina 01 A Iran 96 A Iran 99 A Eritrea A Iran 87 or A Saudi Arabia 23/86 (or equivalent) A Malaysia 97 (or Thai equivalent such as A/Sak/97)* O Taiwan 97 (pig-adapted strain or Philippine equivalent)* SAT 1 South Africa SAT 2 Zimbabwe
LOW PRIORITY	Within category: not in order of importance A15 Bangkok related strain A Kenya A87 Argentina related strain SAT 1 Kenya SAT 2 Kenya SAT 3 Zimbabwe C Noville

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WRLFMD Summary

www.wrlfmd.org

- A major combined effort both National and Global is needed for control
- Accurate & Timely disease information is vital
- The FMD Reference Laboratory Network provides the Engine Room for the Global Control Initiative

Pirbright designated global coordinating lab for OIE/FAO GCP

Acknowledgements

WRLFMD®

Jemma Wadsworth, Yanmin Li
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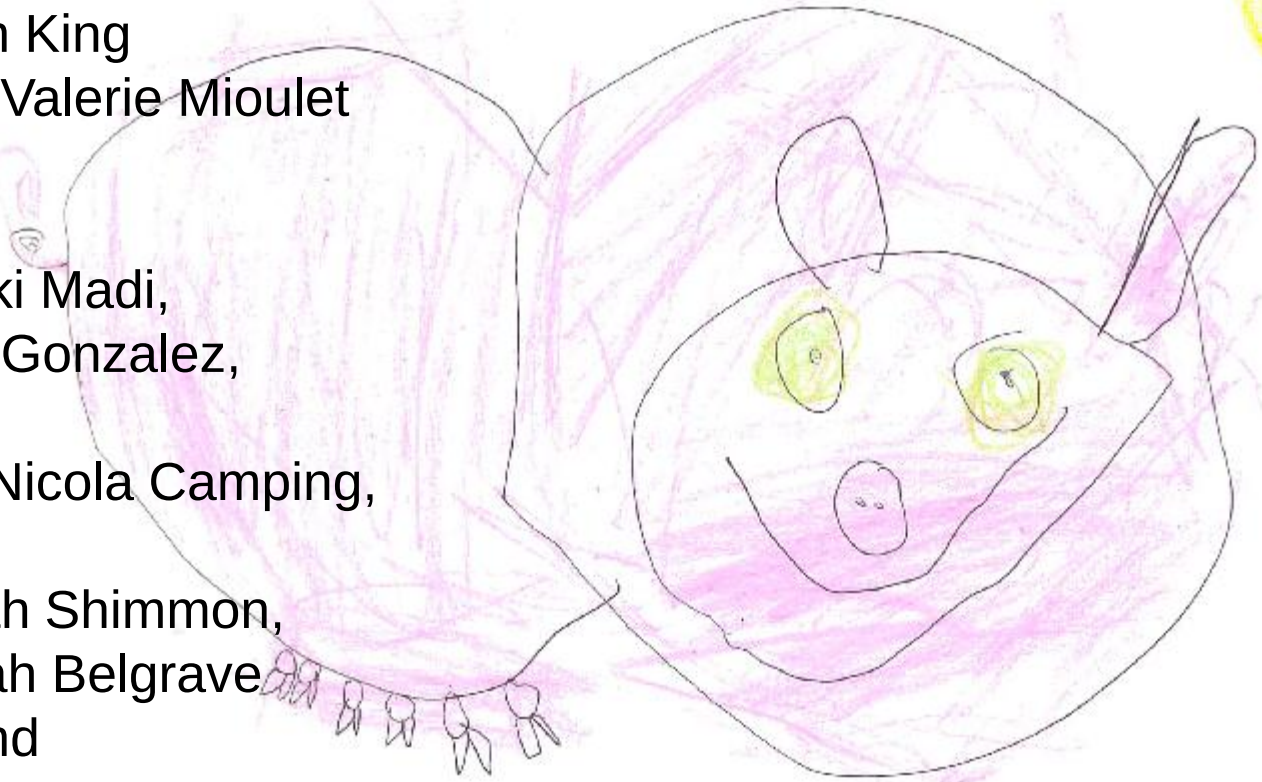
Caroline Wright,
Bryony Armson, Nicola Camping,
Anna Ludi,
Liz Wilson, Gareth Shimmon,
Trish Ryder, Sarah Belgrave
& Suzie Hammond

AND all the network members



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Appendix 4

40th EuFMD General Session, 22 – 24 April 2013, Rome

Paper on needs and support to be provided to North African countries, members of REMESA regarding the coordinated control of FMD

Prepared by the FAO/OIE Regional Coordination Unit of REMESA

Reducing the risk of introduction of Foot-and-mouth disease (FMD) remains a priority for the European Union countries' veterinary services. To contribute to reach this goal, supporting control programs in the neighbouring countries of Europe, Eastern (Balkans) and Southern (North Africa) parts, is critical.

Background

1) Institutional background : the Mediterranean Animal Health network (REMESA, *Réseau méditerranéen de santé animale*)

In 2009, the Chief Veterinary Officers (CVOs) of 10 Western Mediterranean countries (Algeria, Egypt, France, Italy, Libya, Mauritania, Morocco, Portugal, Spain and Tunisia) created, with the technical support of the World Organization for Animal Health (OIE) and the Food and Agriculture Organization of the United Nations (FAO), the Mediterranean Animal Health Network (REMESA) whose purpose is the *improvement of animal health with a particular focus on prevention and control of transboundary animal diseases, including zoonoses, in the Mediterranean region through mutual cooperation and regional strategies*.

REMESA is fully within the overall context of the Barcelona Process for Mediterranean Partnership and the Union for the Mediterranean (UfM). This initiative is consistent with the European Neighbourhood Policy developed by the European Commission aiming at strengthening the prosperity, stability and security, especially with the establishment of privileged partnerships with the North African countries.

2) Foot-and-mouth disease (FMD) : a priority disease for REMESA and the European Union

The CVOs members of REMESA decided to give FMD the highest priority for an increased attention of the network. However, the situation of the countries in respect of FMD is not homogeneous:

- European Union countries are recognised by OIE as "FMD free where vaccination is not practised";
- Algeria, Morocco and Tunisia have not notified any FMD case since 1999. In addition, in May 2012, these countries obtained, through a joint approach, the OIE endorsement of their FMD national official control programs. This approach is fully consistent with the FAO/OIE FMD progressive control pathway (FMD-PCP) and aims at obtaining a FMD-free status, with or without vaccination. Algeria and Tunisia practise annual vaccination, Morocco has stopped vaccinating in 2007;
- The disease is regarded as endemic in Mauritania;
- Libya and Egypt have reported numerous outbreaks of FMD in 2011 and 2012, mainly related to the introduction of new FMDV serotype SAT2 strains. Control measures (including vaccination) were implemented.

The disease is also endemic in the sub-Saharan countries, in the south of North Africa. The introduction and spread of FMD viruses in "officially free" or "without notified outbreak" countries remain therefore an important threat.

This is why, in 2012, the Joint Permanent Committee of REMESA (decision-making body attended by the CVOs of the member countries, OIE, FAO, the European Commission and the Arab Maghreb Union) drafted a resolution so that the issue of EU financial support for vaccination campaigns in Libya and Egypt and the constitution of an antigen bank for at-risk countries are subject to the attention of the European Union

countries. This resolution was presented during the 83rd EuFMD Executive Committee meeting which was held in Bucharest (Romania) on 12 and 13 April 2012.

FAO and OIE are present and active in North Africa, especially through the OIE/FAO Regional Coordination Unit (RCU) of REMESA, in order to support the countries' efforts to strengthen their capacity to control animal diseases, in the framework of specific activities on FMD or of general activities on animal diseases. The OIE endorsement of the official national control programs of Algeria, Morocco and Tunisia can be seen as recognition of the significant efforts made by these countries for several years to control FMD.

All these elements (different animal health status and significant efforts of some countries) justify the countries that are already infected or directly threatened, *id est* the North African's ones, are supported through coordinated monitoring and control actions. This support must complement the work already done or in progress, and must be differentiated according to the considered country. The involvement of the FAO/OIE RCU in the definition, implementation and follow-up of actions taken by international organizations, such as OIE, FAO or the European Union through EuFMD, is essential to help ensure consistency with the FAO/OIE FMD-PCP, the recommendations of the FAO/OIE global conference on foot and mouth disease control[1], the coordination with existing initiatives and, consequently, the overall efficiency.

Based on, and in line with this observation, the Spanish and French CVOs (members of EuFMD and members of REMESA), in consultation with their counterparts in other REMESA countries and EuFMD requested the RCU to prepare the present paper which will be presented at the EuFMD General Assembly meeting, to be held from 22 to 24 April 2013 in Rome.

[1] FAO/OIE global conference on foot and mouth disease control ; 27-29 June 2012, Bangkok (Recommendations available at: http://www.oie.int/fileadmin/Home/eng/Conferences_Events/docs/pdf/recommendations/A_FMD_Recommendations_Bankok_2012.pdf)

Identifying needs for capacity building of North African countries to monitor and control FMD and nature of the support that could continue to be provided by EuFMD

The support provided by EuFMD to the North African countries, in particular since the report of SAT2 FMD outbreaks in 2011 and 2012, is significant:

- training sessions on laboratory diagnosis were organized in Egypt and France;
- kits for laboratory diagnosis were provided;
- a logistical and technical backstopping was proposed to the countries for the interpretation of the analysis results;
- meetings on information exchanges and coordination were co-organized with FAO at the sub-regional (UMA countries, Rabat, July 2012) or regional level (MENA region, Cairo, December 2012).

As mentioned above, according to the needs of the countries, the support that EuFMD could provide must be differentiated according to the animal health status of the country and existing initiatives.

Regarding the establishment of a regional vaccine and antigen bank whose feasibility is currently studied by FAO, it is a project that meets a common need. The experience and support of EuFMD and OIE[2] will be crucial to the success of this project.

Algeria, Morocco and Tunisia

The OIE World Assembly of Delegates endorsed, in May 2012, the FMD national official control programs of the 3 countries. This endorsement is subject to annual re-confirmation after exchanges of information between OIE and each country, to see that the program remains relevant to existing or emerging risks.

In addition to the EuFMD supported activities already mentioned, laboratories from these countries are now involved in the European network of reference laboratories on FMD, through an initiative of the FAO Tunis with the European Commission, and they participate in inter-laboratory tests and workshops organized by the European Union and World reference Laboratory (Pirbright Institute).

For the next three years, additional needs in terms of support for the implementation of the control programs consist in:

- The provision of diagnostic kits to perform the analyses included in the annual serological surveys,
- Regular trainings for the strengthening and updating of laboratory competences. Except in urgent situations such as the emergence of new serotypes, an annual training would be desirable. Support to "small" national or regional research / development programs would also be of interest for the development of regional knowledge,
- Training on risk assessment methodology for updating the regional skills,
- The preparation of a formal mechanism regarding the provision, in emergency, of vaccines in case of occurence of new serotypes in or near the concerned countries.

1) Mauritania

FMD is regarded as endemic. The serotypes identified in 2005 were O and A. No prevention or control program is implemented on a regular basis. In particular, no vaccination is practised.

Skills for the monitoring and diagnosis of animal diseases exist in Mauritania, especially in the framework of the Mauritanian Animal Health Epidemiosurveillance Network (REMEMA) and in the national diagnostic laboratory (CNERV), but their effectiveness is currently burdened by a significant lack of financial and human resources. The national authorities are aware of this problem and try to address it.

[2] http://www.oie.int/en/support-to-oie-members/vaccine-bank/

The needs identified are:

- for the laboratory:
    - As for the countries mentioned above, regular trainings for the strengthening and updating of laboratory skills,
    - The regular supply of packages for shipment of samples to reference laboratories,
    - The provision of diagnostic kits.
- in terms of monitoring and control program:
    - Support to the definition (medium and long terms) of a strategy adapted to the country field conditions,
    - Training of field staff for the monitoring and collection of samples of good quality,
    - Provision of sampling material,
    - Provision of field diagnostic kits (e.g. Svanodip).

2) Libya

The occurrence of numerous FMD outbreaks has highlighted the need for a general support regarding the organization and functioning of an operational animal health service, and the definition and implementation of a strategy to control animal diseases, especially FMD.

To this end, FAO is present alongside the Libyan authorities in several projects funded by Unilateral Trust Funds (UTF) relating to animal health.

Specifically concerning FMD, the most urgent needs identified are:

- For laboratories:
    - backstopping (logistical and technical aspects) for the purchase of diagnostic kits,
    - conducting trainings for different diagnostic methods.

  Pending the operationality of laboratories, a protocol for sending samples to international reference laboratories should be established.

- For the prevention and control strategy:
    - Technical and logistical backstopping for the purchase of vaccines, or for access to a vaccine and antigen bank,
    - Support to the definition of a monitoring strategy and training of field staff on the identification, collection and sending of samples of good quality.

Subject to the security requirements, it would be better to send experts in the country (for all kinds of support) so that expertise is optimally adapted to address the needs, taking into consideration the realities of the country.

3) Egypt

The situation and needs of Egypt need to be better known by the OIE/FAO RCU before substantiated proposals can be made. Indeed, mainly for geographical reasons, this country is more integrated into the Near/Middle East sub-region than in North Africa.

Conclusion

In conclusion, among the proposed actions:

- Some are quite easy to implement and they can be implemented immediately: these include the provision of diagnostics kits, the organization of training workshops and information exchange;
- Others should start as soon as possible but should be considered on the medium term: for example, the support for the definition of monitoring and control strategies, adapted to the concerned country, or the establishment of a regional vaccine bank.

A renewed and reinforced EuFMD support to North Africa will demonstrate the interest, recognition and encouragement from the European Union to the efforts of the sub-regional countries, efforts that contribute, in return, to an increased protection of Europe.

If the European Union decides to reinforce its support through EuFMD and OIE to contribute to the development and strengthening of a coordinated regional strategy, it is important to highlight that this support must be provided in the existing and operational framework of cooperation, REMESA. Its FAO/OIE Regional Coordination Unit will provide all necessary support to identify and quantify the specific needs.

FMD control in the European's neighboring countries.
International Coordination and capacity building in North African Region : identification of main needs and potential support

REMESA
Mediterranean Animal Health Network

40th General Session of the European Commission for the control of Foot-and-mouth disease (EuFMD)
Rome, Italy, 22 - 24 april 2013

With the contribution of the Regional Coordination Unit (FAO Sub-regional Office for North Africa /OIE Sub-Regional Representation) of REMESA

2009 : Creation of REMESA

- Chiefs of Veterinary Officers
- 10 Countries
- Common framework for cooperation and improvement of animal diseases prevention and control
- REseau MEditerranéen de Santé Animale (REMESA)
- Mediterranean Animal Health Network

Global Strategy

- 2 main priority objectives
  - To strengthen national capacities
  - To develop the regional coordination
- Priority diseases: FMD, RVF, PPR, IAHP, Rabies, Blue tongue, West Nile Fever
- Initiatives undertaken by countries, FAO, OIE, UMA, UE
- Keywords: coordination, information exchange, co-organization

Joint Permanent Committee

(CVOs, FAO, OIE, UMA, EC)

ACTION PLAN: PRIORITIES

4 sub-network

FAO / OIE Regional Coordination unit

RELABSA Laboratoires

REPIVET Epidemio-Surveillance

Activities and results

RECOMSA Réseau Communication Santé Animal

RESEPSA Socio-Economie

Focal Points:
Veterinary services and implementing partners.

FMD in REMESA Countries (1/2)

- European countries: "Free from FMD without vaccination" (OIE status)
- Algeria, Morocco and Tunisia: no cases since 1999. Official control programs approved by the OIE (2012)
  - Annual vaccination in Algeria and Tunisia
  - Morocco stopped vaccination in 2007
- Mauritania: Endemic
- Libya and Egypt: many outbreaks in 2011 and 2012 (mainly SAT2)
- FMD is endemic in sub-Saharan countries

FMD in REMESA Countries (2/2)

- FMDV strains (O, A, SAT2, others?) are present in, and in the vicinity of, the REMESA region, that's means:
- -significant risk of spreading
- OIE and FAO have adopted a joint worldwide approach against FMD (Progressive Control Pathway - FMD)
- The FMD is considered as the priority disease in the region REMESA

- (see resolution REMESA presented at the 83rd meeting of the Executive Committee EuFMD (Bucharest, 2012)

Need for support

- The countries of North Africa are a “barrier" against the risk of spread of FMD in REMESA region (including Europe)
- Algeria, Morocco and Tunisia have already invested considerable efforts that must be sustained for the prevention and the control of FMD
- Some countries are less advanced in their efforts to prevent and control FMD despite the presence of the virus on their territory

- *Importance of an increased support of EuFMD, tailored for each country*

Need to coordinate

- EuFMD already supports the control of FMD in the region (training sessions, provision of diagnostic kits, ...)
- The Regional Coordination Unit FAO / OIE is involved in many initiatives to support the North African countries alongside national authorities

Need for a coordination between REMESA and EuFMD (or other international structures) in order to increase control efficiency

Common needs should be Identified by the two organizations in order to:

- Contribute to the definition and coordination of "national and regional strategies" especially in the Mediterranean area
- Coordinate and integrate activities conducted by all international partners involved in the Mediterranean region
- Improve capacity for early response in case of outbreaks
- Strengthen the diagnostic laboratory capacities

REMESA

Réseau Méditerranéen Santé Animale

- Some questions for discussion.

Points for Discussion/study

- **What are the countries with the most urgent training needs in the diagnostic and laboratory field?**
- **What are the most important needs in terms of material (eg, kits for laboratory diagnosis)?**
- **What are the needs in human resources, specialized support?**
- **What are the logistical and technical needs in the fields of surveillance, diagnosis and control, including vaccination?**
- **What are the requirements for coordination and exchange of information at the subregional and regional levels?**

The sanitary status of the country and the existing initiatives should lead us to a differentiated support by country and health status

How to respond? The Methodology

- **Identify for each country in North Africa, the needs to strengthen the capacity of countries**

What to do?

- **2. Identify possible support mechanisms, including EuFMD**

How to do it?

- **3. Prioritize countries (or regions) regarding the urgency of the needs**

Where to do it ?

- **4. Establish a short and medium terms program**

When to do it ?

Some proposals for discussion

<u>In the field of epidemiology</u>

1. **Harmonization of monitoring and control plans**
2. **Regional Contingency Plan approach and contingency essays.**
3. **Continuous training Plan in epidemiology and Risk assessment**

<u>In the field of vaccination strategy:</u>

1. **Emergency supply of vaccines in case of outbreaks and antigens bank**
2. **Common Regional vaccines strategies**

<u>In the field of Socioeconomics and animal movements.</u>

1. **Assessing the risks related to animal movements (study)**

<u>In the field of laboratory.</u>

1. **Regional reference laboratory and laboratory network**
2. **Organize inter-laboratory tests**
3. **Reinforced cooperation (twinning)**

REMESA
Réseau Méditerranéen Santé Animale

- Thank for your attention.

Standing Technical Committee Report



David Paton

Rome April 2013

Overview

- Jerez meetings and conclusions
  - Policy recommendations
  - Research highlights, GFRA research report
  - Research needs, themes for new concepts
- Annual review
  - Operational effectiveness of EuFMD
  - Changes to committees and structures
  - Research support from EuFMD
- Future priorities
  - Turkey and Eurasian control plans generally
  - Changes in OIE Trade rules – 3 month period
  - Need for a further “vaccine decisions” workshop

Jerez Meetings

- EuFMD Open Session, 29-31 October 2012
- Changed format
- STC day 1 – invited speakers
- Offered science on days 2 & 3
- Special committee meeting
- FAO/OIE International RLs meeting

Policy Recommendations

- Need for socioeconomic studies
- Contingency planning improvements
- Wildlife issues
- Regaining disease freedom
- Biosecurity standards

Waiting Periods to Regain Disease Freedom

- Dorothy Geale - Importance of trade in animal products rather than live animals is sometimes overlooked in considering trade rules.
- Angus Cameron - Combining evidence from different surveillance approaches to help substantiate FMD freedom
- Further work needed to define output-based standards that would convince third countries of the reliability of the new surveillance approaches.
- OIE review of FMD Code Chapter

Research Recommendations

- GFRA Review and future meetings
- Special Committee Recommendations
  - Diagnostics and testing
  - Epidemiology
  - Vaccines and vaccination
  - Biosecurity and trade

Dealing with NS positives

- Number of missed infections in a densely populated livestock area
  - Lower with vaccination than without because the outbreak is smaller
- Consequences of the strict rules for surveillance hamper the choice of vaccination

Dealing with NS positives

Position paper

1) Review of the requirement to sample all vaccinated animals, including pigs
2) The follow-up investigation required to establish the significance of seroreactors identified
3) The criteria for removal of seropositive animals and herds
4) What can be done with such animals (slaughter for consumption or destruction)
5) The impact of finding seroreactors during the process of surveillance with the objective of regaining the status "FMD free without vaccination"

Need for a follow-up to the 2007 Workshops on Design and Interpretation of post FMD vaccination by NSP tests?

- Not all recommendations enacted
- Have had modelling workshops to look at decision to vaccinate
- Focus again on Post-vaccination monitoring
- Wait for OIE FMD Chapter review and position paper
- Same principles as made earlier "Improcon" workshops successful
  - Focus on one item specific for Europe
  - Multidisciplinary teams
  - Realistic scenarios
  - Combine budgets form different sources to cover costs

Annual Review Meeting

With EuFMD Secretariat, Jan 2013, Rome

- Discussed EuFMD priorities and work-programme with Secretariat
- ToR for STC and SCR
- Strongly endorse policy-related EuFMD Research Fund
- Fund lab representatives of non-EC MS to attend EU CRL meetings
- Integrate PCP support from EuFMD pillar 3 into wider FAO/OIE strategic approaches
- Specific doubts over PCP in Turkey and W Eurasia
- Training – clarify model for growth and sustainability
- Importance of biosecurity expertise and input

Role of Standing Technical Committee

Purpose to support the Executive Committee and the Commission in developing and overseeing implementation of the policies and programmes approved by the Commission

Advice on:

a. Measures of success and methods for evaluation of programmes or projects
b. Policies or programmes that the Commission should consider
c. Scientific and technical aspects of proposals for policies or programmes

Work with the Special Committee on Research and Development of FMD Programmes to provide the ExCom and Com with:

a. scientific and technical assessment of regular reports or specific evaluations of programmes or projects
b. scientific and technical assessment of proposals for research put forward for funding or support

Special Committee on Research and Programme Development

Reorganized around the three pillars for the new EuFMD work-programme

Reviewing, proposing, position papers

Strengthen expertise in Epidemiology, Economics and Outbreak Management

Input of EuFMD consultants necessary

Need for steer from STC and Secretariat

Special Committee on Research and Programme Development

- Supplies a network between scientists working on FMD (scientists paid by national budgets)
- Reviewing, advising, developing:
  - containment issues and standards for lab containment
  - new diagnostic tools and standards for FMD diagnosis
  - models and cost-benefits for optimisation of contingency and control plans
  - EuFMD funded research and research priorities
  - surveillance results in regions bordering EuFMD territory and advice on surveillance in those areas
  - risk for introduction from various pools

Research supported by EuFMD

Technical gaps to implementing FMD control by MS are identified, and where urgently required, are supported through a Research Procurement Process

Low budget Concept Notes (CN) - max *~50,000 USD*

Reviewed by the Standing Technical Committee

Supported by letters of agreement through the Secretariat

Budget is from the EC Trust Fund

Process and Criteria for Research Study Programme

STC strongly endorse the Programme

Examples of successes – full genome sequencing, submission of “RNA” samples, multi-component surveillance, vaccine evaluation in Turkey

Process:

- Continue to be commissioned by the EuFMD Secretariat
- More transparent commissioning procedure – clearer priorities but not specific research tendering
- New reporting template
- Guidance for reviewers
- SCRPD selection and review

Recent and ongoing research concept studies

- Vaccine effectiveness studies in Turkey
- Wild boar surveillance in Turkey and non-invasive sampling
- Combining multiple surveillance data to show FMD freedom in Turkey
- Epicollect in Kenya
- Full genome sequencing
- Development of serotype specific RT-PCR assays for FMDV

Appendix 7

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

MINIMUM BIORISK MANAGEMENT STANDARDS FOR LABORATORIES WORKING WITH FOOT-AND-MOUTH DISEASE VIRUS

VERSION GS40/4.2BIS

Updates to the 39th Session Standard indicated in highlight

Modifications after receipt of feedback from member States by April 17th indicated in ~~strike through~~

Proposal to the 40th Session

1. To Adopt the "Minimum Biorisk Management Standards (MBMS) For Laboratories Working With Foot-And-Mouth Disease Virus", as developed by the Biorisk Working Group of the EuFMD Special Committee on Research and presented as paper GS40/4.2bis;
2. To place the further development of the MBMS, including standards for Tier A ad B laboratories, on the programme of the Special Committee for the biennium with the expectation of revised Standard being proposed for the 41st Session

Note on the Version GS40/4.2bis

1. The Biorisk Working Group of the EuFMD Special Committee on Research reviewed the current "Minimum Standards for Laboratories working with foot-and- mouth disease virus in vitro and in vivo" which had been adopted at the 38th General Session of EUFMD on 29 April 2009 , and which superseded the prior Standards (1993 and 1985).
2. Their recommendations for changes to the Standard were then circulated in a consultation Phase, through the Secretariat, involving Biorisk managers of the FMD reference laboratories which handle live FMDV in Italy, France, Netherlands, Denmark, Germany and the UK.
3. Following their responses, the proposed Standard was sent out to the EuFMD member states in April with request to return technical comments by the 17th April.

4. Comments were received from 5 member states (UK, Ireland, Sweden, Switzerland and Denmark).
5. The technical comments were reviewed by the Leader of the Biorisk Working Group. The version GS40/4.2bis indicates the changes to the 2009 MBMS in yellow highlight , and in strike through (indicated ~~strike through~~), the changes following the response from the MS received by April 17th.
6. Specific points addressed following consultation with the MS :
   a) As "Tier 1 – 4" may cause confusion with Risk Group 1-4 and BSL 1-4, the suggestion (UK) was followed to change it to Tier A,B,C, and D.
   b) It was taken into account that in some facilities showering out is not possible and so this was changed into a recommendation (CH) ("should").
   c) As pre-heating of serological samples will not be possible in some testing regimes and requires additional validation efforts (UK). A flexible wording was chosen. ("…should … as far as possible without impairing the intended testing regime or the validity of the tests used".)
   d) Points to be considered in a future revision include:
   e) a clause on a preventive maintenance (Romania)
   f) the use of Safety Performance Indicators (UK)
   g) clarification of the role of the Biorisk Officer (CH).
   h) Comprehensive updating of the Glossary (DG SANCO)
   i) work on Sections covering Tier A and B
   j) an Annex providing examples/guidelines for inactivation procedures for samples';
   k) the use of vaporized hydrogen peroxide for FMDV inactivation, following validation .

Version 18 April 2013 Paper GS40/4.2bis

DRAFT Document

for

adoption at the 40th General Session of the European Commission for the Control of FMD (EUFMD) - April 2013

MINIMUM BIORISK MANAGEMENT STANDARDS FOR LABORATORIES WORKING WITH FOOT-AND-MOUTH DISEASE VIRUS

SECTION I.

LABORATORIES WORKING WITH FOOT-AND-MOUTH DISEASE VIRUS IN VITRO AND IN VIVO ("MBRM STANDARDS FOR FMDV LABORATORIES")

SECTION II.

MINIMUM BIORISK MANAGEMENT STANDARDS FOR LABORATORIES UNDERTAKING DIAGNOSTIC INVESTIGATIONS FOR FMD IN THE FRAMEWORK OF A NATIONAL CONTINGENCY PLAN ("MBRM STANDARDS FOR FMD CONTINGENCY LABORATORIES")

NOTE: highlighted text indicates a section that has been updated/revised compared to 2009

~~Strikethrough~~ indicates change after consultation with the EuFMD MS in April 2013

The present document does not reflect the opinion of the European Commission (DG-SANCO)

Table of Contents

FOREWORD

In 1985 the European Commission for the Control of Foot-and-Mouth Disease (EUFMD) at the Food and Agriculture Organization (FAO) of the United Nations adopted a document entitled "*Minimum Standards for Laboratories working with FMDV in vitro and in vivo"*. This document described a set of precautions to be taken by foot-and-mouth disease (FMD) laboratories to avoid an escape of virus. It was prepared at a time when the majority of countries on continental Europe employed systematic annual prophylactic vaccination of their cattle. Council Directive 90/423/EEC amending Directive 85/511/EEC on Community control measures for FMD made the above standards a condition for the approval and operation of laboratories handling live FMD virus (FMDV).

Although the above document dealt with all important aspects of FMD containment, it had been found necessary to review it with special reference to the need for more specific technical and general requirements as a consequence of the change in Europe to a policy of non-vaccination. The security standards as specified in the 1993 revision had to be considered as minimum requirements for FMD laboratories located in FMD-free countries with or without systematic prophylactic vaccination. Article 65 of Council Directive 2003/85/EC on Community measures for the control of FMD and repealing Directive 85/511/EEC makes the FMD-lab standards, as amended in 1993, a condition for the approval and operation of laboratories handling live FMDV.

Following the 2007 FMD outbreak in the UK that was possibly linked to the research and commercial FMD vaccine manufacture establishments co-located at the Pirbright site, EUFMD undertook to review, and where necessary to adapt, the aforementioned FMD-lab standards. The edition of the "Minimum Standards for Laboratories working with foot-and- mouth disease virus *in vitro* and *in vivo*" adopted at the 38th General Session of EUFMD on 29 April 2009 superseded the edition adopted by EUFMD in 1985 and revised in 1993.

In the years since the adoption of the 2009 version of the "Minimum Standards", it has become even more evident than before that not all the diagnostic tasks in the framework of FMD control can be carried out in laboratories meeting the "Minimum Biorisk Management Standards for Laboratories working with foot-and-mouth disease virus in vitro and in vivo". There are too few of these expensive facilities available and they are usually research laboratories with a limited sample throughput. Therefore, "FMD Contingency Laboratories" have become part of contingency plans, as foreseen in Annex XV of Council Directive 2003/85/EC. In the following, the term "FMD Contingency Laboratories" is used for laboratories which must not work with any infectious FMDV - except for virus that might be present in field samples submitted for FMD diagnosis from the country where the laboratory is situated. This means there is no risk of escape unless there is an outbreak in the field – in which case the risk posed by infected holdings by far outweighs any escape risk posed by a laboratory operating according to Section II ("FMD Contingency Laboratories") of the "Minimum Standards". In contrast to the expectations when the "Minimum Standards" were adopted in 2009, there still is no validated and fully satisfactory protocol for the inactivation of FMD samples on the suspect premises. However, inactivation of such samples in a microbiological safety cabinet in a laboratory by trained staff using lysis buffers containing chaotropic salts prior to RNA extraction poses almost no additional risk. It is therefore now included into Section II ("FMD Contingency Laboratories").

In particular in countries where the national laboratory responsible for FMD diagnosis does not meet the "MBRM Standards for FMDV laboratories" even the testing of non-inactivated samples by antigen ELISA may be justifiable, provided that the risk is controlled by appropriate measures (mainly by restricting all liquid handling steps to a microbiological safety cabinet). It allows these labs to confirm PCR results, maintain a back-up method in case PCR fails and to determine the serotype. It is up to the national competent authority to decide whether a "FMD Contingency Laboratory" is authorized to carry out antigen ELISA. This approach was applied successfully during the 2011 FMD epidemic in Bulgaria.

The alternatives would often be to forego laboratory investigations or send all suspect samples to a foreign laboratory which may be stressed to limit already by the examination of suspect samples from its own country. In particular in times of crisis, sending samples to a foreign lab creates great logistical problems. It also makes communication between laboratories and veterinarians in the field much more difficult, substantially reduces sample throughput and increases the turn-around time for decision critical diagnostic results. For effective and swift disease control, it is crucial that official veterinarians as well as the national crisis centres can contact a diagnostic laboratory easily and without a language barrier, which have staff that are familiar with national legislation and disease control systems.

Using the capacity of existing laboratories which can meet the "MBRM Standards for FMD Contingency Laboratories" can provide exactly these benefits for effective disease control, in times of crisis, and also substantially lowers the psychological threshold for submitting samples for exclusion of FMD as a differential diagnosis. In several countries, it is attempted to lower this threshold by allowing regular veterinary laboratories to carry out "exclusion diagnosis", e.g. by PCR, in cases which are not considered "suspect cases of FMD" in the legal sense but where FMD is considered a possible differential diagnosis. The measures outlined in Section II ("FMD Contingency Laboratories"), mutatis mutandis, can also help competent authorities to reduce the biorisk associated with this approach.

Following review of the former "Minimum Standards of Biorisk Management for Laboratories Undertaking Diagnostic Investigations of Low-risk samples during an Outbreak of FMD", revisions have been introduced into the new "MBRM Standards for FMD Contingency laboratories". The technical content of the "Minimum Standards for Laboratories working with FMDV in vitro and in vivo" has been left unchanged, except for minor clarifications and the now consistent use of the term "Restricted Zone" for all areas where infective FMDV is or might be handled.

What also has become clear since the adoption of the 2009 version of the "Minimum Standards" is that the task of balancing risks and benefits of laboratory work has to be seen in wider perspective, since not all EuFMD member states are free of FMD. Any standard of biorisk management should be proportionate to the prevailing disease situation in the country or zone where it is located. Therefore, a 4-tier system of minimum biorisk management standards for FMDV is currently being drafted and the MBRM standards outlined in this document refer to Tier D and C:

Tier A: General diagnostic laboratories, in FMD endemic countries

Tier B: Laboratories working with infectious FMDV, in FMD endemic countries

Tier C: Laboratories undertaking diagnostic investigations for FMD in the framework of a national contingency plan, in FMD free countries

Tier D: (Inter)national FMDV reference laboratories working with infectious FMDV, in FMD free countries

Until MBRM standards have been internationally adopted for Tiers A and B, the biorisk managers responsible for the diagnostic laboratory system in FMD endemic countries are encouraged to apply the principles of the Tier C and D MBRM as far as can be reasonably achieved. In particular, "exotic" serotypes and topotypes of FMDV should be treated with the same precautions as FMDV in a country free of the disease.

FMD free country*[1]

Activity	**Biorisk Management Standard**
Any handling of infective FMDV strains not present in the field	Tier D Standard (MBRM STANDARDS FOR FMDV LABORATORIES)
Diagnostic investigations for FMD in the framework of a national contingency plan	Tier C Standard (MBRM STANDARDS FOR FMD CONTINGENCY LABORATORIES)
General diagnostic or research work on animal samples*[2]	No FMD-related requirements *(Principles and elements of Tier C Standard should be applied according to risk assessment)*

*[1]The term "FMD free country" is used here for a country that has been recognized by the OIE as being free of FMD, with or without vaccination, even during the phase of trying to regain this status during or after an epidemic.

*[2]The term "animal samples" is used here for samples of species susceptible to FMD.

FMD endemic country

Activity	**Biorisk Management Standard**
Any handling of infective FMDV strains not present in the field	Tier D Standard (MBRM STANDARDS FOR FMDV LABORATORIES)
Infection of animals and vaccine production with infective FMDV strains present in the field	Tier B Standard *(being drafted)* *(Principles and elements of Tier D standard should be applied depending on the stage of eradication reached)*
Handling on a regular basis, including propagation in small volumes, of infectious FMDV strains present in the field	Tier B Standard *(being drafted)*
General diagnostic or research work on animal samples*[2]	Tier A Standard *(being drafted)*

SECTION I. MINIMUM BIORISK MANAGEMENT STANDARDS FOR LABORATORIES WORKING WITH FOOT-AND-MOUTH DISEASE VIRUS *IN VITRO* AND *IN VIVO*

INTRODUCTION

Foot-and-Mouth Disease (FMD) is one of the most infectious diseases known, and manipulating the virus in the laboratory without adequate precautions is a risk of environmental release. It has been shown that as few as 10 TCID can be infective to cattle by the airborne route. However, this is under experimental conditions and the low infective dose may relate to the relatively large size of aerosol droplets, which can be efficiently contained by HEPA filtration of air exhaust from facilities handling infective FMD virus (FMDV). As a consequence of the low infective dose, laboratories handling FMDV must work under high containment conditions, **in which the principle objective of the containment measures is to prevent release of virus that would give rise to animal infection outside of the laboratory (veterinary containment).**

The principles on which the containment measures are based are as follows:

– FMD virus is an animal health but not a human health hazard;

– containment measures for FMDV laboratories will differ in certain respects from those required of high containment facilities handling pathogens which present a significant human health hazard;

– effective implementation and maintenance of the containment measures will reduce the risk of an accidental release of virus to a level that can be considered acceptable in a risk management balancing those risks against the expected benefits of the services provided by such laboratory.

The containment measures were prepared on the basis of the documented evidence on the physico-chemical properties of FMDV, its inactivation kinetics, and the form and quantity of FMDV required to infect susceptible species.

Key factors in establishing and implementing a successful containment system include:

1. Physical and operational barriers to the release of FMDV that involve three containment layers and multiple fail-safe mechanisms as follows:

1.1. Primary containment layer:

– contain the live FMDV at source within closed containers or a class I, II or III safety cabinet, or

– in the case of infected animals, contain the live FMDV by physical containment in specially constructed rooms with treatment of all waste and the HEPA filtration of air;

1.2 Secondary containment layer:

– containing FMDV of infected materials and staff working with such materials within a closed and highly controlled physical environment, and

– subject solids, fluids and air to a treatment by validated procedures that will remove or inactivate FMDV;

1.3. Tertiary containment layer:

– prevent contact between the live FMDV and susceptible livestock outside containment by appropriate measures, such as restrictions placed on access of staff to such livestock.

2. Commitment by senior management:

– to provide the resources required to attain and maintain the containment measures, including the physical and human environment;

– to recognise the top priority of the management of the risks associated with facilities handling live FMDV;

– to establish and maintain a management system and a working culture in the facility that facilitates continual improvement in preventing possible release of virus, the effectiveness of containment processes and root cause analysis of possible release incidents so as to prevent their recurrence;

– to recognise and promote continual improvement.

General requirements

FMD risk management system: Each facility should establish, implement and maintain a FMD risk management system, appropriate to the level of risk associated with each of the mechanisms and routes by which FMDV could escape or be released.

Policy: The management of the facility should have in place a policy that clearly states the FMD risk management objectives and the commitment to improving the FMD risk management performance.

Risk assessment: To operate a FMD risk management system, a risk assessment system should be in place in order to:

– identify and address the risks (likelihood and extent of impact) of release or escape of FMDV by each facility (plant);

– define the circumstances which would trigger a new or revised assessment, for example plans to construct new or modify existing facilities , changes to the programme, changes to volume of activities, following incidents or as a result of elevated levels of biosecurity threats to the facility.

Hazard identification: The Hazard identification system should identify the situations, and other hazards, associated with the work of the facility that may impact on the risk of FMDV release, including emergencies (such as electrical failure, fire, flood, medical emergencies etc). The requirements in this standard do not necessarily identify all hazards that may occur, but are written to reduce the risk associated with the hazards in facilities handling live FMDV.

The main sources of FMDV are:

– diagnostic specimens,

– infected tissue cultures,

– infected laboratory animals, e.g. baby mice and guinea pigs,

– laboratory based physical and chemical processing of large quantities of virus, and

– infected pigs, cattle, sheep, goats and other susceptible large animals.

The principal routes by which the FMDV may escape or be carried out from laboratories include:

– personnel,

– air,

– liquid effluent,

– solid waste,

– equipment, and

– samples and reagents.

Although RNA derived from FMDV may still be infectious under very specific conditions, for practical purposes samples can be considered "inactivated" after an approved treatment with an appropriate lysis buffer and a disinfection of the sample tube by an approved method. However, as a precaution, such samples should not be handled without appropriate risk management measures, which must, in particular ensure that such samples are at no stage of processing added to cell cultures or injected into animals, except in laboratories meeting the ""Minimum Biorisk Management Standards for Laboratories working with foot-and-mouth disease virus *in vitro* and *in vivo"*

Risk control: Under the direct responsibility of the management of each facility (plant), the hazards which could lead to a risk of FMD escape should be identified, quantified, prioritised and control options identified. The requirements indicated in this Standard should be considered a minimum, and do not release the management of each facility from the responsibility to undertake a formal risk assessment process.

Special attention should be given to:

– replacement and reduction in use of live virus where possible;

– security and recording of access to the facility;

– security check of personnel handling live FMD virus;

– the responsible behaviour of personnel within and when they leave the laboratory, including the use of changing and showering facilities;

– the application of rules for primary containment;

– the maintenance of the physical containment including the air handling systems to ensure a negative air pressure where virus is manipulated and the effective particulate filtration of exhaust air;

– the decontamination of effluent;

– the disposal of carcasses in a safe manner;

– the decontamination of equipment and materials before removal from the Restricted Zone.

Use of alternative procedures: The use of alternative procedures for inactivation of FMD virus to those specified in this Standard is permissible provided that the information from the validation of the process has been examined and found equal or superior in performance to those currently specified. Decisions on equivalence of the proposed procedures can be made by national competent authorities. However, national authorities have to inform the EUFMD

Standing Technical Committee of such decisions and their scientific basis, which will be reviewed and findings published in the "*Report of the Sessions of the EUFMD Standing Technical Committee.*"

Residual Risk: The residual risk is the risk of a consequential release of FMDV, after application of the control measures. The Biorisk Officer (BRO), management and ultimately the national regulatory body should consider the overall biorisk management system together with the hazard identification and risk control procedures, and identify if there are residual risks requiring either more effective controls to be put into place, or work to be suspended.

Authorization of laboratories in respect to FMD:

In respect to work with FMDV, laboratories may be authorized by the competent authorities to carry out one or more of the following types of work:

(1) infection of experimental and/or large animals with FMDV;

(2) Manufacturing activities that involve the production of large amounts of infectious FMDV, e.g. large scale virus production for the production of antigen banks or FMD vaccines at a capacity greater than 10 litres of cell culture in monolayers or suspension that may reach many thousands of litres;

(3) activities involving the propagation of infectious FMDV, but are limited to 10 litres of cell culture, and during which the FMDV is enclosed in containers which can be effectively autoclaved or disinfected;

(4) to test diagnostic samples for FMDV antigen by ELISA and related methods

(5) to test diagnostic samples for FMDV genome by PCR and related methods

(6) to test diagnostic samples for antibody to FMDV by ELISA and related methods

(7) to apply on the genome of FMDV methods of molecular biology that do not involve live FMDV manipulation

Laboratories carrying out the type of work mentioned under points 1, 2 and 3 must comply with the "MBRM Standards for FMDV Laboratories".

In accordance with EU legislation, and in most cases national legislation, the manipulation of live FMDV requires a mandatory authorisation by the competent authority.

The FMDV-associated risk of laboratories carrying out the type of work mentioned under points 5, 6 and 7 is usually much lower, while the risk associated with the activity mentioned under point 4 is intermediate. However, in case the laboratory tests field samples of national origin, there is no FMDV related risk as long as the disease is not present in the country. In case of an outbreak, the main risk is posed by the infected holding and the risk of a laboratory escape must be controlled by appropriate measures (see Section II).

SPECIFIC REQUIREMENTS

The requirements below are intended to assist self-assessment, biorisk audit and inspection of facilities.

I. Management

Specific management requirements:

1. *Biorisk policy, delegation of responsibilities and communication*: The management of a facility is ultimately responsible for biorisks (biosafety and biosecurity) of its premises. The management should therefore define and document roles, responsibilities and authorities related to biosafety and biosecurity management in a formal policy statement and communicate this to all staff members.
2. *Formal process of Risk assessment / threat assessment*: The management should ensure that a formal process is in place to conduct, review and update a risk assessment. The need for a structured security threat assessment should be considered for each facility.
3. *System for continual improvement:* The management should put a system in place to guarantee that biosafety and biosecurity procedures and elements are thoroughly reviewed and audited on a regular basis. Records should be maintained of findings of audits, including actions taken to comply with the containment policy.
4. *Standard operating procedure (SOP)*: A system should be in place to maintain a complete set of SOPs for all operational processes that are considered critical to the containment of FMDV.
5. *Biorisk Officer(BRO)*: It is the duty of the management to properly monitor the biosafety and biosecurity by appointing a BRO (Biosafety / Biosecurity Officer), arranging for a deputy or replacement, and creating the necessary framework conditions in the facility. To ensure that biosafety and biosecurity is given full consideration in its activities the management should carefully define the status, duties and responsibilities of a BRO:
   (a) The BRO should report directly to the top management representative (Director-General, site Director or similar) and should have authority to stop the work in the facilities in the event that it is considered necessary to do so.
   (b) The status of the BRO should ensure his/her independence and the absence of any potential conflict of interest.
   (c) Adequate financial and personnel resources should be allocated to the BRO to carry out his or her duties.
   (d) The BRO should have the possibility of a direct link to the competent authorities responsible for the enforcement of biosafety / biosecurity regulations within the country or geographical/administrative area.
   (e) The BRO should have appropriate training in virology, containment techniques and procedures to fulfil his/her duties. It is to be expected that he/she would also have a broad based knowledge of the FMDV with particular respect to its physico-chemical properties, mode of transmission and other topics of relevance to his/her role.
   (f) The BRO should review regularly both technical reports concerning the various containment facilities as well as data relating to their day to day operation and

monitoring. On the basis of such information, the officer should inform senior management of any concerns he/ she may have and as they arrive as well as prepare an annual report on all relevant containment elements of the facilities.

6. *Accessibility to live FMDV*: Access to live FMDV should be limited to adequately instructed key personnel authorised by the management.
7. *Record keeping:* Detailed records of handling live FMDV (e.g. virus strains and dates used) should be kept and stored at least 5 years. Inventory lists including information on the location where a virus strain is stored should be maintained and periodically inspected and crosschecked. Laboratory books or other daily records of procedures by staff working with FMDV should be in place to enable retrospective analysis of activities for at least 12 months.
8. *Accident / incident reporting system*: Each facility should have an accident / incident reporting system in place, with a procedure for rating of the risk of the event and a decision making process for recording, reporting and remedial actions. An example of a risk rating system and associated decision tool is given in ANNEX I.
9. *Accident / Incident review system*: there should be a system in place to ensure each incident/accident is reviewed to ensure that the lessons learned have been identified, the type of failing in control measures is recognised, and adequate and proportionate remedial measures set in place. A statistic concerning accidents / incidents should be made available to the management at least annually.
10. *Systems to review biorisk changes*: changes to the design, operation and maintenance of a facility including biosafety / biosecurity procedures and risk assessment should be reviewed, verified, approved and documented through a formal change control process before implementation. Trigger points for review or drafting of new risk assessments should be identified.
11. *Emergency management plans* (contingency plans): types of emergency should be identified, including fire, flooding, loss of essential services, security breaches and major events affecting integrity of buildings, and standard management procedures for each event developed, documented and made permanently available to staff.
12. *Access to site:* management should implement and document a system for controlling access to areas of the site where the activities of the area pose a potential hazard. There should be physical security measures to restrict access.

    Management should define the different zones on the site, taking into consideration the hierarchy of risk of activities in each zone. A suggested typology is:

RED	*[=Restricted Zone = where FMDV is manipulated and/or which contain infected animals]*
ORANGE	*[= support services and access to the Restricted Zone]*
GREEN	*[general access and administration].*

RED, ORANGE and GREEN zones are situated within the *Controlled Zone* = area within the outer security barrier or fence of the facility.

The minimum requirements are to clearly define and document the zones under control of the BRO, including definition of the outer perimeter of the site, lower risk areas for personnel and plant access, the location and barriers of the laboratories in which FMDV is handled, and the location and access points to waste treatment (including ventilation systems).

II. Training

13. The organisation should ensure that personnel are competent for their designated roles and receive appropriate training on a regular basis. In particular, training requirements and procedures for biosafety and biosecurity related training of personnel should be identified (training programme) and established (training manual) and training records should be maintained.

14. Training content and training tools should be defined taking into account the different target audiences and the individual learning differences within a facility. Training efficacy assessment should be considered wherever possible and appropriate. Training should be reviewed on a regular basis.

    The BRO should be in charge of providing information and advice on biosafety and biosecurity to laboratory staff, cleaning personnel, visitors, contractors as well as to other persons working either in locations in which FMD is handled or adjacent facilities such as service areas. Personnel should be made aware of the responsibilities, the specific containment features and the risks associated with such activities.

15. Training should be provided on the specific properties of FMD, the primary and secondary containment features and the biosafety / biosecurity procedures pertinent to each facility.

16. All staff members must be appropriately informed and regularly trained in emergency evacuation procedures with special attention being given to security requirements in cases of fire.

III. Laboratory Biosecurity

Note: Additional considerations and notes are given in ANNEX I.

The objective of Laboratory biosecurity is to protect biological materials containing FMD virus against deliberate removal from the facility.

17. It is part of the duty of care of every facility handling FMDV to ensure that it minimizes the risk of virus misappropriation by intruders and people with access rights to the facility, through measures taken following a *formal threat assessment process*.

    In a threat assessment the critical assets of a facility should be identified and the facilities' vulnerability to threats should be assessed. Any decision not to undertake such an assessment requires documentation and justification. Based on the threat assessment, structural (e.g. building design, IT etc.), physical (cameras, fences, access etc.) and organisational (security policy, accessibility etc.) measures should be taken.

18. To comply with point 17, the minimum requirements are*:*

    (a) *Security system* that is appropriate to detect and alert security to the presence of intruders, with a security plan in place for rapid response to intrusion.

    (b) E*ntry Recording system:* Access to the facility should be recorded to provide an audit trail of who was in the facility at any given time.

19. *Threat reduction/control measures*: Due to the unpredictability of the actual threat, controls are required to reduce the risk to an acceptable level. These controls should consider structural, physical and organisational measures and must address at least the following scenarios:

    - Intruder attempting to remove FMDV from the facility by forced or fraudulent entry;
    - Staff member removing FMDV from the facility;
    - Shipment of virus containing materials.

IV. Personnel

20. Control of entry into and exit from the Restricted Zone must take place only through changing and showering facilities. This means a complete change from private or controlled area working clothes to dedicated Restricted Zone working clothes on entry and the reverse process on exit but with a shower before leaving the Restricted Zone.

21. A code of FMDV containment practice, including instructions for entry into and exit from Control Zones/Restricted Zones, must be available for all employees and visitors on site.

22. The FMDV containment rules and other relevant documents provided by the management must have been read and signed by each employee at the beginning of their employment. At this time, it should also be made clear to new staff that any violation of such and similar regulations may result in disciplinary actions by the management and the terms of employment should indicate this.

23. *Control of access to Controlled zones and critical areas*: A level of security checks is recommended for all individuals with access to FMDV laboratories or critical plant/service areas of these laboratories. The performance of such checks will depend on the legislation of the country and procedures should have been developed in consultation with the police and relevant government agencies of the country.

    Access to FMDV containing materials in the laboratory should be restricted to trained and dedicated staff on the basis of legitimate needs. The number of individuals with access to virus storage areas should be kept as small as reasonably possible.

24. *Visitors*: There must be rules in place governing the access to controlled zones by visitors, covering at least the record keeping and the possible use of background checks. The security system should verify the identity of visitors through use of unique identifiers including passport or ID card details. The reasons for each visit and the responsible person must be recorded.

25. Visitors have to be instructed in the specific containment procedures (eg. decontamination) of each facility before entering the Controlled / Restricted Zones. There must be a system in place that guarantees that these procedures are properly followed.

26. *Oversight (mentoring)*: A system for oversight of new personnel should be established, such that all new staff has someone assigned for oversight who has sufficient understanding of the biosafety rules.

27. The human resources department should establish procedures to support compliance with biorisk management procedures. At the work place, factors which might

compromise compliance are e.g. excess work load, bullying, bad management style or lack of oversight. Also on the level of individual employees, problems like substance abuse or mental conditions could compromise compliance with biorisk management rules.

28. Quarantine: each facility must define and apply quarantine periods for persons authorised to work in each category of Controlled Zone, to reduce the risk that personnel will cause a release of FMD virus as a result of virus carriage on their body. A range of quarantine periods may be defined depending on the level of exposure to virus. Depending on the risk assessment quarantine rules may be applied to other areas of a facility as well. For the Green Zone, usually no quarantine period is necessary.

    Persons, including visitors, authorised to enter the Restricted Zone must agree not to keep any animals which are susceptible to FMD, nor reside on premises where such animals are kept and to abide by minimum standards of quarantine, i.e. no contact with animals susceptible to foot-and-mouth disease for at least three days.

29. Personal protective equipment; regular supply of appropriate laboratory clothing for use within the Restricted Zone.

V. Facility Design

30. General construction of buildings and their surfaces, including ducting of the air conditioning system:
    - maintain inward flow of air through doorways and other openings at all times
    - properly maintained condition with a high standard of airtightness
    - insect, rodent and bird proof.
31. Windows:
    - Sealed, toughened and preferably double glazed, and able to withstand operating pressures and all but major impact.
    - Equivalent standard in animal rooms and at a height where animals are not able to break.
32. Doors:
    - warning signs at entrances:

      ACCESS FOR AUTHORISED PERSONNEL ONLY

      BIOLOGICAL HAZARD

    - access restricted by locked doors where locks are operated from the outside. The advantages of a key-less lock system centrally controlled by the biosafety department should be explored that prevents unauthorised cutting of falsified spare keys and allows the biosafety department to reset access rights as necessary.
    - airlocks provided with airtight doors which are interlocked to prevent opening of both doors simultaneously, in particular following a gaseous decontamination cycle;
    - doors should be fitted with windows to allow staff outside of a room to see actions inside and provide assistance if necessary.

33. Walls, floors, ceilings:

    – In many respects, the surfaces and material appropriate to Pharmaceutical facilities respecting GMP standards are also relevant to laboratories handling FMD virus. Notably, surfaces should be impervious, smooth, crevice free and easily cleaned and disinfected. Cavities within the fabric of the facility should be avoided (e.g cavity walls) unless all penetrations of the walls, floors and ceilings are thoroughly sealed with suitable materials such as silicone mastic. Crevices and joins between surfaces should also be sealed with similar materials. Continuity of seal should be maintained between floors and walls. A continuous cove floor finish up the wall is recommended in particular for areas where major spillages will occur, e.g. animal and post mortem rooms.

    – Sealed (airtight) entry of service lines.

34. *Communication*: All areas equipped with telephones and, in some areas, cameras, to ensure additional security outside of normal operations and allow staff to report issues including accidents and incidents without leaving work area.

35. *Emergency back-up power*: The laboratory facility should be equipped with a back-up source of electricity (an emergency generator) which starts with a delay of no more than a few minutes in the event of power failure. Alternatively, it is acceptable if the commercial power supplier is able to guarantee a supply from an alternative source within a few minutes of the main power failure. The delay period that is permissible will depend on the airtightness of the key buildings in the facility where virus in aerosol form may be present. In the design of a Restricted Zone facility, special attention should be paid to the critical electrical supply circuits such as air handling systems, cold stores, safety cabinets, and other equipment and installations relating to the security and safety of the facility. There should be no possibility of the emergency supply being diverted from critical circuits by less important demand from non-critical equipment. Thus, the critical supply circuits would include air handling systems, cold stores, safety cabinets and other equipment and installations relating to security and safety of the facility.

VI. Handling of FMD virus

36. *Recording receipt of virus containing materials*: A system should be in place for recording receipt of specimens or samples known or reasonably be suspected (to contain FMDV. The accompanying type and strain identification, or such information generated by the laboratory, respectively, should be recorded.

37. Except in cases when this is not technically feasible (e.g. during large animal experiments and post-mortem examinations), materials known or expected to contain FMD virus must either be kept within closed vessels or in devices that in combination with suitable operating procedures will function as primary containment. Such devices should be equipped with suitable filters, for example HEPA filters for which the requirements are defined in the Glossary, or equivalent off-gas or vent filters (primary containment). A suitable disinfectant should be kept close to the work areas such that a spillage can be rapidly dealt with.

38. In areas where only small quantities of virus are handled (10 litres or less of cell culture), liquids and suspensions containing FMDV should be inactivated by a

validated procedure, for example, dilution in disinfectants, before disposal into the liquid waste system of the facility.

39. When large quantities of virus are processed (e.g. for vaccine production), it is necessary to transfer virus with a contained system of vessels, pipes and other equipment. To permit fluid transfers, air needs to enter and exit equipment and infectivity must be efficiently removed by a suitably validated procedure. Usually, this is done by filtration and a number of manufacturers supply filters capable of removing FMD virus with very high levels of efficiency. Procedures are also required for decontamination of vessels, pipes and other equipment after the process has finished and before the process is either repeated or items are opened or stripped down for cleaning or maintenance. Usually this will require a chemical decontamination stage followed by steam sterilization.

40. Inoculation of animals, maintenance of infected animals and post-mortem examinations must take place within the Restricted Zone in rooms (normally dedicated animal or post-mortem rooms, respectively) that in combination with suitable operating procedures function as a primary containment. [see glossary] Personnel must wear appropriate and comprehensive protective clothing to minimise exposure of body surfaces to virus splashes and aerosols when handling virus suspensions and when inoculating or handling infected animals. On exit from an animal and post-mortem rooms, protective clothes and footwear must be left inside these rooms or in ante-rooms to these rooms. Showering and complete change of clothes is required before the operator can move to an area not operating under a negative pressure/air filtration system.

41. Movement of materials known or expected to contain FMD virus out of one zone (eg laboratory), to another zone (e.g. animal rooms) on the same site must be governed and made by a set of procedures that prevent possible loss or spillage of virus in a non-Restricted Zone of the facility. As a minimum requirement, such materials are transported between the zones within a leak and break proof container. Staff making such transfers should be fully authorised to do so and be familiar with the emergency response procedures in the event of accident or incident.

42. Laboratory facilities and equipment must be cleaned and appropriately disinfected at regular intervals. In particular, benches and other flat surfaces exposed to virus should be wiped down with a suitable disinfectant as soon as open work has finished.

VII. Air Handling – Live Virus Facilities

Note: Additional considerations and notes are given in ANNEX I.

Ventilation systems

43. *Negative pressure ventilation system*: All facilities used for the handling of FMDV must operate under a negative pressure ventilation system with HEPA filtration of exhaust air and systems to prevent air escape on the inlet supply.

    In areas where only small quantities of virus are handled (10 litres or less of cell culture), the minimum negative pressure should be 35 Pa [1]but due consideration needs to be given to ensure a gradient from the periphery of the Restricted Zone to the area

[1] **1 pascal (Pa) ≡ 1 N/m^2 ≡ 1 J/m^3 ≡ 1 kg/(m·s^2) ≡ 0.102 mm water column**

where virus is handled. From a practical perspective, it is difficult to achieve gradient steps of less than 10 Pa and this will tend to dictate the choice of pressure in the most negative part of the Restricted Zone. For areas where larger quantities of virus are handled such as large scale virus production rooms and large animal rooms, the minimum negative pressure should be 50 Pa. A system should be in place to prevent a positive pressure occurring within the building due failures or faults within the Restricted Zone ventilation system.

44. *Exhaust air filtration system*:

Laboratories:	Double HEPA (H13 or H14) filtration of exhaust air. Use of a single HEPA filter may be acceptable, provided that it is demonstrated that open work with live virus is at all times restricted to within biological safety cabinets (BSC) which have HEPA filtration of exhaust air, thereby maintaining an effective double HEPA filtration following open work.
Animal rooms	Double HEPA filtration of exhaust air is obligatory.

Production laboratories: Double HEPA filtration of exhaust air is obligatory.

45. *Inlet air supply*: A system must be in place to prevent escape of air via the inlet in case of ventilation shut-down. This may be achieved by a single HEPA filter or automatic dampers in the air inlet system.

46. The air pressures within the different rooms of a Restricted Zone should be continuously monitored by manometers and a system must be in place so that staff working in these areas are informed if significant loss of air pressure occurs and the actions to be taken. Manometers should be labelled to indicate the working pressure and the minimum and maximum limits within which open virus work is permitted. Under any of these alarm conditions, the primary action is to cease all open virus work and secure the workplace by sealing virus containers and disinfection of surfaces and protective clothing. The opening of doors leading to the contained area or to rooms containing infected animals or carcasses should be avoided as far as possible until the pressure difference has been restored.

47. All critical filters (HEPA) should be incorporated into a preventative maintenance programme. In particular, the efficiency of HEPA filters should be checked at least once per year, and in line with requirements of EN 14644.

48. When HEPA filters are installed or replaced, an in-situ efficiency test must be carried out by trained personnel with validated equipment. Replacement of HEPA filters must be performed in accordance with an authorised procedure. Strict precautions must be taken to prevent the spread of virus with used filters or contaminated air. Replacement of filters from outside the Restricted Zone must take place after decontamination "in situ" or in "safe change" air-handling units. Filter specifications and test results supplied by the manufacturer should be incorporated into the maintenance records but cannot replace in-situ testing because filters may have been damaged during transportation or may not have been fitted into the gaskets properly during installation.

49. Filters must be changed when the pressure difference exceeds certain limits in accordance with the instructions given by the manufacturer, or sooner if the filter fails one of the prescribed efficiency tests. Additionally, it may be necessary to change some filters more frequently if they are subject to high humidity or high particle challenge.

50. Animal rooms – prefilters should be designed in a way that they can be changed without shut-down of the ventilation system.

51. HEPA filters in safety cabinets should also be checked at least once per year. Movement of safety cabinets should be accompanied by re-validation of the filter integrity due to possible flexing and movement on the filter cartridge or filter housing.

52. Off-gas or vent filters require testing on installation and at least once per year.

VIII. Waste management

Effluent

53. Effluent from Restricted Zone laboratories and from facilities holding FMD infected or potentially infected animals must be treated in a manner which ensures that there is no residual infectivity in the effluent using a suitable validated procedure. Both heat and chemical treatment may be used to process the effluent provided all of the material in the effluent is exposed to the specific treatment.

54. The treatment must be validated for the highest virus load and the most difficult matrix that can reasonably be expected. The possibility that virus particles may be protected from inactivation by proteins or lipids, and/or by aggregation or precipitation, must be taken into account in the validation process.

55. The entire effluent treatment system must comply with high containment conditions. In every case it must be ensured that no leakage from the primary containment system into the environment can occur.

56. There must be sufficient storage capacity (tanks) for the storage of untreated effluent.

57. The equipment must have automatic monitoring systems to ensure proper function. These systems must ensure that the required conditions for inactivation of FMDV have been reached before the effluent is discharged. The systems should be continuously monitored and all critical data recorded. The system should be designed in a way that in case of any failure, the likelihood of a release of potentially infectious material is minimised.

58. Treatment options:

    Heat treatment: FMD virus is quite sensitive to heat at 100°C for 1 hour or an equivalent heat effect has been shown to be sufficient to inactivate FMDV in effluent to the extent that no residual infectivity can be detected. The treatment process should be monitored by multiple, automatic and continuous time and temperature measurements, combined with automatic measurement of flow rates or volumes. Any treatment system must ensure homogeneity of the effluent during the inactivation process. All data relevant to the inactivation process and the release of effluent must be recorded. Critical data measuring and logging equipment must be validated by qualified personnel at least annually.

    Chemical treatment: FMD virus is quite sensitive to acid and alkaline pH conditions. NaOH or Na_2CO_3 or other alkaline treatment at pH 12 for at least 10 hours has been shown to be sufficient to inactivate FMDV in effluent and are particularly effective because of their action on concentrated biological effluents. As with heat, thorough mixing of the materials must be ensured. The treatment process should be monitored by multiple, automatic and continuous time and pH measurements. After treatment, the

materials must be neutralized and the pH checked before the effluent is released. All data relevant to the inactivation process and the release of effluent must be recorded. Critical data measuring and logging equipment must be validated by qualified personnel at least annually.

Solid waste (animal carcasses, feedstuffs, laboratory waste etc.)

59. The principle requirement is on-site inactivation of FMDV in waste using a validated method.

60. These methods include:

- Sterilisation by steam using an autoclave (at least 115°C for 30 minutes or equivalent heat effect). It is essential that the different autoclave load types (eg plastic waste, paper waste, waste liquids) are each validated for the maximum load size with suitable recording devices, e.g. thermocouples, at different locations within the load including the centre of the load. Typically, autoclave periods are 30 min or more. Autoclaves should be double-ended so that treated waste does not need to re-enter the Restricted Zone. Autoclaves should be revalidated at least annually by experienced personnel. Depending on the national requirements, it may be necessary to dispose of the autoclaved waste by incineration on or off the site.

  Rendering of carcasses on site, in compliance with the requirements for category 1 animal by-products (Regulation (EC) No 1069/2009 and Regulation (EC) 142/2011).

- Incineration on site. The incinerators must comply with current safety standards and be fitted with afterburners.

61. *Emergency procedures*: A similar level of safety must be demonstrated for procedures used when normal waste treatment procedures can not be followed, e.g. because of a breakdown of equipment. Emergency procedures must be documented in the laboratory emergency plans, and include procedures for storage until treatment and final disposal.

IX. Equipment and Materials

Laboratory fittings

62. *Benches* shall be smooth, impervious and resistant for any chemicals used in the facility. Junction between horizontal and vertical surfaces should be radiused.

63. *Centrifuges, sonicators, homogenizers and other equipment* must be designed so as to contain aerosols or be used within safety cabinets where any aerosols generated will not escape to the atmosphere of the restricted laboratory.

Removal of equipment and other material

64. Before removal from Restricted Zones, equipment must be decontaminated according to the size and use of the equipment:

- either by steam sterilization within an autoclave, at 115°C for 30 minutes, or an equivalent heat effect, or

- after surface disinfection, fumigation with formaldehyde (10 g/m3 at 70 % RH) for at least 10 minutes or (3 g/m3 for 24 hours or equivalent with other aldehydes, e.g. glutaraldehyde, or ethylene oxide (0.8 g/litre at 50°C for 1.5 hours). Equipment, for example contractors' tool boxes, laptops, etc. which is fumigated out of a Restricted

Zone should be cleaned and be opened as much as reasonably possible to allow penetration of the gaseous fumigant; or

– thorough washing in an appropriate chemical disinfectant[2] such as:
  - 4 % Sodium Carbonate or 10% washing soda (Na_2CO_3 Dehydrate);
  - 0.5 % caustic soda (NaOH);
  - 0.2 % citric acid;
  - 4 % formaldehyde or equivalent with other aldehydes, e.g. glutaraldehyde; or
– an equivalent disinfection protocol officially approved for the purpose.

65. Decontamination of clothing before removal from the Restricted Zone for laundry must include a wet heat treatment step (autoclaving at a temperature of at least 115°C for 30 min, or equivalent heat effect). A laundry process without autoclavation is permitted if performed on-site in a double-ended pass-through laundry device. Such a laundry process must include a validated alternative inactivation step.
66. Documents should be sent out of the Restricted Zone preferably in electronic format (fax, scans, electronic documents, e-mails etc.). In case papers have to be taken out of the Restricted Zone, they must be treated by a validated procedure e.g. autoclaving, irradiation or ethylene oxide treatment. In cases when only low levels of contamination can reasonably be expected and following risk assessment, paper can be sealed and kept at > 20 ^{0}C for two years before being taken out of the Restricted Zone.

Removal of biological material from the Restricted Zone

67. Before sending non-FMD biological material to another laboratory which lacks the required level of containment, the necessary precautions must be taken to ensure that the material does not contain FMDV.

    Thus if the source of the biological material is a restricted laboratory area, it is essential that it is subject to an innocuity test to demonstrate freedom from FMDV or a validated treatment that destroys FMDV infectivity.

    The recipient laboratory must be informed about the potential risk of material coming from a laboratory manipulating FMDV. The recipient laboratory must further sign a statement that it is prepared to receive the material and that it will take the necessary precautions.
68. For the shipment of FMDV containing materials to other laboratories an innocuity test is not required if the material is sent to a high containment laboratory licensed to handle live FMDV.

    The laboratory which provides FMDV to another laboratory has a duty of care to ensure that the recipient laboratory is authorised to handle FMDV. Before shipment, it has to ask for a statement from the recipient laboratory that it is requesting the virus only for legitimate purposes and will not redistribute the virus to other laboratories

[2] *Note:* The efficiency of these chemical disinfectants is considerably improved by the addition of a non-ionic detergent.

without written consent. The sending of materials containing FMDV is subject to international requirements governing transportation.

X. Decommissioning containment compartments for maintenance or renovation purposes.

Note: Additional considerations and notes are given in Annex I.

69. Maintenance or renovation work that may compromise the integrity of the containment barrier thus possibly allowing the escape of air or liquids must be preceded by an assessment of the risk and a safety plan.

70. Decontamination of rooms/compartments, to reduce the risks to an acceptable level, are required before these can be decommissioned permanently or temporarily, for example during renovation.

    Standard Treatment procedures include fumigation with formaldehyde after making the room effectively air-tight.

71. Waste building materials generated by demolition and redevelopment and other potentially contaminated materials must be treated in a way that any residual infectivity is inactivated. If autoclaving is not feasible, it should be sprayed or fumigated to disinfect surfaces, and then stored on site for 6 months before removal.

Glossary

Terms are in line with the proposed "Laboratory Biorisk Management Standard" (CEN draft document for public comment, 2007-07-25)

Biorisk (adapted from OHSAS 18001:2007): combination of the likelihood of the occurrence of an adverse event involving exposure to biological agents and toxins and the consequence (in terms of accidental infection, toxicity or allergy or unauthorised access, loss, theft, misuse, diversion or release of biological agents or VBMs) of such an exposure.

Biorisk officer (BRO) or biorisk advisor (Biosafety / Biosecurity Officer): a staff member of an institution who has expertise in the biohazards encountered in the organisation and is competent to advise top management and staff on biorisk management issues.

Biosafety (adapted from: WHO/CDS/EPR/2006.6): Laboratory biosafety describes the containment principles, technologies and practices that are implemented to prevent the unintentional exposure to biological agents and toxins, or their accidental release.

Biosecurity (adapted from: WHO/CDS/EPR/2006.6): Laboratory biosecurity describes the protection, control and accountability for valuable biological materials within laboratories, in order to prevent their loss, theft, misuse, diversion of, unauthorised access, or intentional release.

Restricted Zone: area of the facility where FMDV or diagnostic samples submitted for FMD testing is manipulated and/or which contain infected animals, bounded by physical barriers to prevent air and fluid escape except through air filtration and waste treatment systems.

Controlled Zone: area within the outer security barrier or fence of the facility, containing the Restricted Zone, the services for the Restricted Zone, and zones for access and administration.

Open virus work, or open work: describes the handling of materials containing FMDV (usually liquids) in which exposure to room air occurs, for example during the pipetting of liquids into containers, and the subsequent exposure of the liquid handling object (pipettes etc) to air.

Primary containment: measures that contain the live virus at source, within closed containers or within a class I, II or III microbiological safety cabinet, or for animals, by physical containment in specially constructed rooms with treatment of all waste including the HEPA filtration of air.

HEPA filter: High Efficiency Particulate Air filter: the classification of HEPA filters is on the basis of efficiency of removal of the most penetrating particle size, and set by international standards (EN1822). In the context of this minimum standard, all HEPA filters must at least meet H13 requirements. However in order to increase the margin of safety, H14 filters are recommended.

HEPA filter performance requirements are defined by EN1822; to classify as H13, the filter must remove > 99.95% of particles of the most penetrating particle size (~0.15 μm). A leak is defined as penetration > 5 times the required integral efficiency, i.e. 5 times 0.05% = 0.25%. To classify as H14, the filter must remove > 99.995% of particles of the most penetrating particle size (~0.15 μm). A leak is defined as penetration > 5 times the required integral efficiency, i.e. 5 times 0.005% = 0.025%.

ANNEX I

Additional Considerations and Examples

I: Establishing an FMD incident risk rating system

Each facility should establish a risk rating system and an associated set of incident management procedures, including reporting and responsibilities in the event that a high risk incident occurs.

Risk is the product of consequence and likelihood. The consequence of an FMD escape into susceptible livestock (resulting in an outbreak) is huge.

In establishing a risk rating system, the following factors should be considered:

– Where does the incident occur? (for example in an animal room)

– What type of event? (for example a visitor leaving without showering)

– How much potential virus exposure or loss? (for example number of persons, time or volume)

– To where was the virus release? (for example outside of the high containment area, to ruminants, to areas within the perimeter of the facility).

Each facility should establish their own risk rating system, taking into consideration e.g. the history of incidents, estimations of likelihood, objective data, and computer simulations. The risk rating system and reporting requirements should be agreed at the level of the top management of the facility, and reviewed on a regular basis.

Once established, the risk rating system can be used in training of staff on their reporting requirements, setting out the types of event or that should be reported to the line manager and/or biorisk officer.

Example of a risk rating system

Where		**What**		**How much***		**To where**	
5	Animal room containing FMD infected pigs.	**5**	Potentially contaminated person, without showering	**5**	Unknown or very high or long time: > 1 L or Kg fluid or material/day. >10 days air. > 50 persons.	**5**	Outside containment, probable exposure of FMD susceptible animals.
4	Animal room containing FMD infected animals (not pigs).	**4**	Potentially contaminated waste.	**4**	High: 10 – 100 ml or gram fluid of material / day. 1 – 10 days leakage of air. 5 – 50 persons.	**4**	Outside containment, to Yard or farm with FMD susceptible animals. In contact with other (not FMD) Vet.Bios.Level 3 and 4 susceptible animals.
3	Lab undertaking FMD virus work Or During the first half of the FMDV disinfection process of formaldehyde or steam autoclaves or EthyleneOxide sterilizers.	**3**	Potentially contaminated air. Or Potentially contaminated person, after showering	**3**	Moderate: 1 – 10 ml or gram fluid or material / day. 1 – 24 hour leakage of air. 2 – 5 persons.	**3**	Outside containment, to NON FMD susceptible animals
2	Lab not handling FMD virus but within common building/containment to labs handling FMDV Or During the second half of the FMDV disinfection process of formaldehyde or steam autoclaves or Ethylene Oxide sterilizer.	**2**	Potentially contaminated fluid.	**2**	Little: < 1 ml or gram fluid or material / day. <1 hour leakage of air. 1 person.	**2**	Outside high containment suite but on terrain of the institute
1	In engineering maintenance areas – HEPA filter replacement, etc	**1**	Other Potentially contaminated items	**1**	Very little << 1 ml or gram fluid or material / day. <<1 hour leakage of air.	**1**	In engineering maintenance areas – HEPA filter replacement, etc

* temperature, humidity, expired time will also have influence on this issue

Relative risk = where x what x how much x to where

Example

A person who was working in the laboratory where live FMD is handled was observed to pass to the area outside of high containment, without taking a shower, but did not leave the perimeter of the facility.

Risk rating: 3 x 5 x 2 x 2 = 60

relative risk	**≤20 is 'Acceptable'**	**21 – 60 is 'Low'**	**61 – 250 is 'Substantial'**	**>250 is 'Catastrophic'**
decisions	Report Biorisk Officer.	Report Biorisk Officer. Report Biorisk Committee. Report General Manager.	Report Biorisk Officer. Report Biorisk Committee. Report General Manager. Call together Crisis Team. Decision about the necessity to inform authorities.	Report Biorisk Officer. Report Biorisk Committee. Report General Manager. Call together Crisis Team. Report to Regulatory autority/Chief Vet. Officer

II: Improvement of biorisk management through analysis of incidents

Management should take a high interest in learning from reported incidents. Each may be considered a form of failure or non-conformity to the expected performance of the risk control measures, and occur as a result of failure in the engineering controls and/or personnel related control measures.

The cause of each event may be categorised as:

Related to engineering:

– hardware (as facilities and equipment)

– design (as irrational lay-out and ergonomics)

– maintenance (as planning and availability)

– procedures (as standard operations and relevance)

– defences (as protective equipment and signals).

Related to personnel management:

– error-enforcing conditions (as occupational health and attitude)

– housekeeping (as tidiness and discipline)

– incompatible goals (as costs and safety)

– communication (as interpretation and point of time)

– organization (as responsibilities and authority)

– training (as knowledge and experience).

III: Threat assessment

In deciding upon undertaking a threat assessment, the following should be considered:

1. The threat of criminal use of FMDV for any malicious purpose has to be carefully assessed to determine the additional risk that arises from operating FMDV facilities. FMDV laboratories have exclusively peaceful objectives concerned with development and implementation of control measures. They are critical for the technical cooperation with veterinary services around the world in order to minimize the economic impact of FMD on livestock and economies. The threat of criminal use of FMDV is subject to major change as the political agenda of terrorist group changes.

2. The threat and consequences of a terrorist attack will vary by country. Because of the transboundary nature of FMD, there is also the possibility that a deliberate release may occur in another, possibly neighbouring, country. For this reason, effective control measures need to be consistently applied throughout all EU member states that operate FMD laboratories. As the motivation for a deliberate release may change unpredictably over a very short period, effective control measures need to be sustained at all times and be sufficiently flexible to allow an enhanced response if required.

   Facilities permitted to handle FMDV are obliged to prevent illegal access and removal of the virus. As a consequence, such access to laboratory-held virus must be substantially more difficult than acquiring the virus in the field.

Threat reduction/control measures: due to the unpredictability of the actual threat, controls are required to reduce the risk to an acceptable level. These controls should consider structural, physical and organisational measures and must address the following:

3. Intruder attempting to remove FMDV from the facility by forced or fraudulent entry.

   Appropriate controls include 1) physical security measures restricting access to authorised staff and contingency plans in the event of intrusion, 2) secure storage of virus containing materials including maintenance of inventories of stocks.

4. Staff member removing FMDV from the facility

   Appropriate controls include 1) vetting of persons before authorisation of access, and escorts for persons allowed temporary access when security clearance is not available; 2) restricted access to FMDV virus material in the lab to trusted staff on the basis of a legitimate need, 3) access to the facility is logged [and records maintained for at least two years] to provide an audit trail of who was in the facility at any given time. 4) Design of the laboratory or facility such that the number of staff needing to enter the secure areas is limited. Eg some engineering aspects of the design of the facility can be arranged so that certain services can be maintained from outside of the security envelope.

5. Shipment of virus containing materials

   Appropriate controls include standard procedures before authorisation, including receipt of adequate information from the intended recipient of its authority to handle FMDV, and written agreement that the recipient laboratory will not redistribute the virus to other laboratories without applying the same risk assessment and will adhere to relevant national or international legislation relating to shipment and supply of dangerous animal pathogens.

IV: Air-handling

1. Depending on the small animal species, route and nature of infection and method of animal containment and handling, quite high titres of virus in relatively uncontrolled conditions might be produced. Consideration should be given to the appropriate negative air pressure requirements, with 35 *pascal* negative pressure as the minimum.

2. Provisions must be in place to ensure that in the Restricted Zone no overpressure is generated. One approach is to interlock the inlet and extract fans so that the most that can occur is that the air supply and extract fails and the negative envelope decays solely depending on the airtightness of the building. An emergency back-up extract fan is recommended so that the negative envelope can be restored in the event of the main extract fan failing and this also should be interlocked to the supply fan to avoid very high negative pressures which may cause damage to the fabric of the building. As an alternative, the air extraction plant can be divided into several parallel sections so that the negative pressure can be maintained if one section fails or is shut down.

3. It is advisable to have and maintain other filters within the air handling system, notably, prefilters upstream of the HEPA filters. These other filters will conserve the life of the HEPA filters and reduce the need to change at the annual

maintenance interval. In properly maintained systems, it is relatively rare to change the terminal extract filter due to the efficiency of particulate removal by all of the filters upstream. However, high levels of humidity will shorten the life expectancy of filters and large amounts of dust generated by nearby building works or other activities will soon blind filters even with efficient prefilters upstream.

4. Off-gas or vent filters: This type of filter is often steam sterilised and filter efficiency testing involves different approaches such as the water intrusion test. At the smaller scale, disposal cartridge filters may be appropriate as vent filters to allow gas exchange while preventing virus escape from the container to the laboratory environment.

5. Although not widely used, sterilisation of extract air may be done by heating the air as it passes through an in-line furnace.

6. To save energy, air extracted from a Restricted Zone may be partially recirculated into the same Restricted Zone provided it passed through a HEPA filter before it re-enters the laboratory. However, the advisability of recirculation and the proportion of air recirculated will need to be considered against the quality of the air leaving and re-entering the work place and the activities within the workplace.

7. In the event that HEPA filters become blocked prematurely (ie prior to annual testing), this does not normally represent a problem in terms of the integrity of the affected filter(s), but it probable that the increased resistance to airflow and consequent problems of balancing the pressures in the different rooms of the Restricted Zone will necessitate changing the affected filters.

V: Decontamination of compartments:

The compartment must be made airtight to make fumigating possible, if necessary by means of temporary panels.

Formaldehyde procedure:

1. Check the compartment and accompanying drawings for connections with containment facilities that must be closed. Close down utilities as gas, water, electricity, sewerage, steam and if possible ventilation.

2. Empty the compartment, for example by moving objects to other containment facilities. Remove porous material. Discard material via validated procedures like autoclaves and formaldehyde airlocks. Open non removable installation parts to make them accessible to vapour.

3. Clean the compartment and disinfect critical points which are possibly contaminated.

4. Prepare the fumigating equipment and shut the compartment airtight.

5. Disinfect (air)ducts and HEPA filters for example separately by injecting formalin.

   Use a fumigating method in conformance with a validated procedure used for formaldehyde airlocks.

Use bioindicators, (preferably a rapid bioindicator system) to prove the efficacy of the fumigating process.

Set restrictions for access such as clothing, quarantine for people and demolition material, in order to be able to make corrections in case of accidents.

6. Inspect the maintenance and renovation activities to be performed in the compartment.

SECTION II. MINIMUM STANDARDS OF BIORISK MANAGEMENT FOR LABORATORIES UNDERTAKING DIAGNOSTIC INVESTIGATIONS FOR FMD IN THE FRAMEWORK OF A NATIONAL CONTINGENCY PLAN

(MBRM STANDARDS FOR FMD CONTINGENCY LABORATORIES)

Introduction

The following Minimum Standards for laboratories undertaking diagnostic investigations, refers to the laboratories mentioned in Annex XV to Council Directive 2003/85/EC which are designated by the competent authorities as "national laboratories" or in point 13 of Annex XV as "other laboratories" that would be licensed to undertake diagnostic tests as part of national contingency plans but only test field samples originating from the country where the laboratory is situated by assays which do not contain or require live FMD virus as reagents or controls and which do not amplify infective virus. Such "FMD Contingency Laboratories" must operate to standards that will result in inactivation of live virus if received in samples. During an outbreak, they may offer significant advantages in respect to speed and sample throughput as the number of laboratories fully meeting the "MBRM Standards for FMDV Laboratories" is very limited. In some "FMD Contingency Laboratories", rooms equipped with an air handling system providing HEPA filtration of exhaust air may be available for the most critical activities.

Real-time PCR has been introduced in many laboratories, e.g. regional veterinary laboratories. While the inactivation treatment prior to PCR in principle may be carried out on the suspect premises, there currently is no validated and fully satisfactory procedure that could be used for this purpose and thus opening the vessels containing potentially infectious material in a class II microbiological safety cabinet followed immediately by inactivation is considered a suitable alternative.

Furthermore, a national competent authority may decide to authorize a "FMD Contingency Laboratory" to test non-inactivated samples by antigen ELISA in order to allow these labs to confirm PCR results, maintain a back-up method in case PCR fails and to determine the serotype although this procedure poses a higher risk. The use of a lateral flow device (LFD), either on the premise or in a "FMD Contingency Lab" in a MSC, is an alternative to antigen ELISA that poses a lower risk but currently does not allow serotyping.

Serology by commercially produced FMDV-ELISA kits can be performed in many laboratories, e.g. regional veterinary laboratories, which can process samples with a high throughput. In case of an outbreak, this allows to increase the throughput of diagnostic samples significantly, which will often be a crucial factor for successful disease control and timely recovery of the previously free status. Serological samples should be opened and processed in a way that the generation of potentially infectious aerosols is minimized and air that might contain such aerosols should be released through a HEPA filter as far as possible.

While due to the dynamic nature of an FMD epidemic also samples coming from holdings without clinical signs may occasionally contain virus, samples for holdings with clinical signs suggesting the presence of FMD represent a higher risk and should be handled with special caution.

Packaging of samples

Samples must be put into watertight primary containers (e.g. plastic tubes) and the primary containers must be packed in watertight secondary packaging, which should be a strong crushproof and leak-proof container, with absorbent material that can absorb the entire contents of all the primary containers. The packaging process must include a disinfection of the secondary packaging. The packaging should comply with packing instruction P 650 and the European agreement concerning the international carriage of dangerous goods by road (ADR) - unless the requirements for transport by air apply, which may be higher. Samples should be labelled as biological substance, category B (UN3373).

Note: If FMDV has been cultured, it is mandatory to classify it as "Infectious Substances affecting animals, UN 2900" and pack it accordingly (packing instruction P 620). For air transportation, a "Shipper´s Declaration for Dangerous Goods" is necessary.

Laboratory biorisk management in FMD contingency laboratories

1. A biorisk officer (BRO) and deputy (DBRO) must be designated, and one or both present on-site at all periods in which samples are being received, and contactable at all periods when diagnostic activities are ongoing.
2. The BRO/DBRO must have sufficient experience and technical training to enable assessment of FMD risk and risk management procedures.
3. There must be a designated Restricted Zone with controls in place to limit human access.
4. Personnel must be authorised to enter the Restricted Zone by the BRO/DBRO.
5. Authorised personnel working in the Restricted Zone must be trained in biorisk management and evidence of the training recorded. Where facilities for the inactivation of waste from the Restricted Zone are located outside of this area, also staff working with such waste must be trained in biorisk management and evidence of the training recorded.
6. Authorised personnel must
   (a) change clothing before entering and after leaving the Restricted Zone ;
   (b) for at least 3 days after leaving the Restricted Zone not have any contact to animals of susceptible species, nor enter buildings or enclosed fields where animals of susceptible species are kept, and not handle items used in the care of susceptible species.

   The agreement of the authorised personnel to these conditions must be recorded and a reminder notice of these conditions placed in a visible location at the exit point of the Restricted Zone.
7. Entry and exit of personnel to the Restricted Zone should be recorded.
8. Entry and exit points to the Restricted Zone will be kept to the minimum– preferably a single point of entry/exit.
9. A step-over line, or other clearly demarcated boundary, shall indicate the exit point.
10. If possible, staff should shower out before leaving the laboratory premise. In case the shower facilities are not placed at the border of the Restricted Zone, outer protective garments, including shoes or shoes coverings, shall be removed before exit from the

Restricted Zone. All clothing worn in the Restricted Zone must be stored in a secure way, e.g. in designated lockers, until treatment.

11. An incident recording system, SOPs for risk identification and notification procedures and target response time, must be in place to ensure early notification of the authorities in the event that a risk of FMDV spreading from the lab has been identified.

12. The laboratory areas used for the receipt, testing and storage of suspect sample material must be designated and permit isolation from other essential activities in the laboratory. Once a positive sample has been identified, all potentially contaminated areas are classified as Restricted Zone. Access doors to this Restricted Zone should display a warning sign that access is restricted to authorised personnel only.

13. Changing facilities and lockers are required to enable staff to deposit unessential items outside the Restricted Zone.

14. Entering of the Restricted Zone by farmers or staff working on farms should be avoided. If possible, it should be attempted to separate vehicles bringing samples from vehicles entering the premise for other purposes.

15. Shower facilities must be available onsite, preferably at the border of the Restricted Zone.

16. Sample reception area

    (a) The Restricted Zone must contain a specified area for sample reception which must

    (b) be easily disinfected in the event that leakage of samples occurs into packing materials or following opening of the packages;

    (c) be equipped to enable repacking of samples into appropriate transport containers for dispatch to laboratories meeting the MBRM Standards for FMDV laboratories.

    (d) have suitable facilities for waste disposal and have hand-washing facilities at exit points.

17. Sample preparation area

    (a) The Restricted Zone must contain a specified area for serum separation and/or RNA extraction.

    (b) This area must have suitable facilities for surface disinfection and waste disposal and have hand-washing facilities at exit points.

    (c) Samples originating from a holding with clinical signs indicating the possible presence of FMD pose a higher risk. They must be opened and the subsequent liquid handling steps be carried out in a microbiological safety cabinet (MSC). Centrifugation should be carried out in closed rotors or sealed centrifuge buckets, which can contain a spillage in case the primary vessel fails.

    (d) Viral infectivity must be inactivated before further processing in all cases where this does not affect the intended diagnostic tests, e.g. by mixing with an appropriate buffer containing chaotropic salts prior to RNA extraction.

(e) Serum samples should be pre-treated by thermal inactivation for 2h at 56 ^{0}C in order to reduce infectivity titres as far as this is possible without impairing the intended serological testing regime or the validity of the tests used.

18. Testing area

(a) The Restricted Zone must contain a designated area for testing.

(b) This area must have suitable facilities for surface disinfection and waste disposal and have hand-washing facilities at exit points.

(c) The testing of serum samples originating from a holding with clinical signs indicating the possible presence of FMD by ELISA for antibody must be carried out in an MSC as far as possible.

(d) The testing of samples of vesicular material for antigen e.g. by ELISA or LFD poses the highest risk of all activities carried out in "FMD Contingency Laboratories". It must be carried out in a way that all liquid handling steps are performed in a MSC. If an incubator is used to guarantee the required incubation temperature, plates should be sealed or placed in a suitable secondary vessel.

(e) The testing of samples originating from a holding without clinical signs indicating the possible presence of FMD by ELISA for antibody should be carried out in a way that aerosol generation and spread is minimized. In particular, the initial steps including the first washing step are critical.

19. Sample storage area

(a) The Restricted Zone must contain a specified area for the storage of samples.

(b) This area must have suitable facilities for surface disinfection.

20. Communications and reporting office space

The laboratory must have an adequate provision of office space, computing and communications facilities (e.g. electronic communications, facsimile) to reduce the need to a minimum for staff, papers and physical records to exit the Restricted Zone.

21. Rest rooms

The Restricted Zone should have sufficient rest rooms and lavatory facilities in relation to the staff number expected at peak periods of activity, sufficient to reduce the need to a minimum for staff to exit the Restricted Zone.

22. Location of autoclave

Facilities for heat treatment with saturated steam must be present on the site, preferably with sufficient capacity for throughput at the maximum operating capacity of the laboratory.

23. Liquid waste

(a) Heat or chemical treatment of all waste water through a validated effluent treatment system is the preferred method, in compliance with requirements specified for FMD laboratories.

(b) Alternatively, or additionally, the laboratory may demonstrate that it has put in place a robust management system for inactivation liquid waste that is potentially contaminated with virus or has contacted risk materials. If treatment

of all liquid waste from the Restricted Zone (including waste water from the showers) is not possible, at least the ELISA buffers and washing fluids must be collected and treated.

24. Solid waste

(a) For biological, solid waste, and all solid disposable materials that have been in contact with potentially infectious specimens, treatment by wet-heat in an autoclave within or at an entrance point to the Restricted Zone is the preferred option.

(b) If such a treatment of all solid waste is not possible, it may be packaged into suitable hermetically sealed containers, surface decontaminated by a validated method at the exit from the Restricted Zone and removed for autoclaving outside of the Restricted Zone. Only if waste has been effectively chemically decontaminated prior to packaging may it be transported as clinical waste under ADR regulations (UN 3291).

26. Removal of equipment, materials and clothing from the Restricted Zone

(a) Removal of any material and equipment from the Restricted Zone shall be subject to authorisation by the BRO.

(b) The reason for removal, date and destination will be recorded.

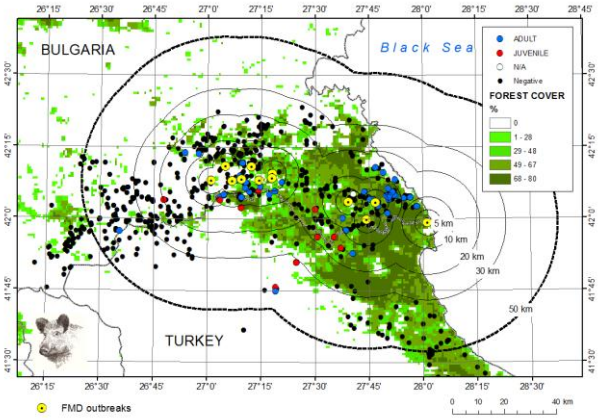
(c) The BRO will ensure that materials and equipment which has been in contact with risk materials (specimens) will not be removed from the Restricted Zone without a validated treatment to inactivate FMDV.

27. Declassification of the Restricted Zone

(a) A decontamination plan must be agreed with the competent authorities, before restrictions can be lifted.

(b) If heat treatment or scanning of all paper from the Restricted Zone is not possible, it should be packed into suitable containers, which should be disinfected and kept under lock for at least two years. If the containers have to be opened before, this has to be done in a Restricted Zone meeting the standards described above.

(c) All clinical specimens handled in the Restricted Zone during a period when potentially infectious FMDV material was handled, should be considered as potentially contaminated with FMDV and should be destroyed before the declassification of the Restricted Zone. Alternatively the material needs to undergo a validated inactivation process and surface decontamination in order to be released. These samples and processes have to be approved by the BRO and/or the competent authority and documentation on these samples has to be maintained until the samples are destroyed by autoclaving, incineration, or a method approved for category 1 animal by-products (Regulation (EC) No 1069/2009 and Regulation (EC) 142/2011).



WHEN FMD GOES WILD…

LINKING ECOLOGY, EPIDEMIOLOGY AND SURVEILLANCE

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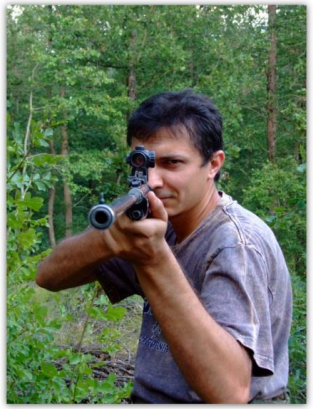
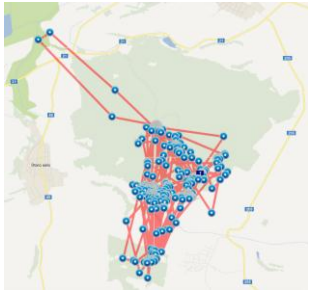
40TH GENERAL SESSION OF THE EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE Italian

Ministry of Health, Via Ribotta, 5 Rome, Italy

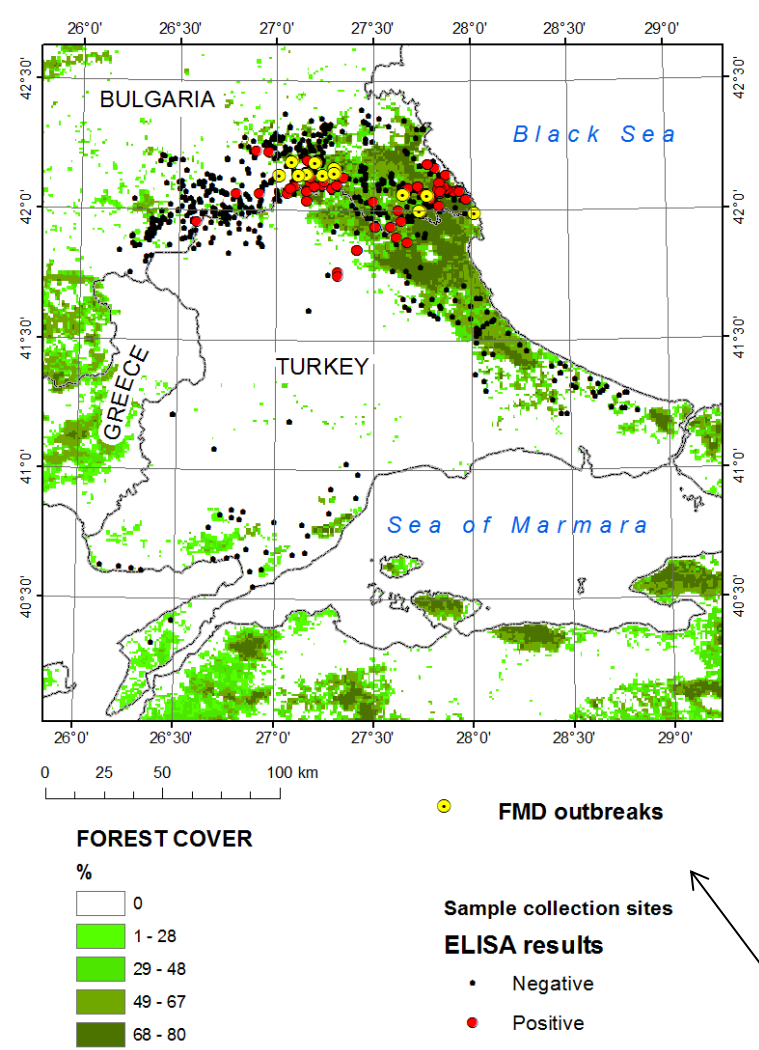
Research topics:

- **Surveillance for FMD in wild boar :** 2011 epidemic in Thrace v endemic conditions in Anatolia (conclusions)
- **To kill or not to kill :** non-invasive collection of saliva from wild ungulates for diagnostic purposes (progress update)
- **Wild boar ecology and disease:** space use and social interactions in a wild boar population on a year-round basis (progress update)



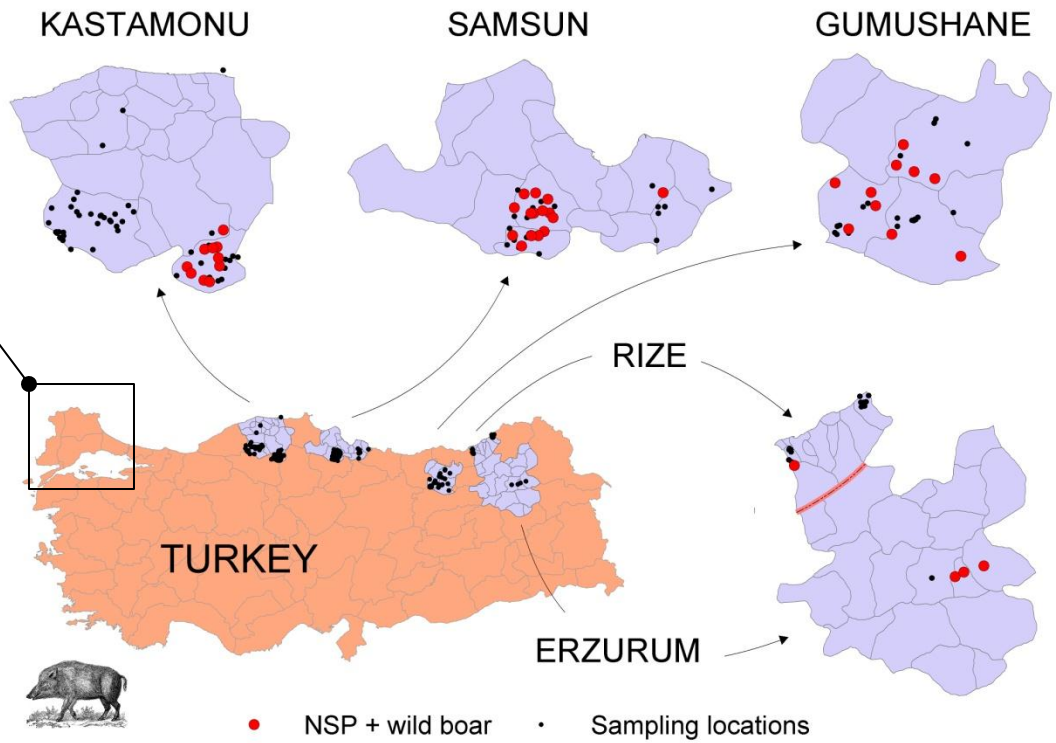


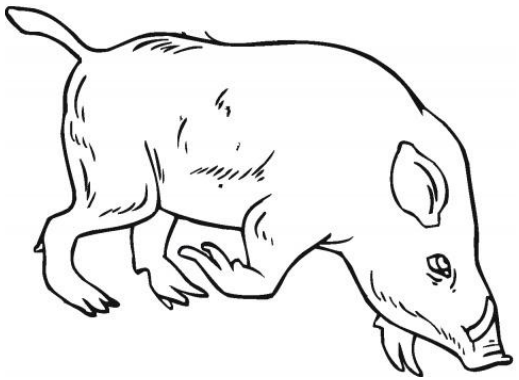
Surveillance in wild boar for FMD 2011-2012



THRACE (BG+TR)
Jan 2011 – Jan 2012
N=1004

ANATOLIA (TR)
Dec 2011 – Feb 2012
N=252





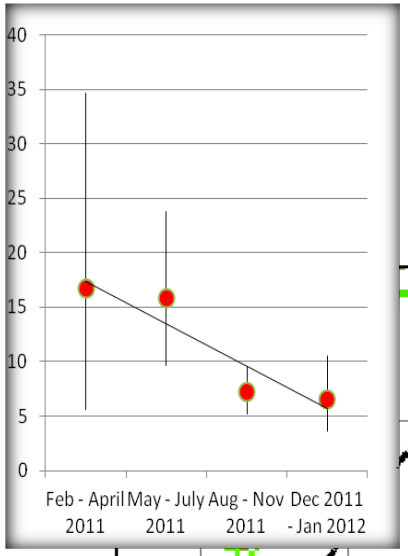
Sero-positivity to FMDV:

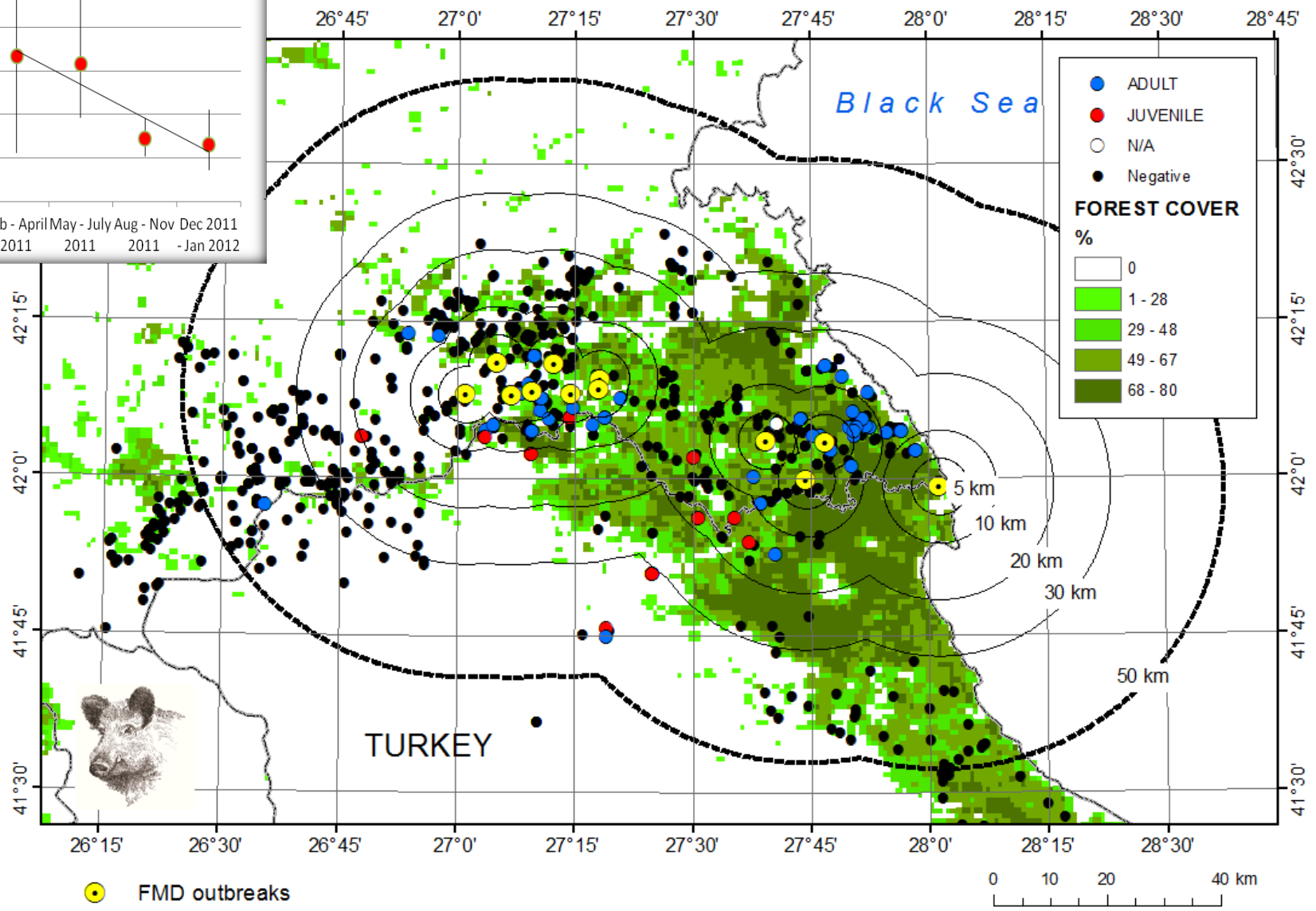
Thrace (epidemic O) *versus* Anatolia (endemic O, A, Asia)

AGE GROUP	THRACE		ANATOLIA		
	n	NSP+ (95 % CI), %	n	NSP+ (95 % CI), %	P
ADULT	628	9.1 (6.9 – 11.6)	185	24.9 (18.3 - 32.4)	<0.05
JUVENILE	358	5.6 (3.4 – 8.5)	67	7.5 (2.5 - 16.6)	ns
ALL	1004	7.8 (6.2-9.6)	252	20.2 (15.5 - 25.7)	<0.05

NOTE: NO DIFFERENCE BETWEEN SEXES FOUND

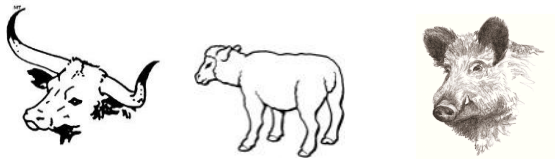
NSP + in Wild Boar in Thrace

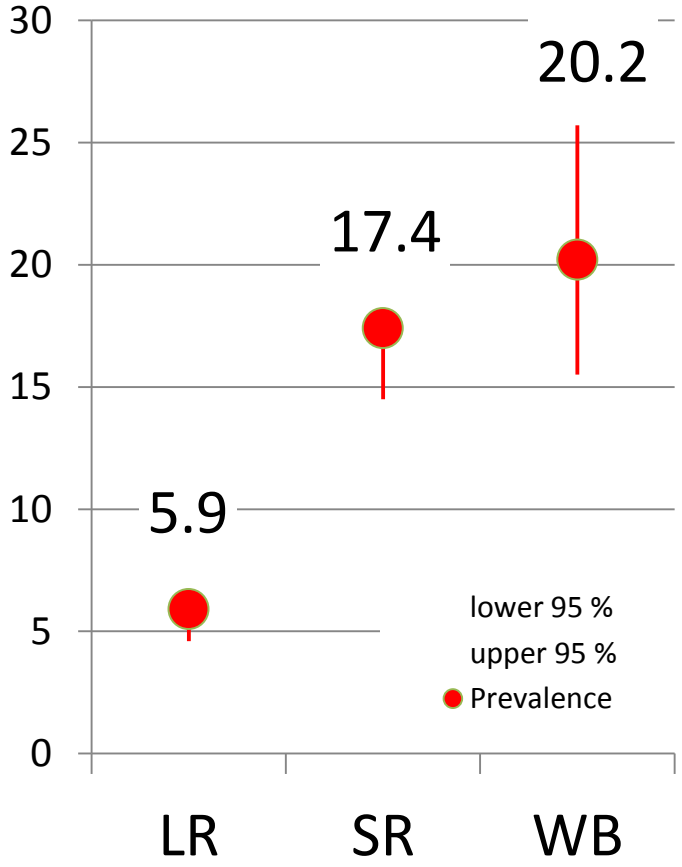




Anatolia: NSP+ in WB *versus* livestock

Average sero-prevalence in all 5 provinces of concern





- Distinctly different from LR (P=0.1), but not SR (P=0.001);
- Except for Samsun prevalence in WB does not differ from SR (P=0.6-0.8);
- Prevalence in WB correlates best with that in SR (r=0.9, R^2 = 0.8), but not LR (ns).

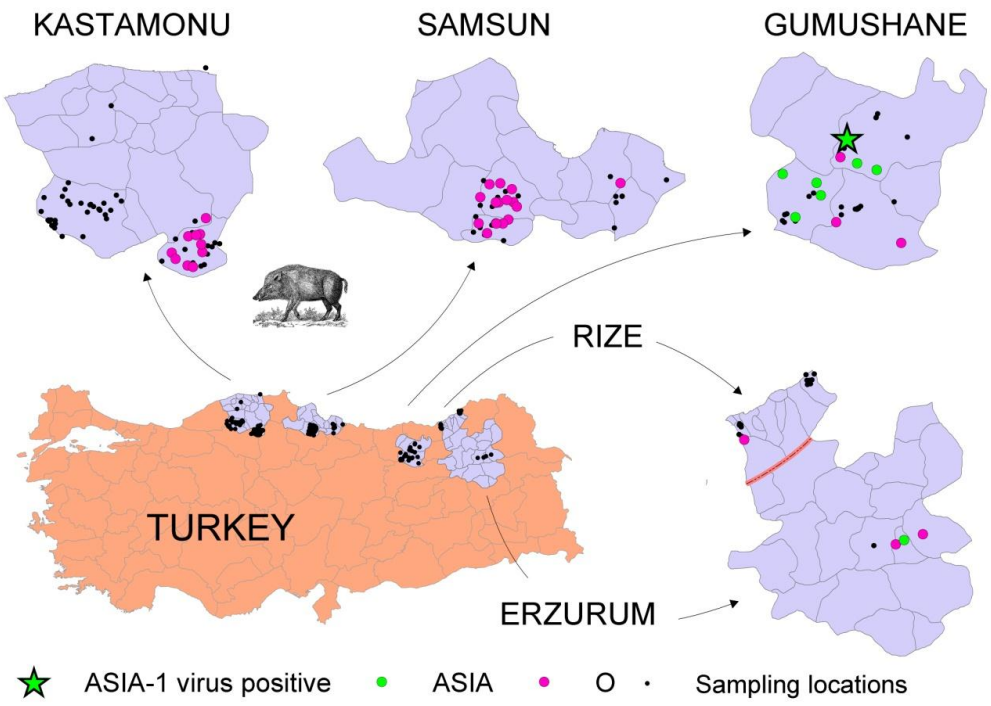
Regional variation in sero-prevalence:

60,000
infected with FMD all over Turkey !

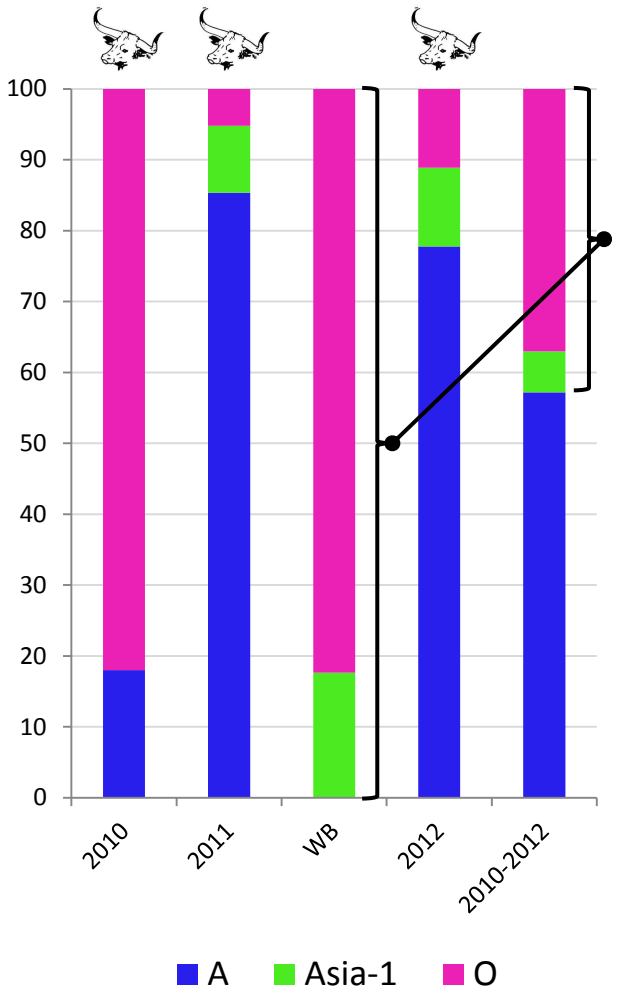
Region	n	% NSP+ (95 % CI)	% ASIA +	% O +
ERZURUM	17	**52.9** (27.8 - 77.0)	11.8	41.2
SAMSUN	73	**28.8** (18.8 – 40.6)		28.8
GÜMÜŞHANE	58	**17.2** (8.6 – 29.4)	12.1*	5.2
KASTAMONU	76	**13.2** (6.5 – 22.9)		13.2
RİZE	21	**4.8** (0.1 – 23.8)		4.8
TOTAL	252	20.2 (15.5 – 25.7)	3.6	16.7

Serotypes in livestock and wild boar seem to mismatch

NO SEROTYPE “A” FOUND, but “O” and “Asia-1” were found in exactly the same proportion as in livestock



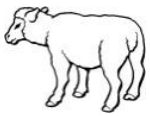
Serotype prevalence

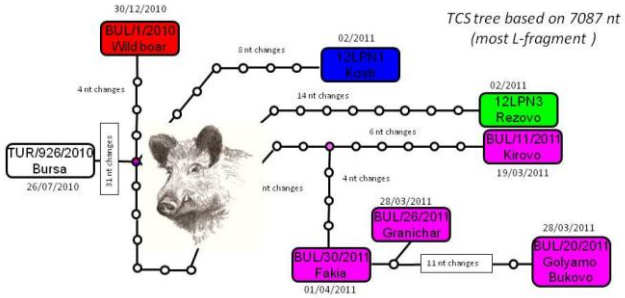


THRACE

Serotype

O





- Closely related isolates from cattle
- Isolates from wild boar

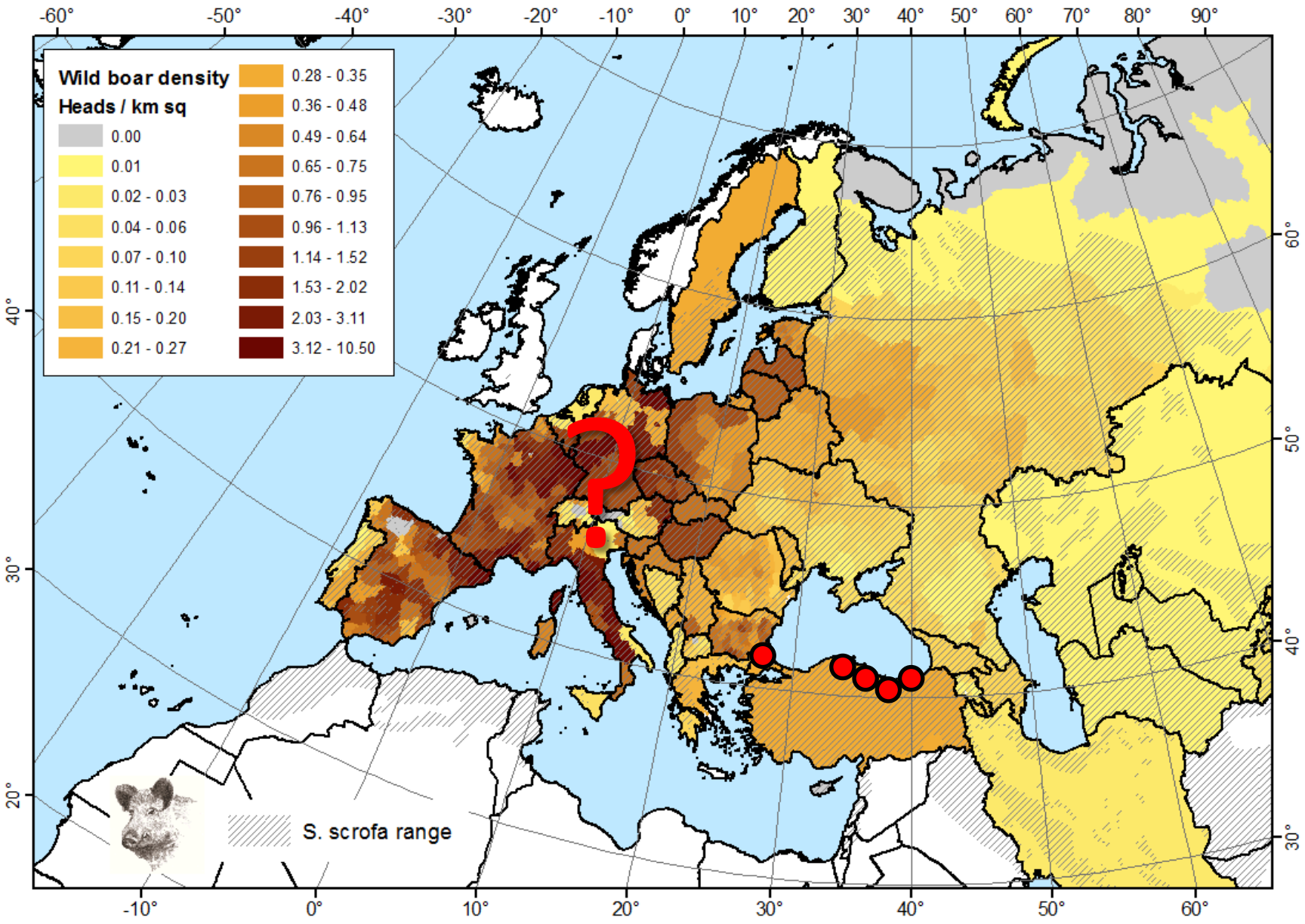
ANATOLIA

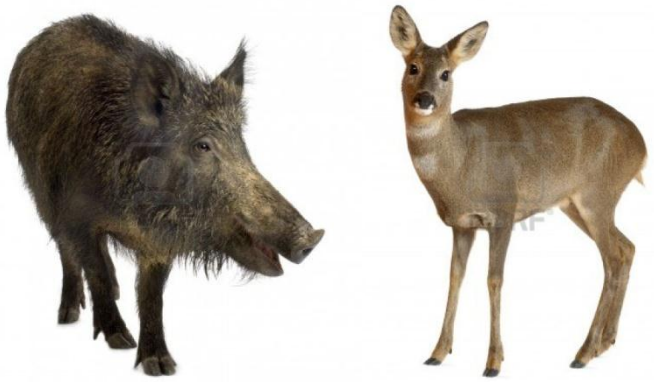
Serotype

Asia-1

Implications for disease surveillance and control

1. Wild boar and livestock can **easily exchange FMD viruses** (sharing habitats, scavenging, Kurban, hunting);
2. Epi role of **wild boar is secondary** both under endemic and epidemic conditions in livestock and **correlates well** (spatially, temporarily and serotype wise) **with disease occurrence in small ruminants**;
3. Different **serotypes may perform differently** in wild boar. O and Asia-1 seem to be better adapted than A;
4. **Winter is most risky period** for horizontal transmission of FMD in wild boar population.
5. FMD in wild boar may develop into **localised sylvatic epidemics** (3-6 months) affecting up to 20 % of wild boar and resulting in virus spread for 15-20 km.


Wild boar density
Heads / km sq
0.00
0.01
0.02 - 0.03
0.04 - 0.06
0.07 - 0.10
0.11 - 0.14
0.15 - 0.20
0.21 - 0.27
0.28 - 0.35
0.36 - 0.48
0.49 - 0.64
0.65 - 0.75
0.76 - 0.95
0.96 - 1.13
1.14 - 1.52
1.53 - 2.02
2.03 - 3.11
3.12 - 10.50
?
S. scrofa range
-60°
-50°
-40°
-30°
-20°
-10°
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
20°
30°
40°
50°
60°



Population sizes in Europe

Spring (post harvest) census data

- Wild Boar – **4,500,000** (Putman, 2011; EMPRES data);
- Roe Deer – **9,500,000** (Burbaitė & Csanyi, 2009);
- Red Deer – **1,700,000** (Burbaitė & Csanyi, 2010).

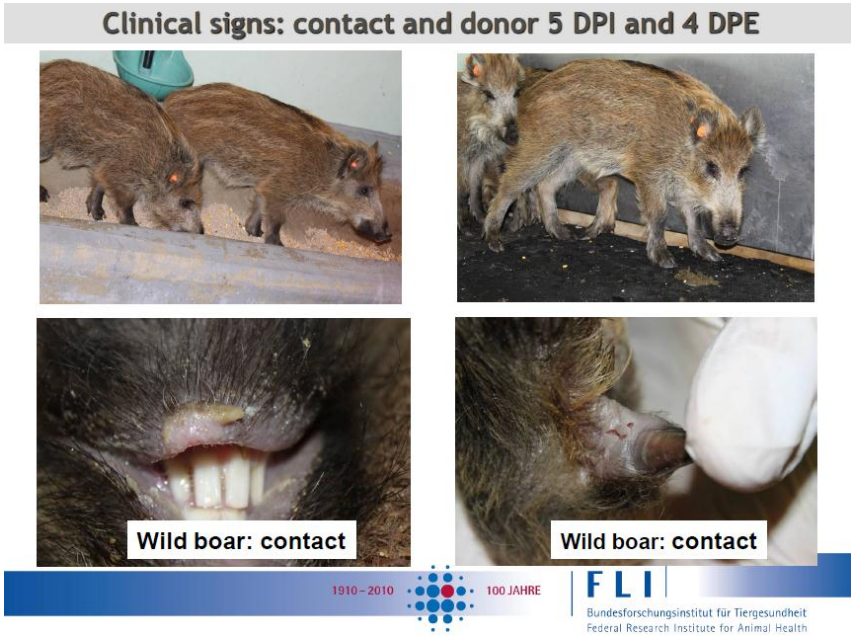
20 – 22 million FMD susceptible ungulates after reproduction

- Due to advances in diagnostic methods pathogens can be detected in oral fluids;
- Tested on farmed pigs (ropes) and wild boar (Chichikin et al, 2012);
- Saliva can be collected without catching or killing of animals (primate studies etc.).

Chichikin et al, 2012

1. Early pathogen detection rather than prevalence study;
2. Repeated frequent sampling possible;
3. Applicable where/when hunting is not possible/eligible;
4. Easy to incorporate into existing wildlife management practices;
5. Multi-species coverage (ruminants);
6. Cost effective and logistically simple.

Experimental infection



- Clinical signs on the 4 DPI (domestic 2 DPI) – e.g. incubation 4 days;
- Most severe and evident lesions – 7 DPI;
- Viraemia: 1 DPI through at least 9 DPI;
- NSP antibodies detected 7-8 DPI;
- RNA in saliva normally found up to 14 DPI and up to DPI 24 DPI intermittently.

CREDITS: A. Breithaupt, K. Depner, B. Haas, M. Beer (*FLI – Federal Research Institute for Animal Health Institute of Diagnostic Virology)*

Way forward and milestones

1. Selection of bait prototypes and pilot testing of their performance (Bulgaria, Ukraine) - *done*;
2. Bait exposure experiments with wild ruminants (Bulgaria) and FMD infected domestic pigs (Nepal) - *done*;
3. Testing samples for species DNA (Serbia) and FMD (Pirbright) – *samples submitted*;
4. Laboratory experiment: 4 FMD infected wild boar to be sampled conventionally and with the NI method simultaneously for 30 days (Russia) - *negotiated*;
5. Field testing of the method in (Turkey and / or Nepal) - *planned*.

A salt lick >

< < Wild boar feeding sites

A red deer feeding site

↓

Site attendance, species and population coverage

- Wild boar + red deer - 65 % attendance rate (7 feeding & 3 salt lick sites);
- Roe deer – 30 % attendance (3 salt licks);
- At attended sites most baits were taken;
- 15 % of wild boar and 15 % or red deer population (70 and 220 respectively) were sampled in 4 days (some even repeatedly).

Bait designs tested

1. Maize cobs with 6 swabs (5)

2. CSF vaccine bait with swabs inside (3)

3. CSF vaccine bait inside plastic tubes wrapped in cotton rope (1)

4. CSF vaccine bait wrapped in cotton material (2)

5-6. Swabs drilled into a block of salt

http://www.youtube.com/watch?v=oLkgePZfReg

Maize cobs taken by red deer and recovered

Bait performance

Saliva contaminated swabs

Bait types	Exposed, bait/nights	Bait uptake		Bait uptake by target species		Baits recovered with swabs	
		n	%	n	%	n	%
1. Maize cobs	125	62	**49.6**	56	**44.8**	47	**37.6**
2. Vaccine bait	77	52	**67.5**	25	**32.5**	16	**20.8**
3. Salt licks	8	1	**12.5**	1	**12.5**	1	**12.5**
Total	210	115	**55**	82	**39**	64	**31**

NI sampling: implications for disease management

- Provides a good solution for wildlife disease surveillance (no killing, inexpensive, easy to use, other diseases e.g. ASF, CSF);
- Early-warning or emergency surveillance in at risk areas in European wild ungulates can be improved and made more flexible;
- There is a potential for commercialization of specifically designed for surveillance baits or salt licks;
- Could be applicable to domestic animals too (extensive farming systems, small ruminants).

Telemetry project

FOLLOWIT
Keep track of everything.

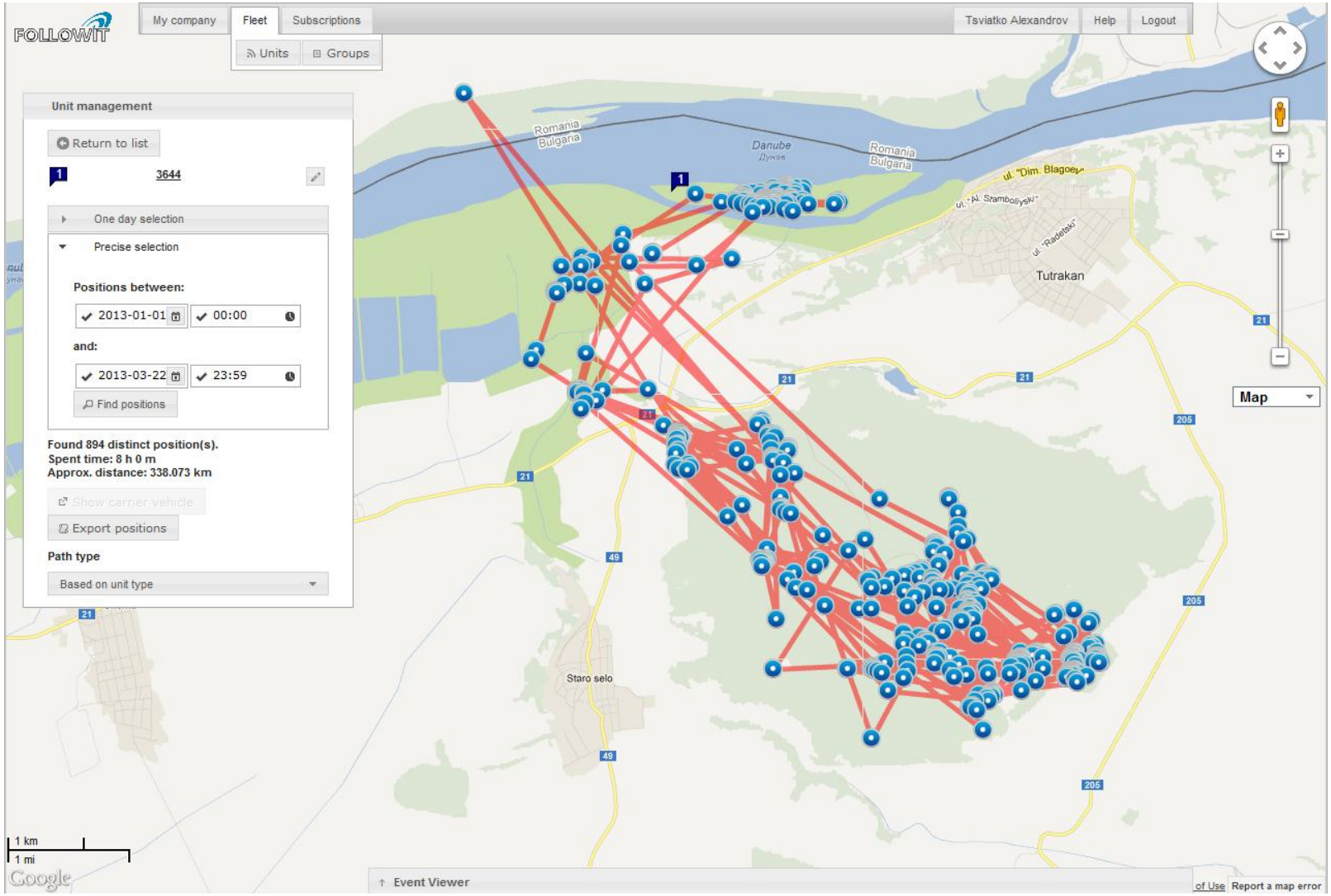
- 20 GPS/GSM Tellus collars (1 year – 24 fixes a day);
- 19 animals collared, 16 collars used (6 reused), 4 were destroyed / failed, 1 - lost;
- 9 animals still give signal;
- More to collar …

Strandzha – 4 (2)

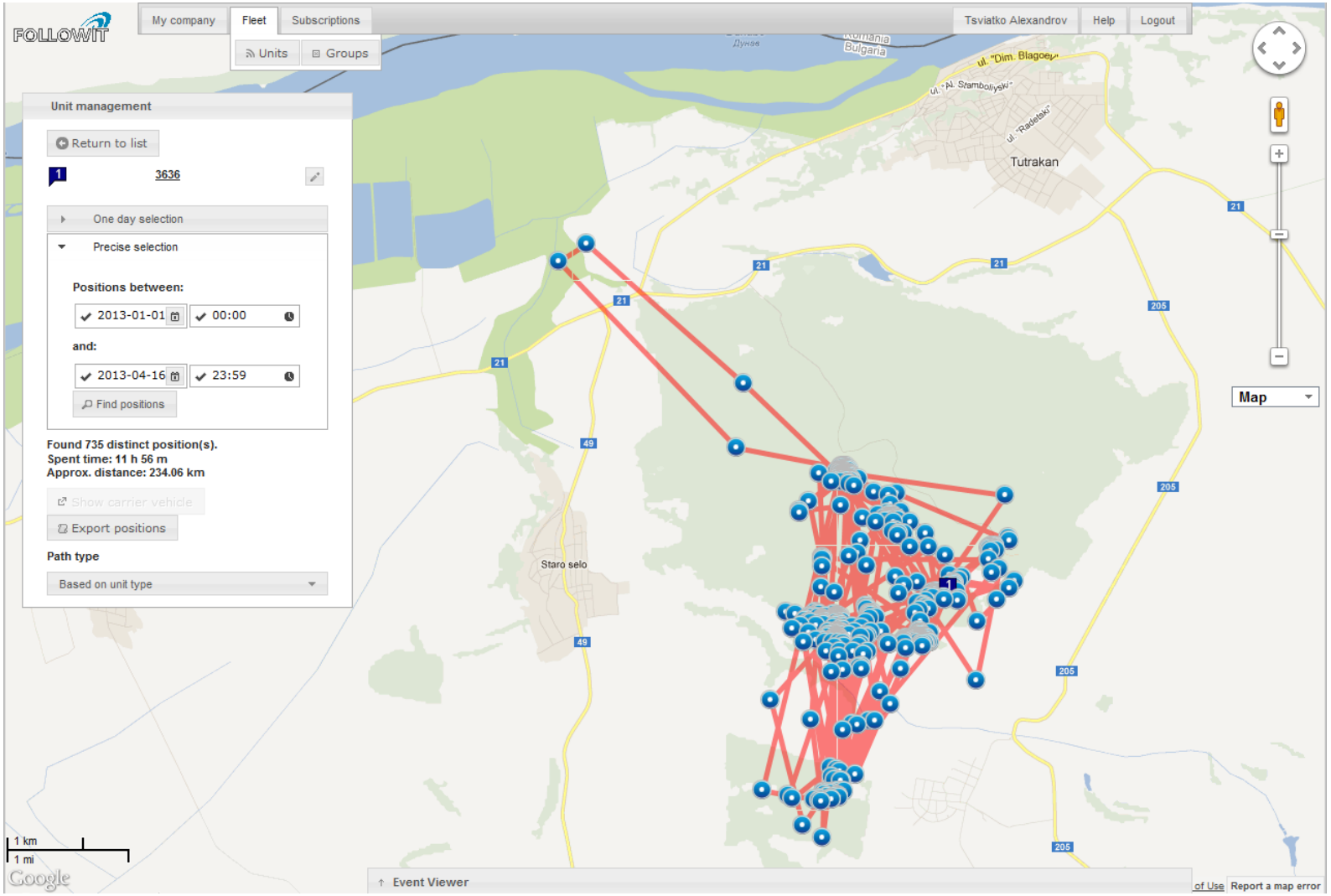
Tutrakan – 15 (7)

http://www.followit.se/wildliferesearch.html

4-year male, 1 Jan - 22 March – 894 positions –a total of 338 km



5 yr female – 13 Feb – 16 April – 735 positions – a total of 234 km



What we want to know

- Sex, age, and seasonal variation in home ranges and movement patterns;
- Habitat use, including attendance of feeding sites and crops;
- Individual and group interactions in space and time to simulate disease spread;
- Response to management interventions (hunting and supplementary feeding).

What's next and perspectives:

- Further field tails of the NI surveillance methodology, including other countries, situations, and diseases;
- Collaboration with other projects as for spatial ecology studies (e.g. ASFORCE);
- Development of a training course on FMD surveillance and management in European wildlife ???
- Development of a wild boar disease surveillance, management and control manual ???

THANKS TO ALL

ECONOMIC EVALUATION OF FMD MANAGEMENT OPTIONS

IMPLICATIONS FOR SCIENCE AND POLICY

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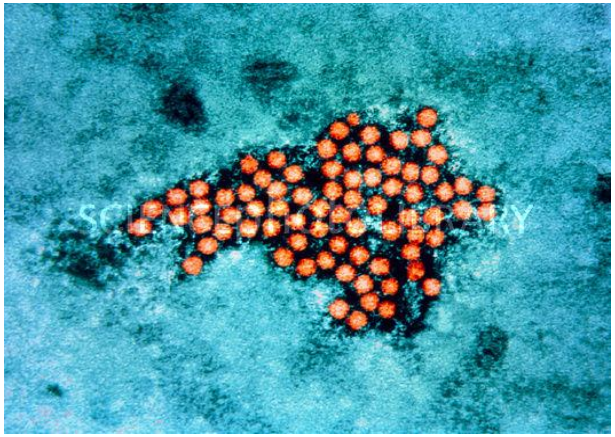
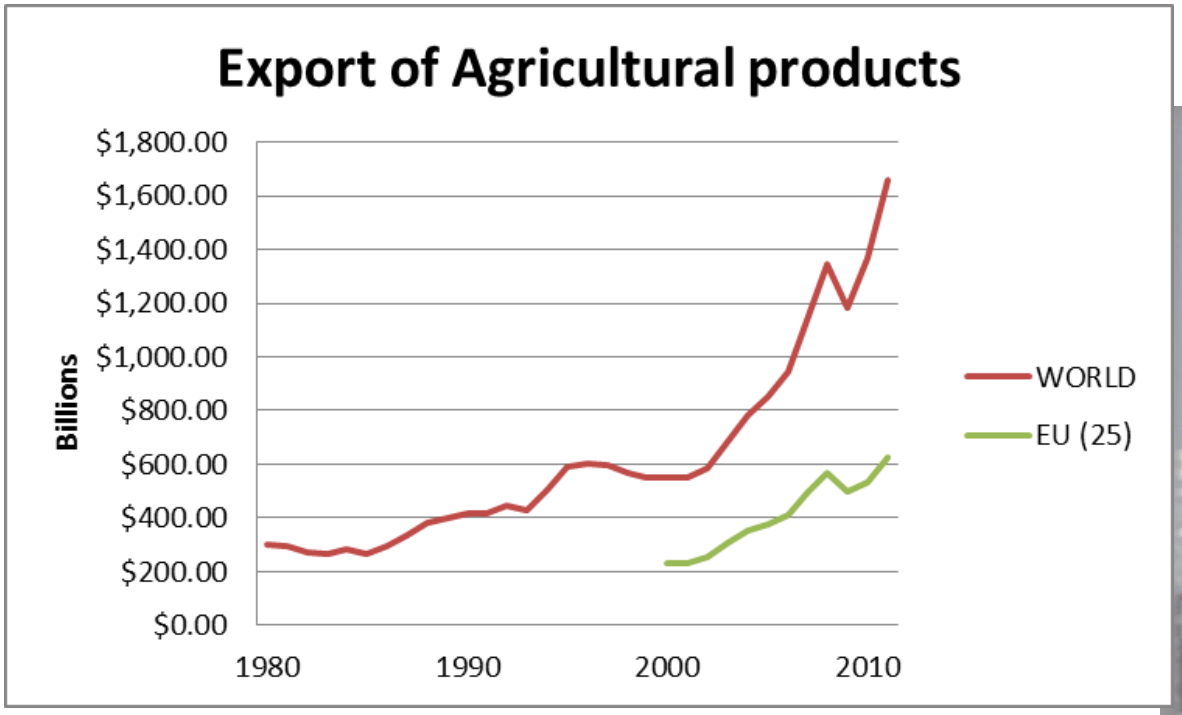
LEI
WAGENINGEN UR

Socio-economic effects of FMD and its control

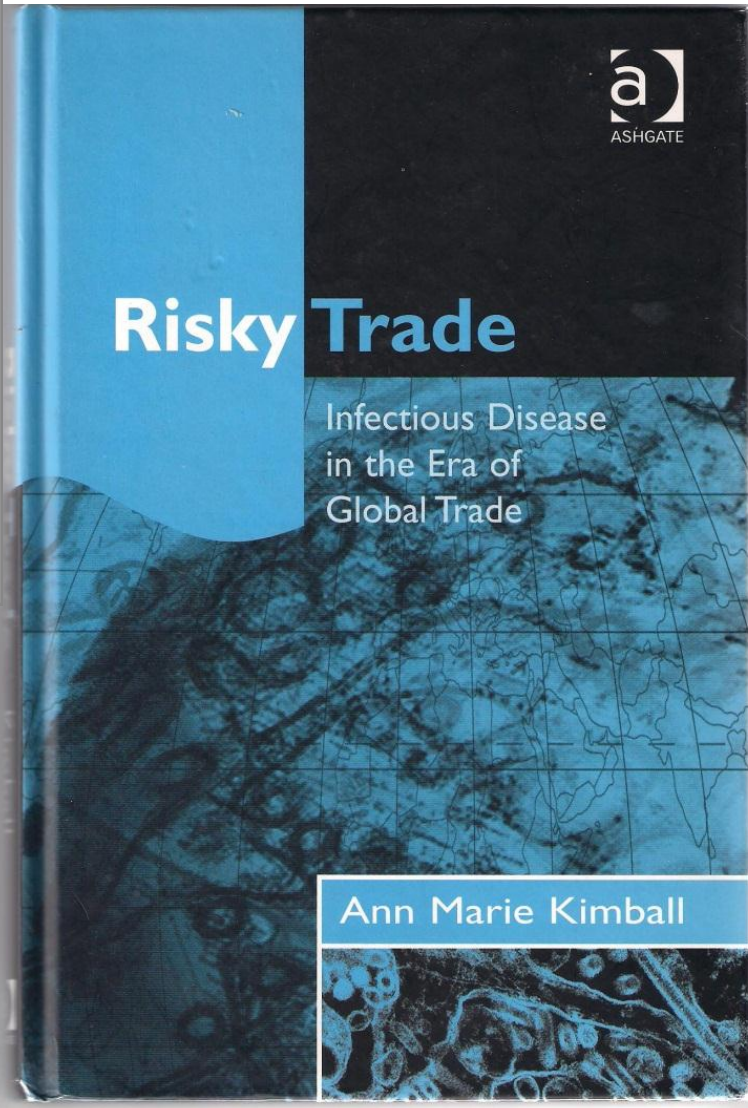
- are determined by:
  1. the probability of occurrence of an outbreak in one or more MS's,
  2. and the economic effects of
     a. the outbreak (the size and duration of the outbreak) and
     b. the control measures taken by Competent Authorities and
  3. the reaction of stakeholders/public and trade partners.

The probability of occurrence of an outbreak in one or more MS's





Source: WTO, international trade statistics (2012)
Current prices



The economic effects of the outbreak and the control measures taken by Competent Authorities

Control of FMD in the EU

- Prophylactic vaccination in EU has been banned in the EU since 1992 (Directive 90/423/EEC)
- EU minimal measures:
  - culling of infected herds,
  - pre-emptive slaughter of contact herds,
  - establishment of control and surveillance zones
- Additional measures:
  - Ring culling and/or
  - Emergency vaccination
    - Delayed culling
    - Vaccination to live

2001 FMD outbreak in NL

- EU minimal measures:
  - culling of infected herds,
  - pre-emptive slaughter of contact herds,
  - establishment of control and surveillance zones
- Additional measures:
  - Ring culling and/or
  - Emergency vaccination
    - Delayed culling
    - Vaccination to live

2001 FMD outbreak in NL

- 26 outbreaks were detected.
- All susceptible animals on approximately 1800 farms were vaccinated. All farms subsequently were depopulated.
- In total, approximately 260,000 animals were killed.

(Bouma, et. al.,Prev Vet Med. 2003, 20; 57 (3) :155-66.)

Economic effects of the outbreak

- Direct costs:
  - *Compensation for depopulated animals*
  - *Depopulation (taxation, culling, transport & destruction, cleansing & disinfection)*
  - *Tracing*
  - *Screening*
  - *Vaccination*
  - *Additional surveillance in movement restriction zone*
- Indirect costs *Business interruption*
  - *Losses related to established movement restriction zones*
  - *Repopulation of the farm*.
  - *Losses from emergency vaccination*

Economic effects of an outbreak

Costs born by government (or PPP) & 60% by EU

- Direct costs:
  - *Compensation for depopulated animals*
  - *Depopulation (taxation, culling, transport & destruction, cleansing & disinfection)*
  - *Tracing*
  - *Screening*
  - *Vaccination*
  - *(Additional surveillance in movement restriction zone)*

Costs born by directly affected farmers

- Indirect costs
  - *Business interruption*
  - *Losses related to established movement restriction zones*
  - *Repopulation of the farm*.
  - *Losses from emergency vaccination*

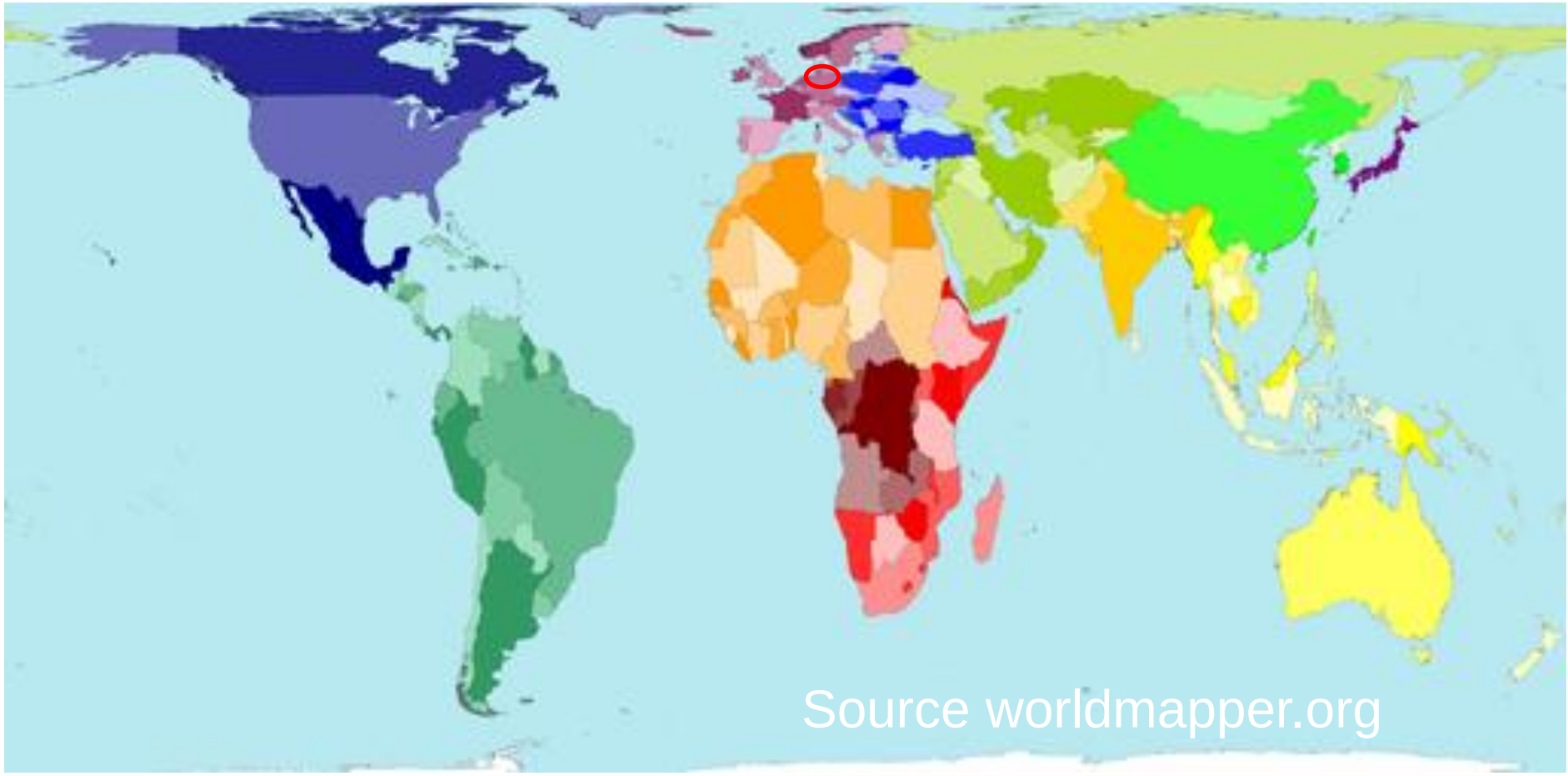
Consequential losses

- Export market losses
- Ripple effects.
  - upstream and downstream along the livestock value chain
- Spill-over effects.
  - During outbreaks e.g. tourism and other services

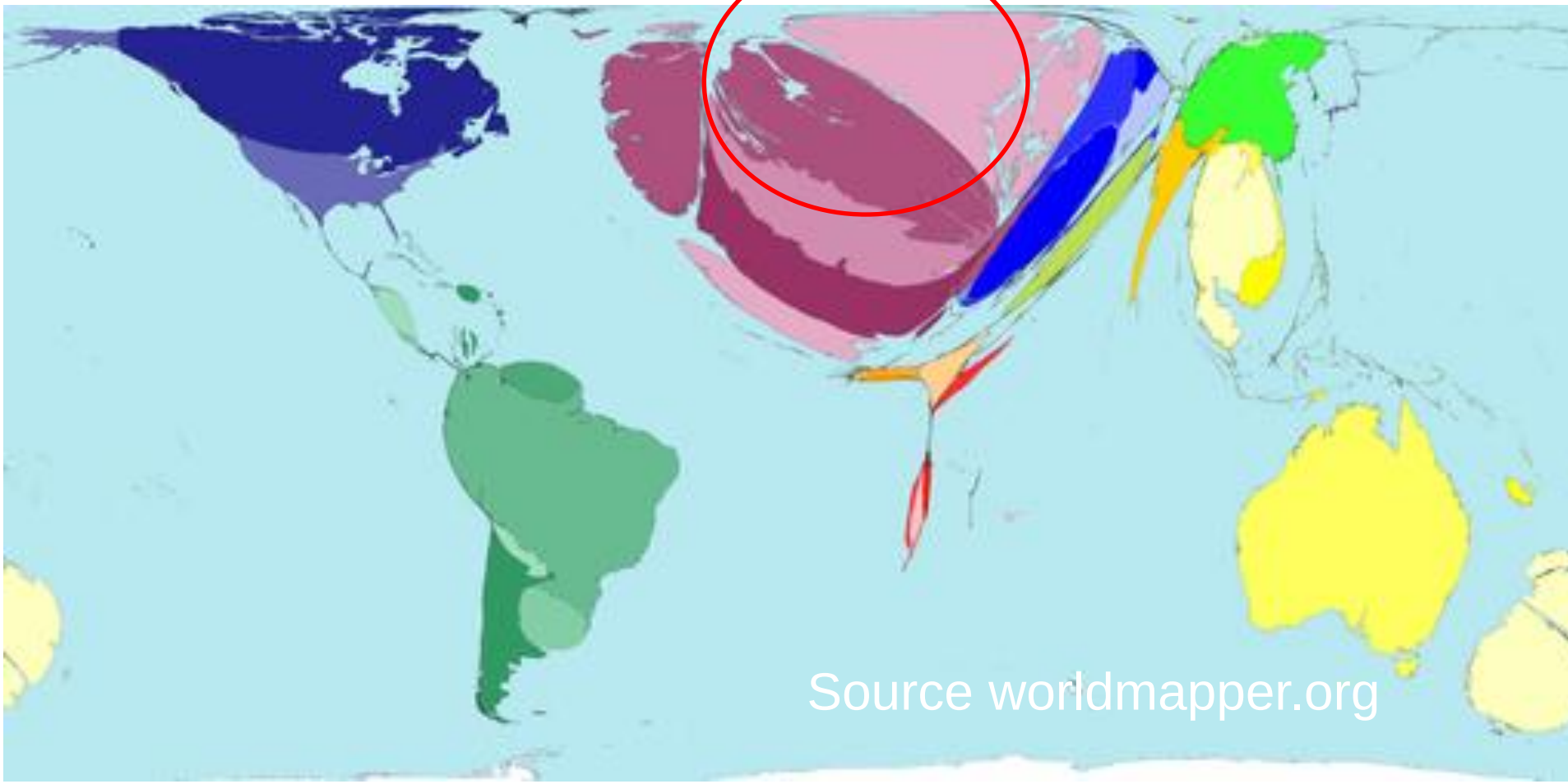
Export market losses

- The costs of animals and products, that because of an outbreak cannot be exported.
  - During the outbreak and after completion of screening until EU lifts export bans
  - After this period, this concerned the third countries market for live animals, meat, meat products, milk and milk products from infected countries/compartments for another 3 months without vaccination and for another 6 months with vaccination-to-live. (OIE terrestrial code article 8.5.8)
  - (Are markets after this period still available as before the outbreak?)

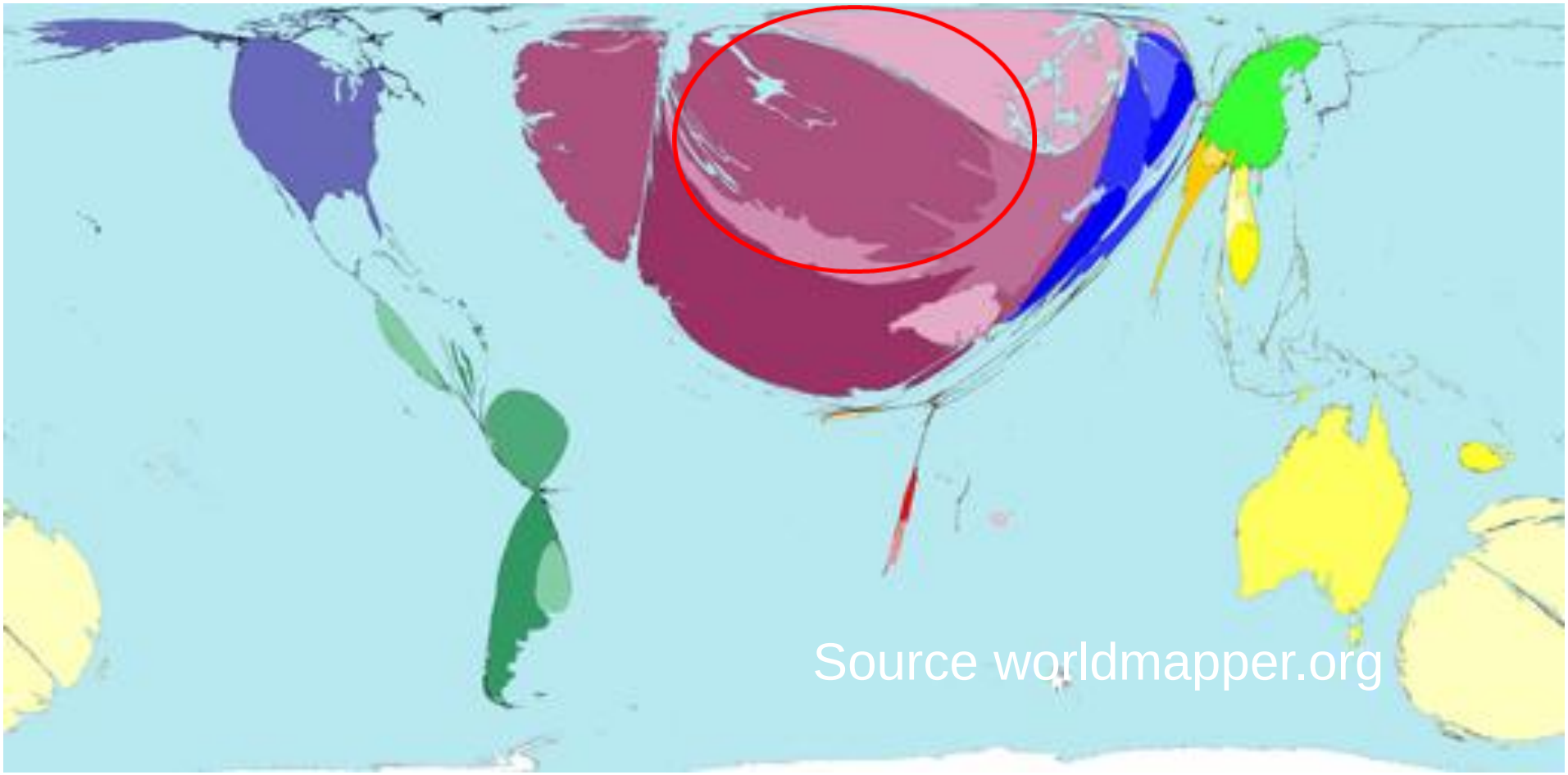
The world



Meat exports



Dairy exports



Export to countries outside the EU

Export value pig meat (2006) Million€			
	NL	DK	DE
total	1767	3333	2458
intra EU	1543	2115	2200
extra EU	224	1218	257
fraction extra EU	13%	**37**%	10%

De Winter et al, LEI 2010

Social concern-The reaction of stakeholders/ public and trade partners

Costs of the 2001 FMD outbreak in NL

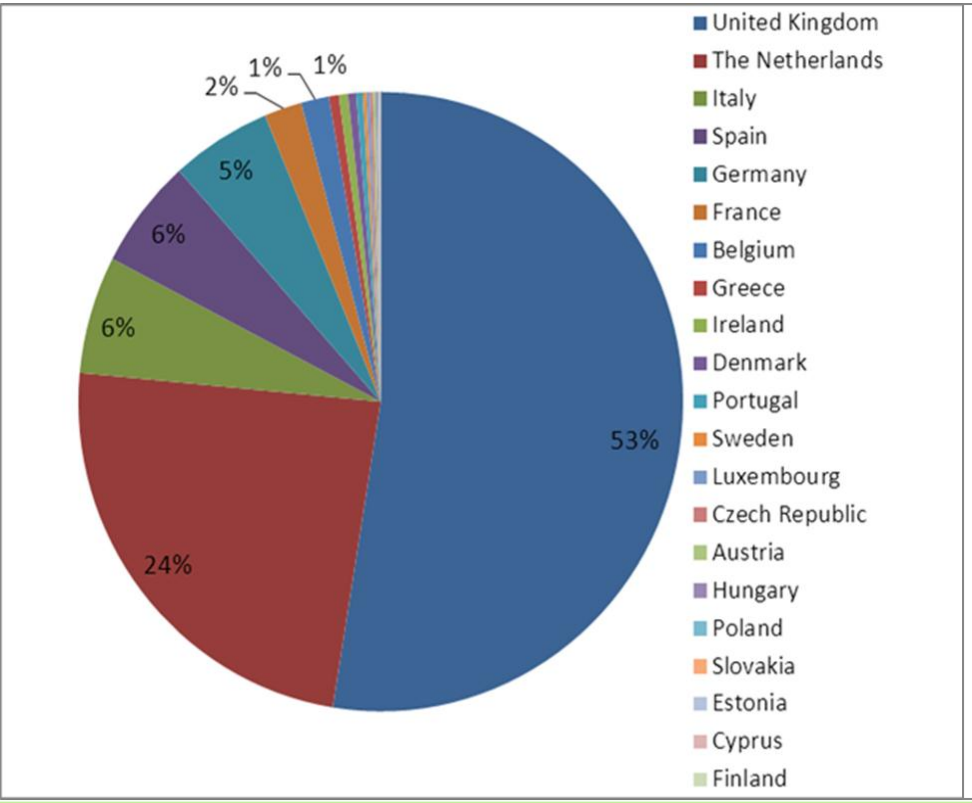
- Total for Dutch society: €900 million or 0.3% GNP
  - Direct costs € 90 million

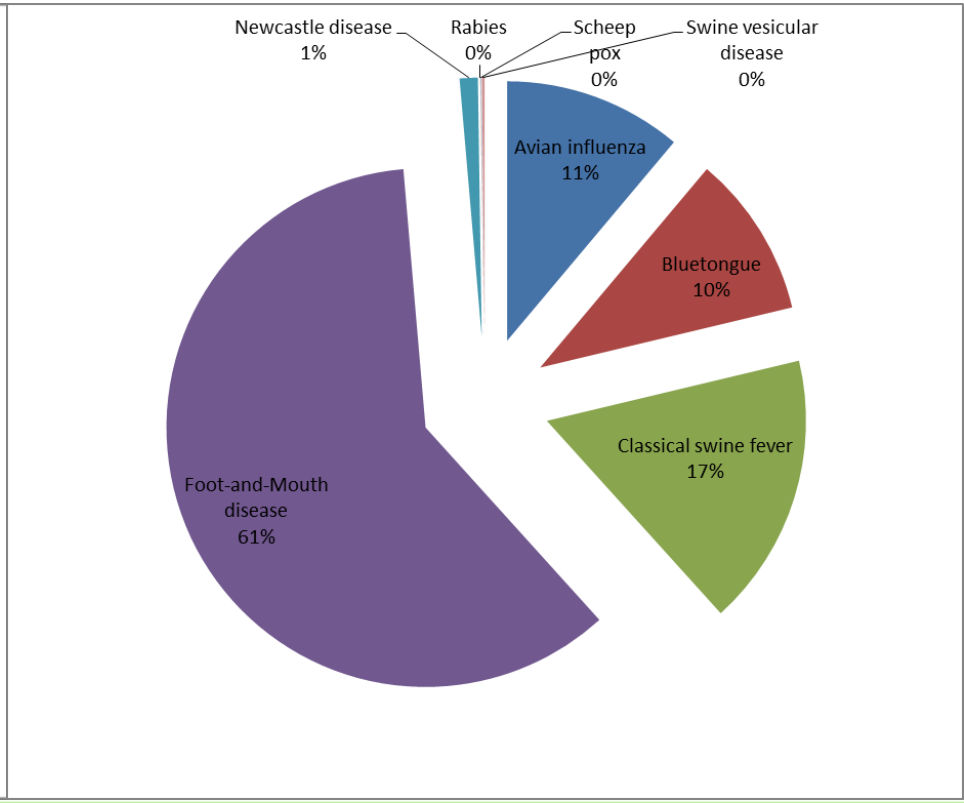
    e.g. enforcement costs, compensation of culled animals, screening etc. (had to be borne by the government)
  - Farmers (Indirect and export market losses): € 320 million
  - Other parts of the livestock chain: € 215 million
  - Tourism and recreation sector: € 275 million

Source (CPB 2001 cited by Huirne et al., 2002)

Payments by the EU Emergency Fund (1997-2009)

- Total payments by Emergency fund in this period:
  - 1,109 million €



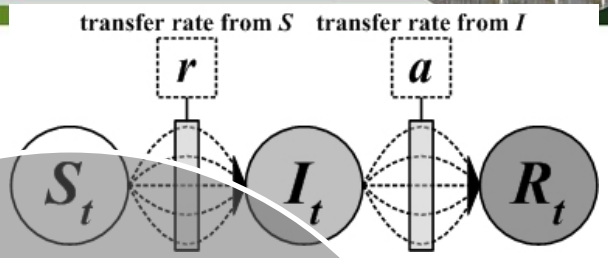



PAST
FUTURE

ECONOMICS OF THE ERADICATION OF FOOT-AND-MOUTH DISEASE EPIDEMICS WITH A VACCINATION TO LIVE STRATEGY

- What has changed in the NL?
  - No more images of large scale culling of animals
  - Society is closely monitoring what is happening
  - No welfare slaughter with destruction but welfare slaughter with animals and products made available for consumption
  - Vaccination to live strategy

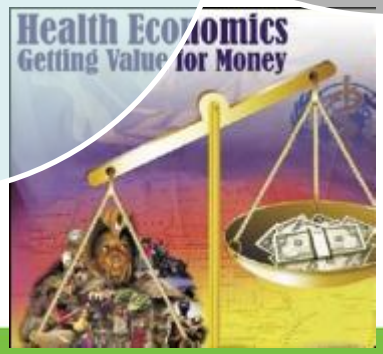
Approach



Policy makers

Epidemiological modelling

Economic evaluation

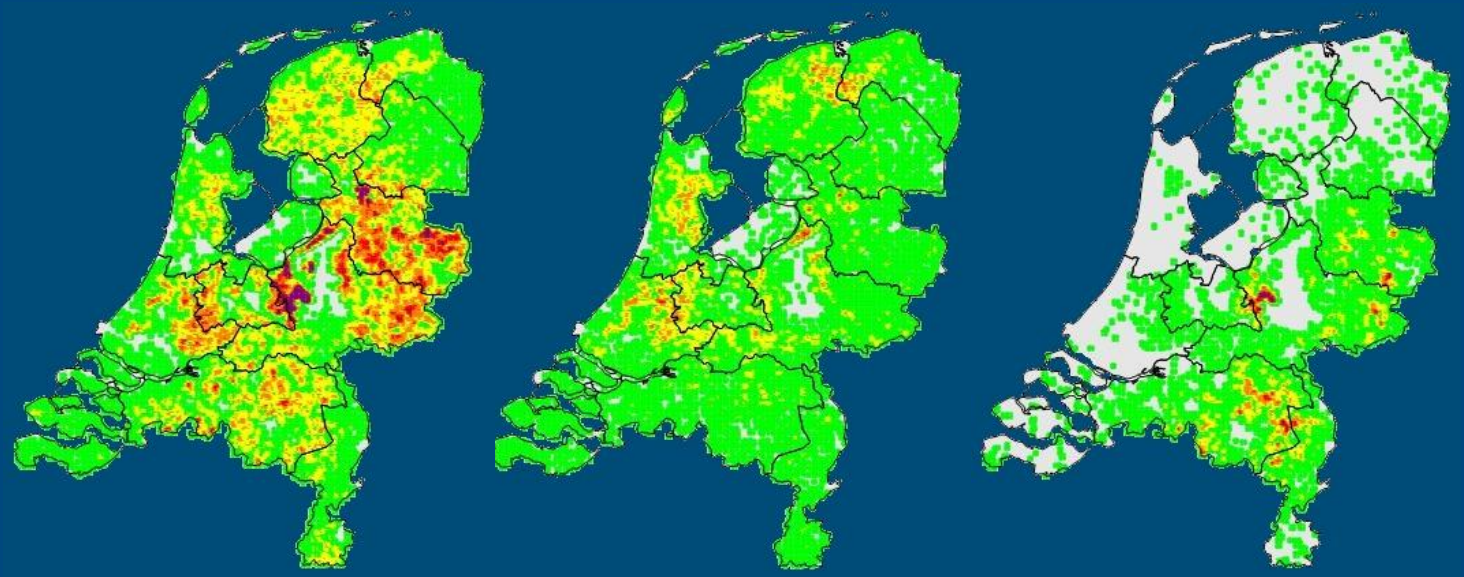


Methodology (1) Definition of investigated policy options / Control strategies:

The following strategies were evaluated:

1. EU basic strategy: EU minimal measures
2. EU basic strategy + Culling in 1 km around infected farms
3. EU basic strategy + Vaccination with radius of 2 or 5 km around infected farms (culling 1st week)

Farm densities 2006



farms/km^2

4
3
2
1
0

cattle

37 000 farms

3.7 mln animals

sheep

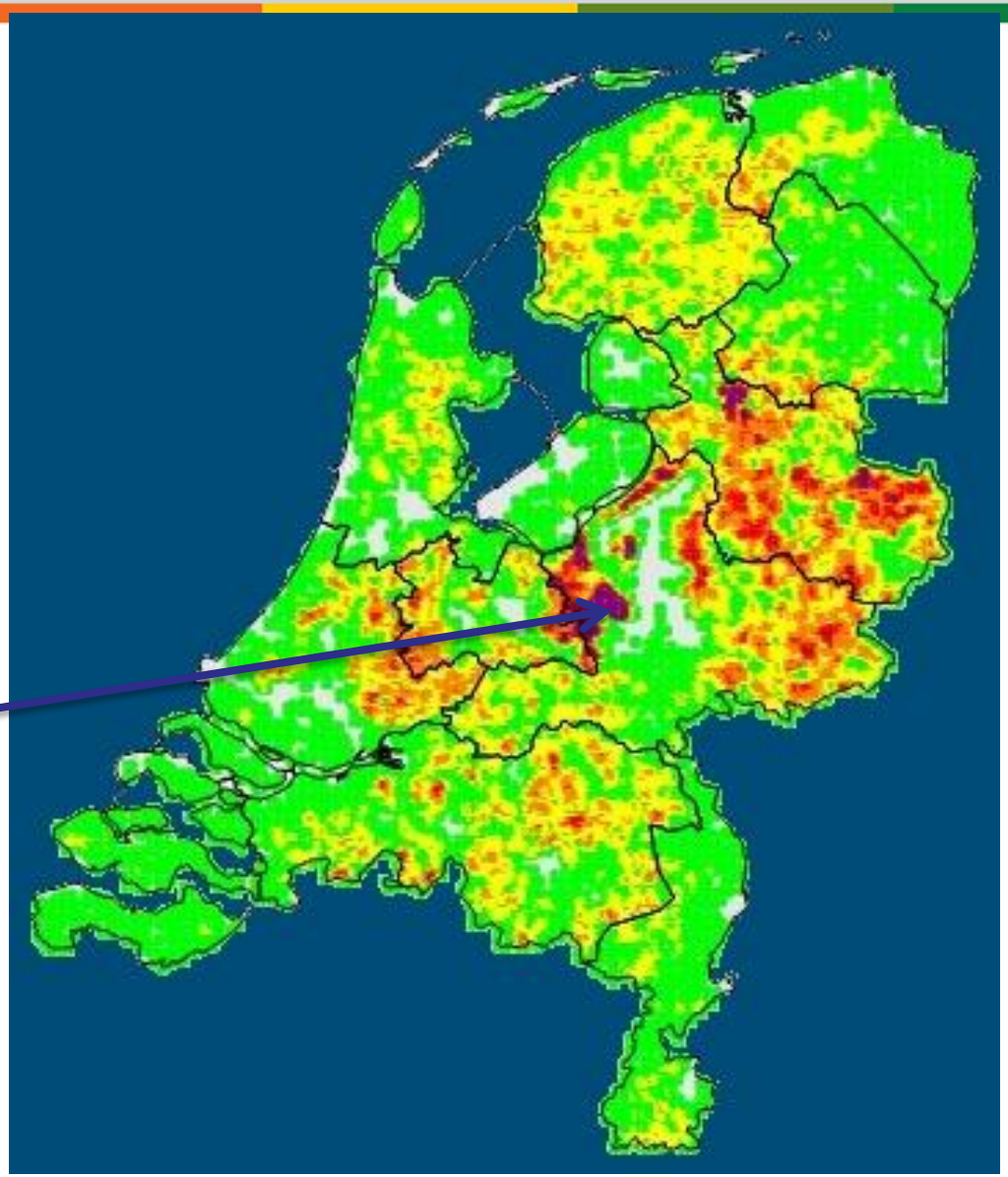
18 000 farms

1.5 mln animals

pigs

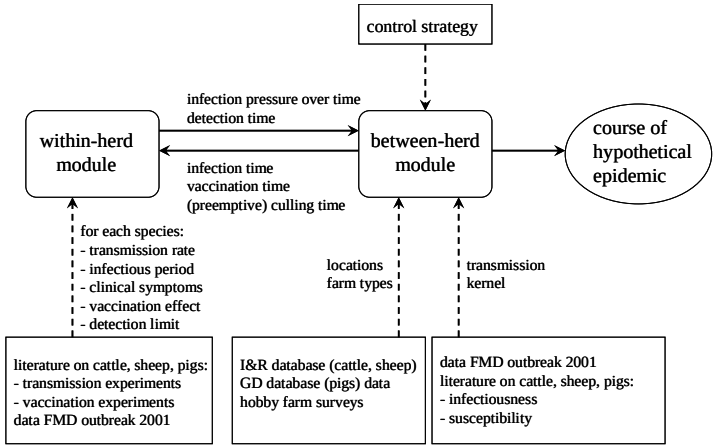
9 000 farms

11 mln animals

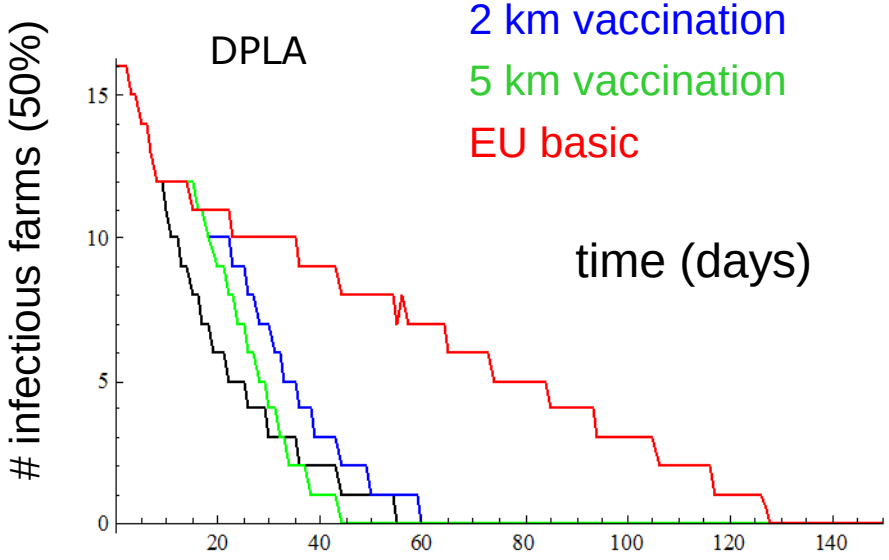


Start of the outbreak

Methodology (2) Epidemiological modelling



Backer et al, 2008, EU FMD conference



Methodology (3) Economic assessment

When vaccination-to-live strategy is applied

- Products of vaccinated animals produced *during* the outbreak: no difference with other animals in control and surveillance zones
- Products of vaccinated animals still present *after* the end of the outbreak until declared officially free:
  - Logistic processing and sub-optimal value
  - Market acceptance: products restricted to Dutch market

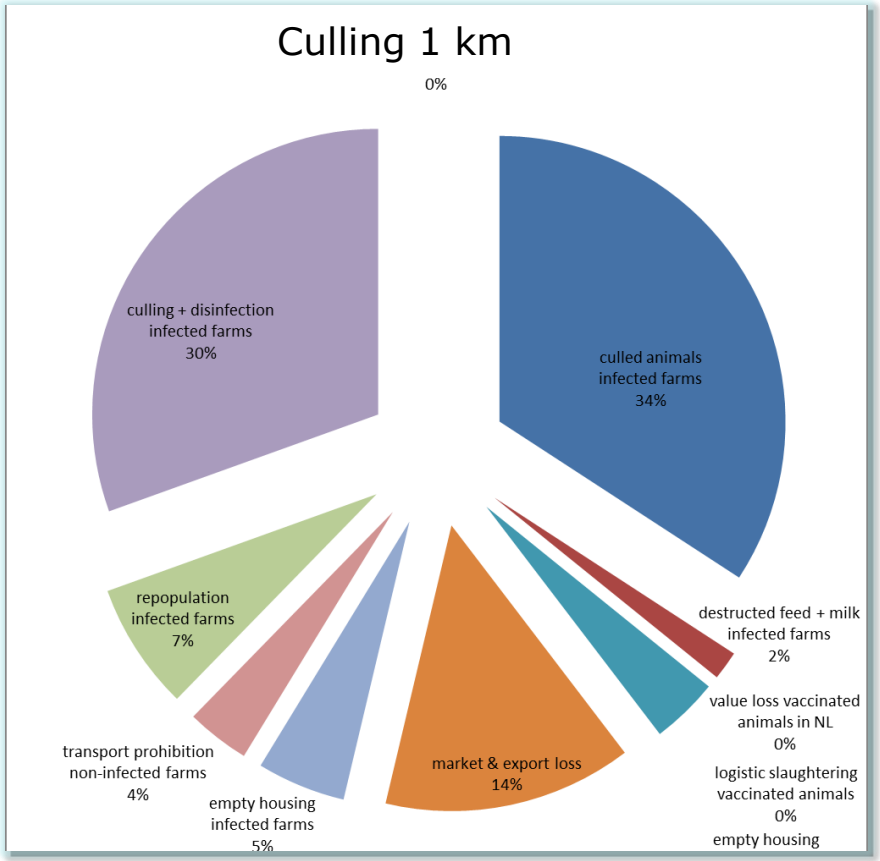
Estimated Average value loss due to lower revenues and logistic processing of vaccinated animals (in € per vaccinated animal).

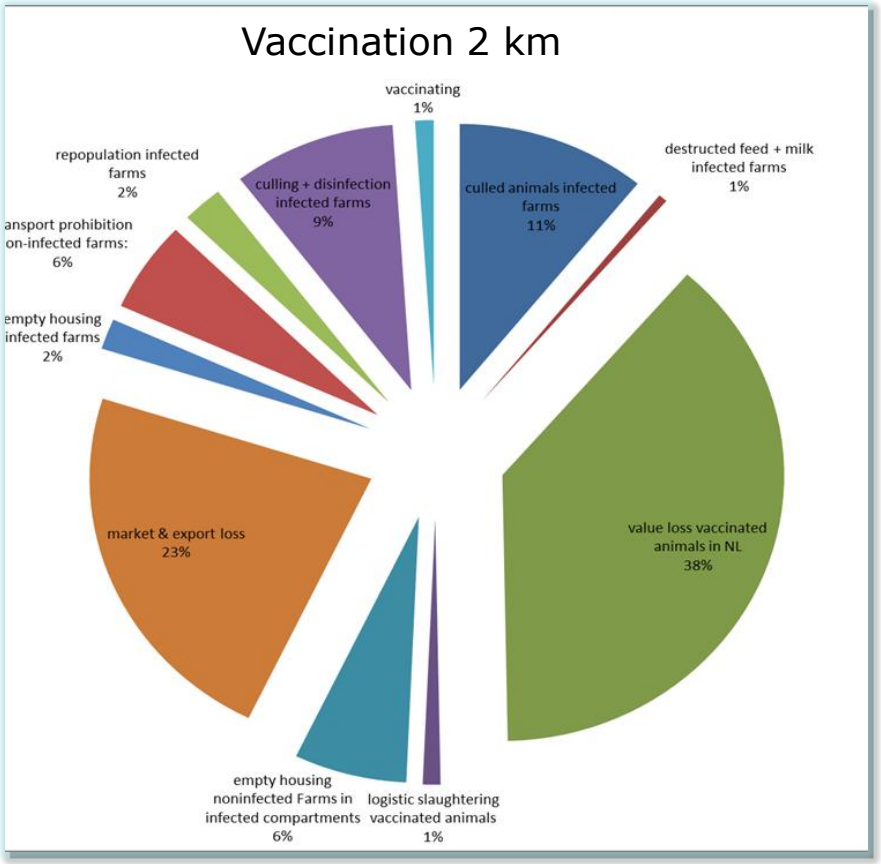
Category	Value loss
Dairy cows	450 €/ animal
Young stock	5 €/ animal
Veal calves	550 €/ animal
Other cattle	26 €/ animal
Sows	260 €/ animal
Fattening pigs	50 €/ animal
Sheep	34 €/ animal

FMD PDLA (>4 farms/km^2): Gelderse vallei

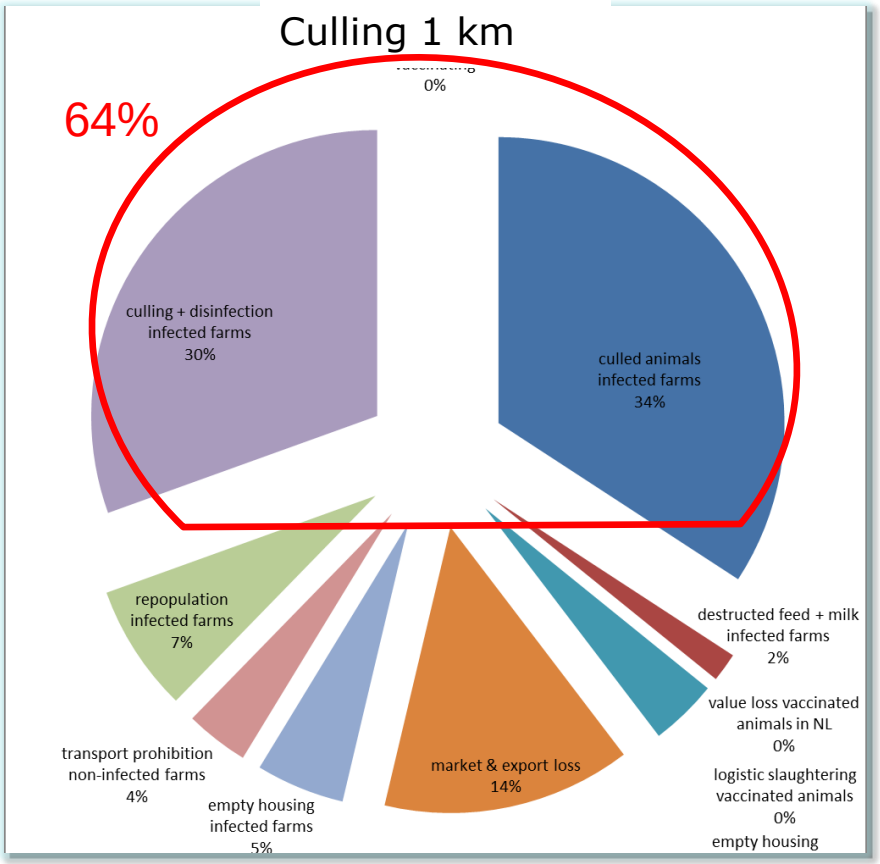
	NUMBER OF CULLED FARMS		LAST WEEK OF DETECTION		TOTAL COSTS INCL COSTS OF OPERATION (in M€)	
	50%	CI(5%-95%)	**50%**	CI(5%-95%)	**50%**	CI(5%-95%)
cul1	**971**	(206-3217)	**9**	(4-15)	**236**	(94-615)
vac2	**260**	(70-707)	**10**	(5-17)	**227**	(99-526)
vac5	**230**	(68-571)	**6**	(4-11)	**228**	(106-504)

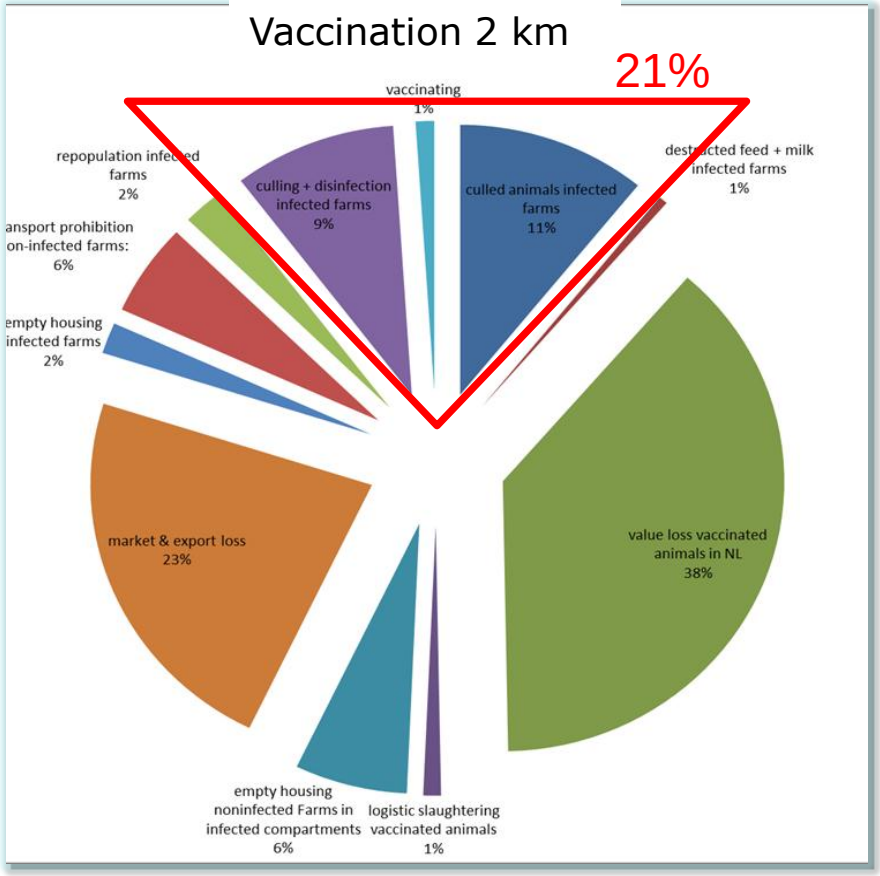
Distribution of costs (median DPLA)





Distribution of costs





Implications for policy and research

1. Reduce the probability of occurrence of an outbreak in one or more MS's,
    1. → preventive measures
    2. → public Private Partnerships

Share responsibility and costs between public and private sector (the PPP)

- All farmers pay a levy to the compensation scheme.
- Sharing responsibility between government and stakeholders has to be established before decisions on cost sharing can be defined.
  - Provides incentives for farmers to stimulate behavioural changes.
  - Should impose biosecurity standards/quality assurance.
  - Determining an appropriate base for cost sharing is a highly complex matter (no “one size fits all” solution).
  - Should adequately consider national and regional differences
  - Should be based on a EU set of basic requirements (and preferably recognized by the EU).
  - Example is Dutch Animal Health Fund

Animal health fund

- Covenant of the Ministry of LNV with the Commodity Boards Cattle, Pigs, Poultry, Sheep and Goats
- Covenant for financing outbreaks of animal disease
  - Covers payments of the costs of outbreaks of contagious animal diseases designated by the Dutch government.
  - The expenses for legal control of contagious animal diseases.
  - Maximal contribution of different livestock sectors in 5 year period

Implications for policy and research (2)

- → Research indicates that vaccination-to-live is alternative for large scale culling
- → Support with epi- and eco-models to continuous update during an outbreak
- → Harmonisation of regulation vaccination-to-live with culling or vaccination as delayed culling
- → Challenge is to put experiences from the past into perspective of the 21st century

Conclusions

- Economic evaluation of different FMD management options:
  - should to be based on universal principles,
  - need to be tailored to local circumstances in discussion with stakeholders,
  - is likely to result in different solutions for different countries e.g. due to difference in livestock population density, trade patterns or acceptance of product originating from vaccinated animals, and
  - should be supported by epidemiological and economic models
  - SHOULD BE PART OF THE DECISION MAKING PROCESS.

Acknowledgements

- Jantien Backer, Thomas Hagenaars, Herman van Roermund, Aldo Deckers, Gonnie Nodelijk WUR-CVI

- Coen van Wagenberg, Nico Bondt, WUR- LEI

- The financial support of the Dutch Ministry of Economic Affairs, Agriculture and Innovation for enabling much of the underlying research is highly appreciated.

- FAO for the invitation

Thanks for you attention

European FMD Research Funding

FP7

DISCONVAC

EMIDA ERA-NET

Epi-SEQ

RAPIDIA FIELD .eu

David Paton

Rome April 2013

DISCONVAC: Development, enhancement and complementation of animal-sparing, foot-and-mouth disease vaccine-based control strategies for free and endemic regions

1st April 2009 – 31st June 2013

14 partners including vaccine producers from Europe and India and Research Institutes from China and Argentina

Objectives

(i) improve the quality of existing FMD vaccines and diagnostics,

(ii) refine and replace *in vivo* vaccine quality tests,

(iii) develop new generation FMD vaccines and diagnostics by cutting edge technology,

(iv) increase/enhance our knowledge on FMDV spread and transmission following the use of high-potency monovalent or multivalent vaccines in free and endemic settings.

DISCONVAC:

Publications (1)

Interplay of FMDV, antibodies and plasmacytoid dendritic cells: virus opsonization under nonneutralizing conditions results in enhanced interferon-alpha responses

Interferon-gamma induced by in vitro re-stimulation of CD4-+ T cells correlates with in vivo FMD vaccine induced protection of cattle against disease and persistent infection.

Characteristics of serology based vaccine potency models for FMDV

Reducing animal experimentation in FMD vaccine potency tests.

Intranasal Delivery of Cationic PLGA Nano/Microparticles-Loaded FMDV DNA Vaccine Encoding IL-6 Elicited Protective Immunity against FMDV Challenge.

DISCONVAC:

Publications (2)

Avidity and subtyping of specific antibodies applied to the indirect assessment of heterologous protection against FMDV in cattle.

Evaluation of cross-protection between O-Manisa and O-Campos in cattle vaccinated with different payloads of O-Manisa vaccine.

Development of a FMD infection model in severe combined immunodeficient mice for the preliminary evaluation of antiviral drugs.

Validation of a recombinant integrinavb6/monoclonal antibody based antigen ELISA for the diagnosis of FMD.

Epi-SEQ

EMIDA ERA-NET

1st May 2012 – for 36 months

Internal funding through EMIDA selection system; 6 partners (all European Public Institutes)

Focus on key diseases caused by RNA viruses (FMDV, AIV, NDV, CSFV) and DNA viruses (ASFV and exotic poxviruses).

Will exploit advances in next-generation sequencing (NGS) techniques that offer unprecedented increases in the scale of sequence data generated from a sample.

1. How to sequence large collections of viruses to parameterize improved models that describe viral transmission and outbreak epidemiology.

2. How to conduct deep re-sequencing of viral sequences within single samples to define the evolutionary dynamics of viruses.

Rapid Field Diagnostic and Screening in Veterinary Medicine

1st January 2012 – for 36 months

Collaborative Project (Small or medium-scale focused research project targeted to SMEs)

12 partners from 8 different countries: five companies (all SME) and seven public research organizations.

Development of **penside tests** that can be used to support local decision-making by animal health practitioners.

Also test formats for use in non-specialised **frontline laboratories**.

Multiple pathogens

anihwa
Animal Health and Welfare ERA-Net

Follow-on to EMIDA and also utilises national funding

IRAFTOVAC - Anihwa FMD proposal (€ 2.2m), currently under review (decision in May, for Sep start). 71 other proposals (non-FMD)

7 European partners including one vaccine producer

Aims to:

1. Generate vaccines inducing long term immunity
2. Determine early biomarkers and mechanisms linked to long term immunity
3. Develop novel viral vectored vaccines and VLPs for increasing adaptive and local immune responses
4. Understand the molecular mechanism of FMDV persistence
5. Develop improved diagnostics to monitor FMDV status

EU FMD Funding from mid-2013

- No FMD-specific funding
- No plans for FMD-specific calls?
- Ongoing funding:
  - Nationally funded
  - Part of multi-pathogen projects
- EPIZONE funding also finished
- Loss of critical mass
- Unfulfilled research requirements
- Need for advocacy

National FMD funding

- Solicited information on FMD funding 2010-2014, from 6 countries
  - UK, Germany, France, Italy, Denmark, The Netherlands
- Quite diverse levels of funding for FMD activities
  - Excluding UK, €0.4m - €1.1m and 1-12 FTE staff
- National funding stagnant or slightly decreased in most cases
  - Most funds available for Ref Lab functions
  - Only 2 countries provide significant amounts of FMD research funding
- Heavy reliance on EC funds for research activities
  - Reduced funding associated with end of DISCONVAC project

Observations on FMD funding

- Increases in funding after 2001 now draining away
- Lack of research funding is paradoxical when pressing for global FMD control
- Need to create a European fund for FMD research
- Need more cooperation between MS to provide shared functions
- Problem of where next generation of FMD experts will come from

Global FMD Research Alliance (GFRA)

- Expanded membership
- Themed Research meetings

FMD Cross-protection, Vaccine-matching and Vaccine Banks: Challenges and Opportunities
Buenos Aires, Argentina
June 14-16, 2011

Surveillance, Epidemiology, Vaccination and Control of FMD
Hosted by the ARC-OVI in the Kruger National Park, South Africa
April 17-19, 2012

- Success has led to development of similar networks for PPR and ASF

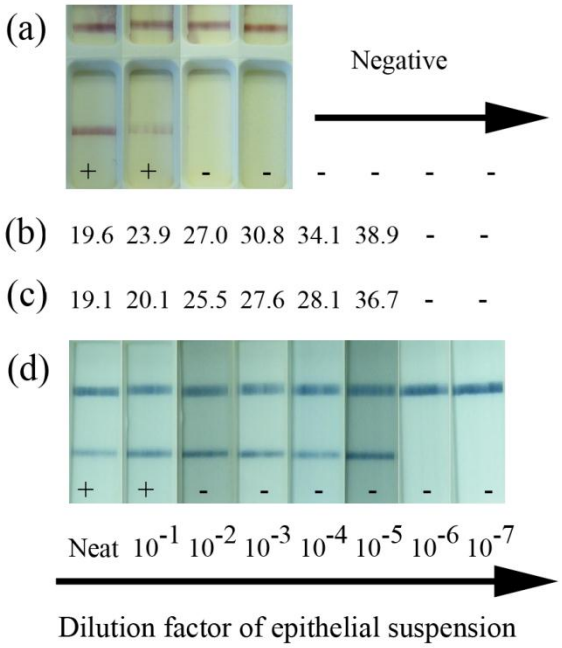
Sensitive and simple penside tests

Isothermal nucleic acid amplification plus LFD read-out

Can detect epithelial and air samples without RNA extraction

Similar sensitivity to rRT-PCR

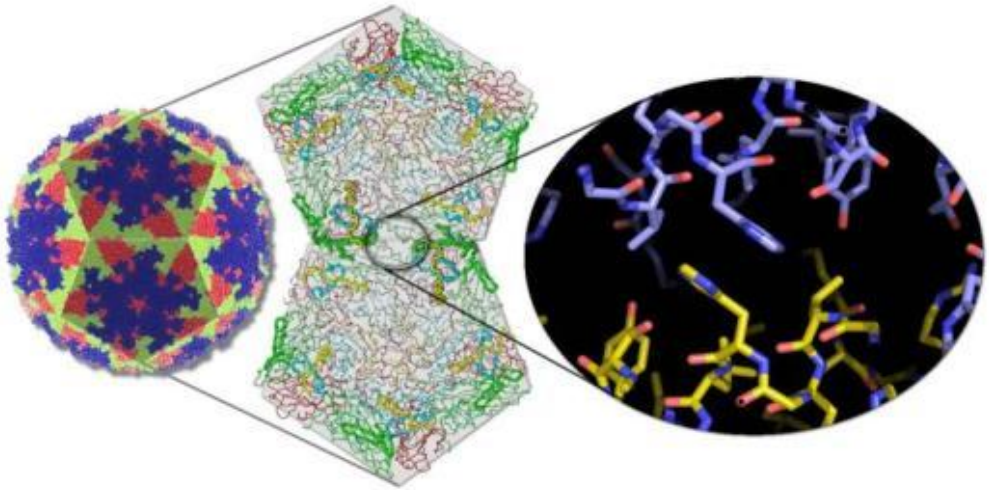
Basis for simple but highly sensitive field assay



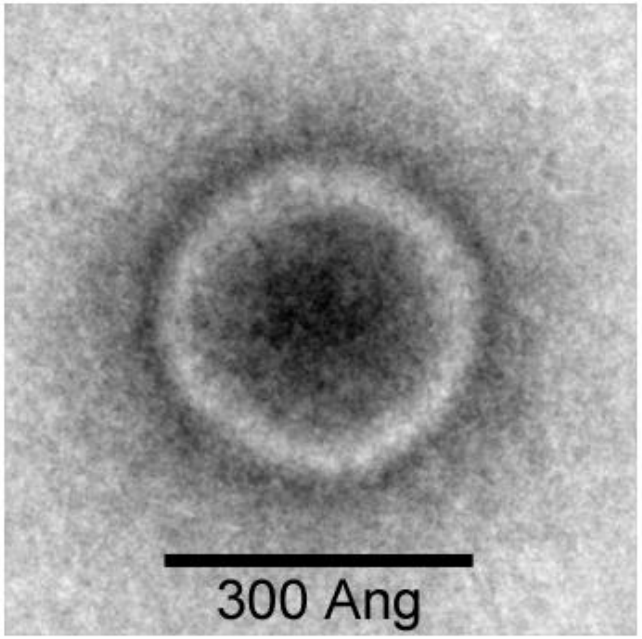
FMDV Capsid vaccines – safe and stable

theguardian

"The science behind the new foot-and-mouth disease vaccine
The creation of a new synthetic vaccine for foot-and-mouth disease is a stranger and more impressive tale than reported in the media"



Stabilised capsids treated 2h at 56ºC (or for 30min at pH5) are intact after sucrose density gradient analysis



Porta et al. (2013) PLoS Pathogens

Surveillance and research needs

"Endemic" countries

- Monitoring in complex epidemiological situations
- Simple diagnostics
- Understand epidemiology
- Cheap, stable vaccines that give long-term and broad protection
- Technology transfer

"Free" countries

- Early warning
- Safe trade
- Rapid detection
- Rapid onset vaccines/antivirals
- Safe and storable vaccines
- DIVA vaccines/tests
- Understand epidemiology
- Decision support tools

Acknowledgements

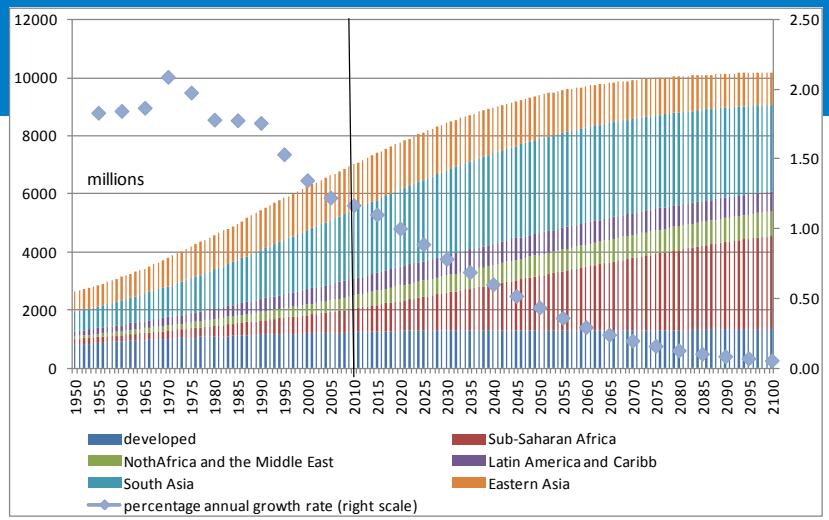
Thanks to those who provided funding information

Ministerie van Economische Zaken

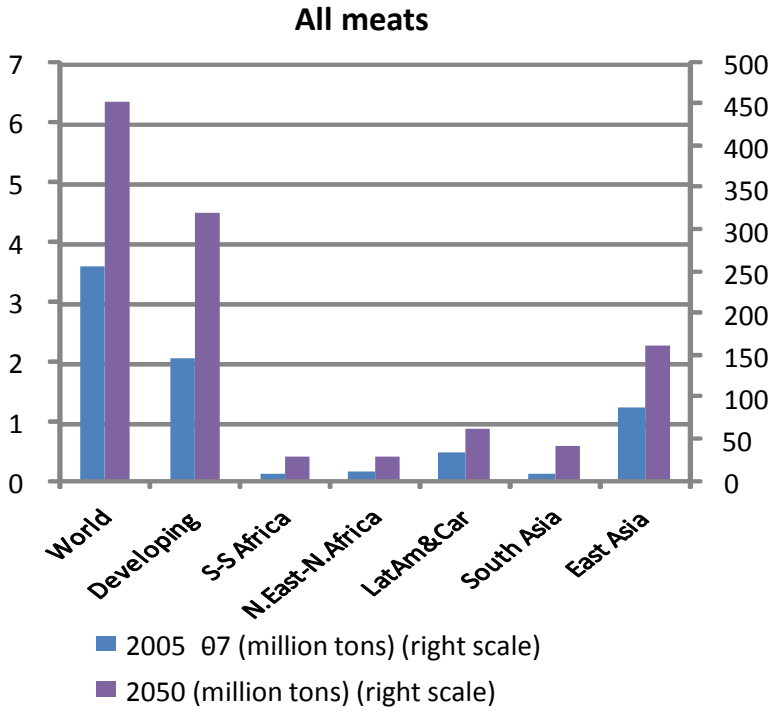
The next 10 years: a changing environment for FMD epidemic management

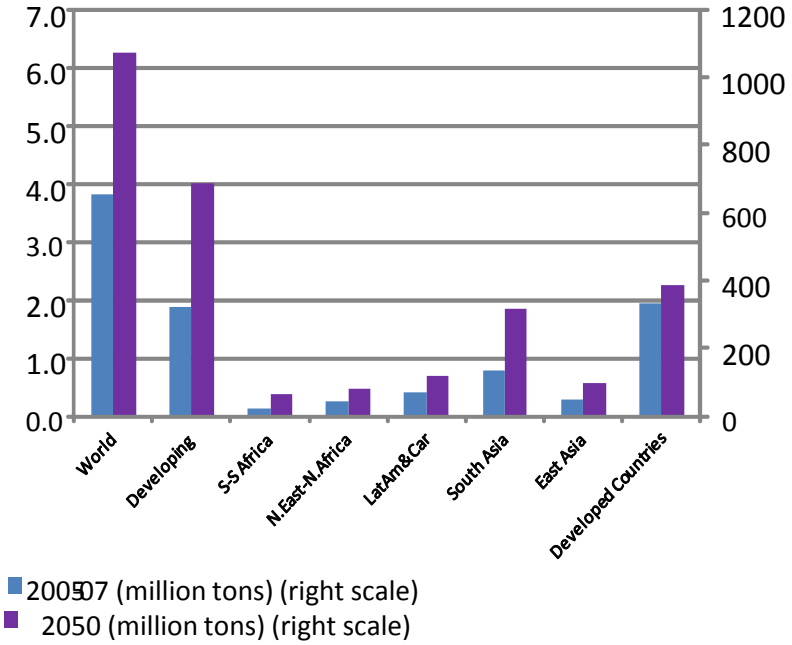
Christianne Bruschke

World population



Dairy and Meat Consumption

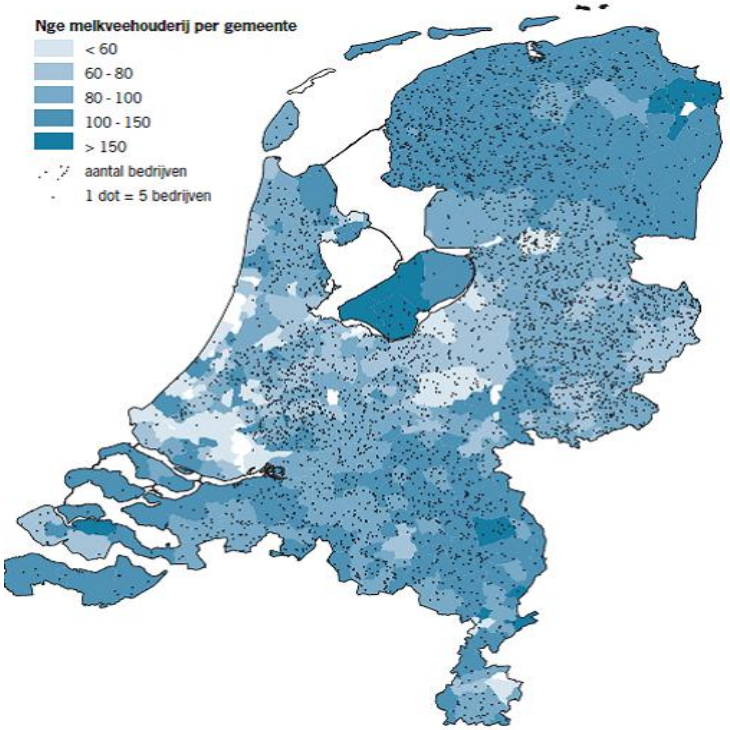




Source: Alexandratos, 2011

Animal Husbandry in The Netherlands

- 3.9 million cattle
- 900.000 veal calves
- 12 million swine
- 500.000 horses
- 1,5 million sheep and goats
- 100 million poultry



Share with:

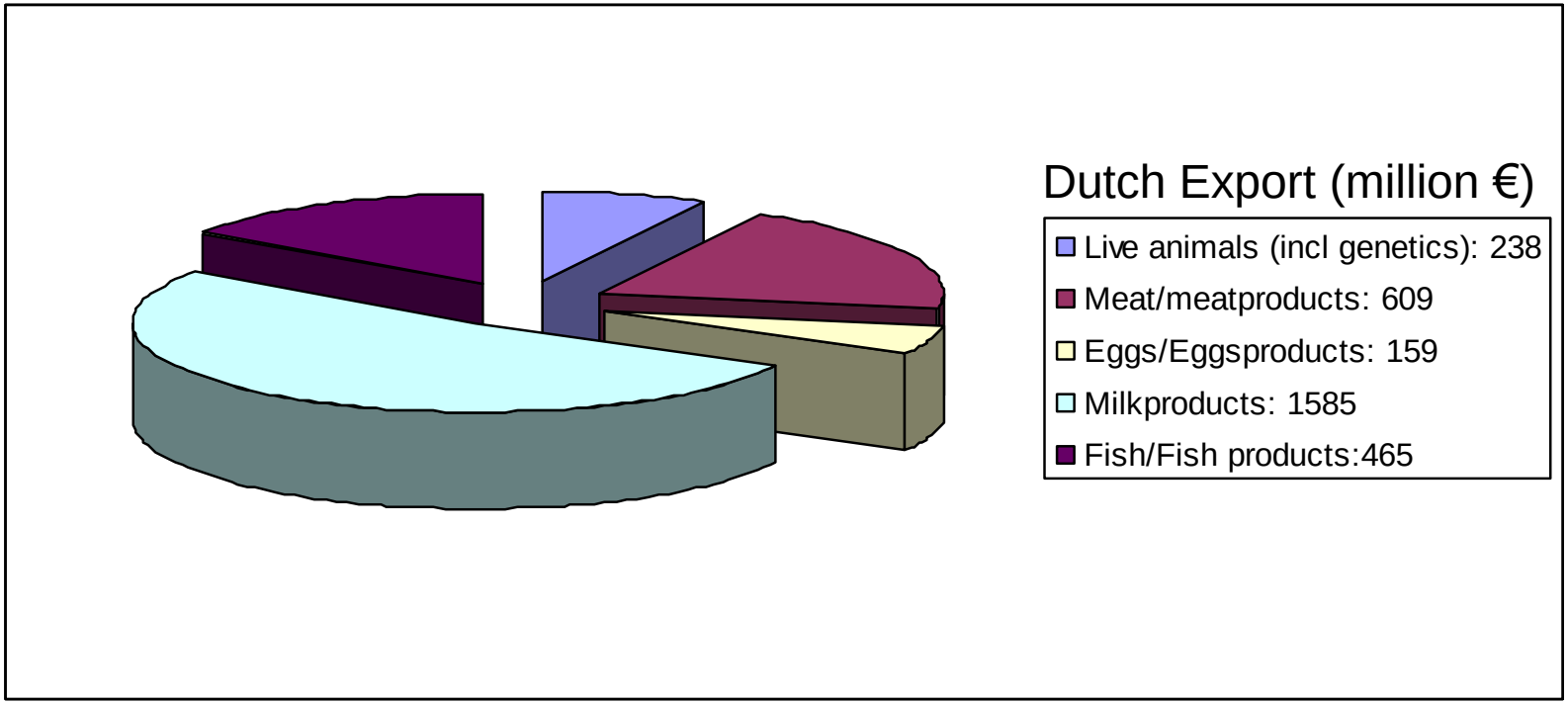
- 17 million people

On:

- 33 893 km^2 land

Bron: CBS

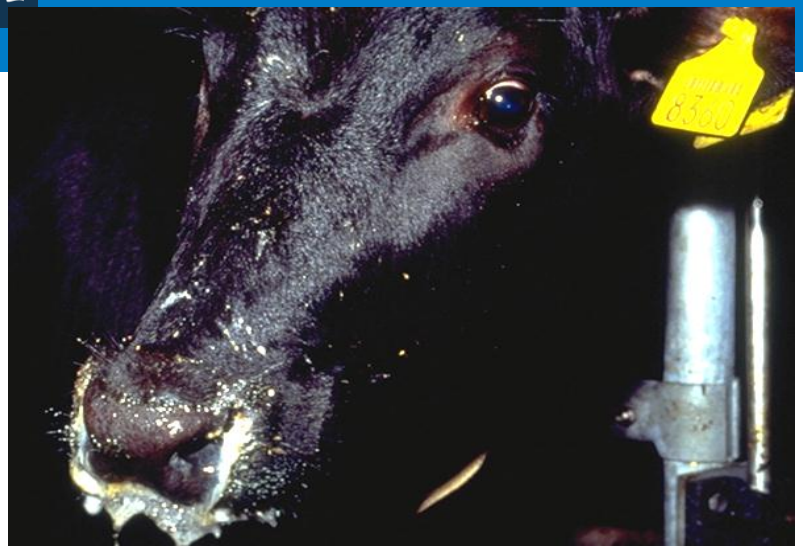
Trade: important part of economy



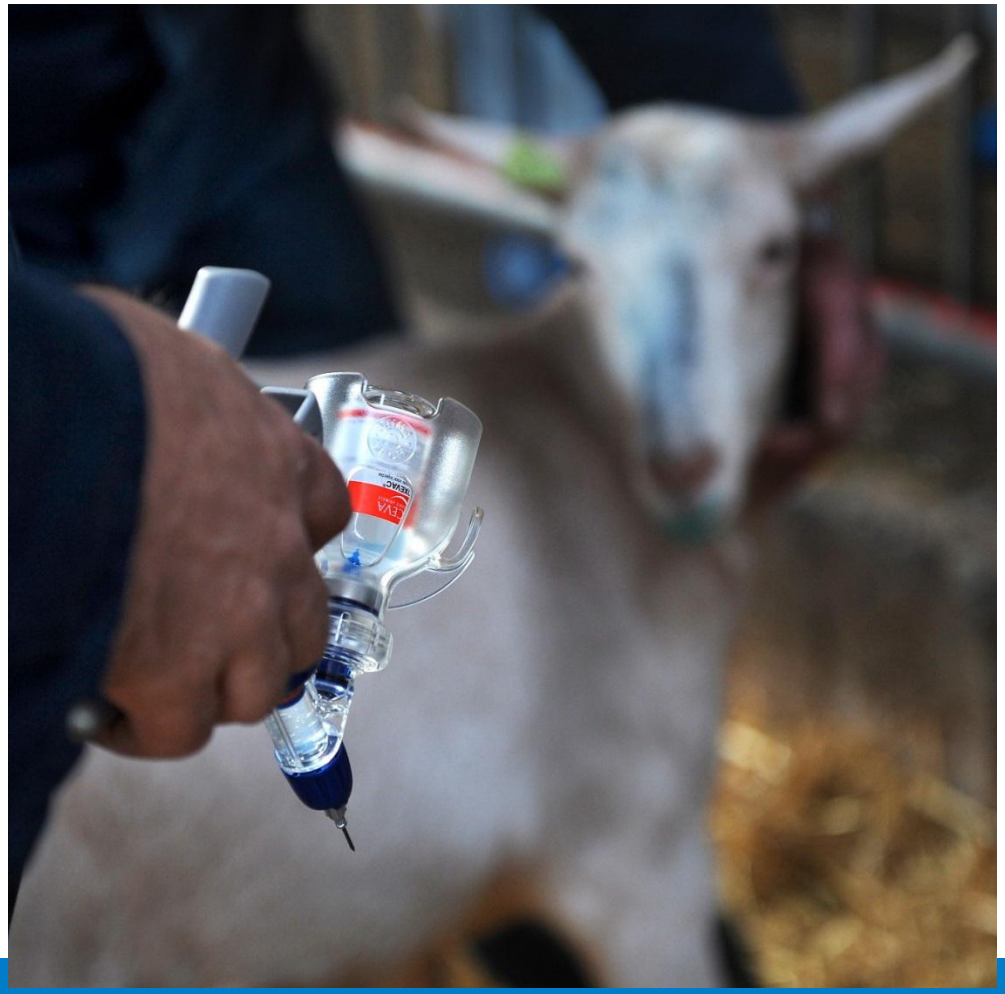
Total Dutch agricultural export 2012: 77,9 billion euro

Total Dutch agricultural import 2012: 48.3 billion euro

The other side: animal diseases



One health and zoonotic threats



Concerns about animal welfare

Global and European task

Global

- Feed 9 billion people
- Key: 2 times more with 2 times less
- Decrease food losses and food waste

Europe

- Sustainability of animal husbandry
- No unlimited growth of this sector

Sustainable Animal Husbandry

- Climate and Energy
- Animal Health and Welfare
- Human Health
- Biodiversity and Environment
- Societal concerns

Responsibilities

- Animal husbandry and related industries: license to produce (sustainable)
- Government: putting difficult issues on the agenda, facilitation and support of (private) initiatives where possible, animal disease management
- Veterinarians: private expert guidelines, more veterinary services and advise
- Pharmaceutical industries: product development and sustaining up-to-date files
-

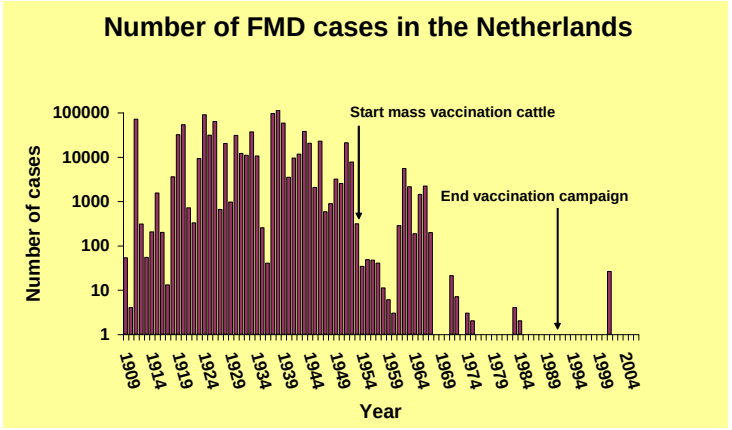
Private Public Partnerships

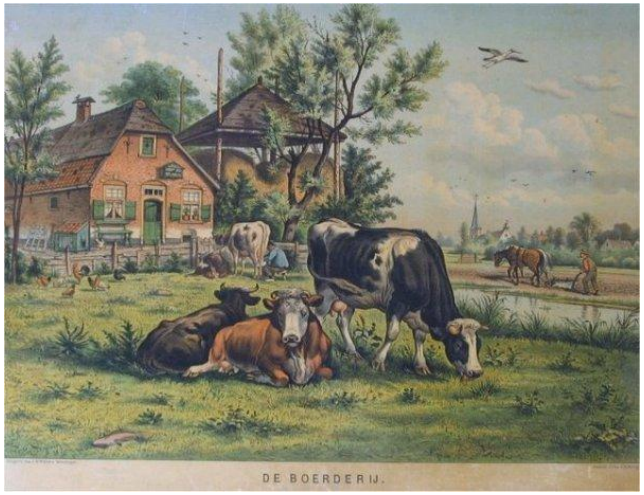
- Europe at the top of agricultural research
- Attractive environment for top-R&D industries
- Top Sector ‘Life Sciences & Health’ is one of the Dutch priority-industries
- Tension between research needs of developing/ in transition countries and the need of developed countries

Changing situation for Foot and Mouth Disease

- Increase in Dairy and Swine production; more susceptible animals?
- Increase in trade; risk of introduction / spread increases?
- Sustainability issues: introduction risk (animals outdoors, swill feeding)?

- Consequences for:
  - Outbreak management?
  - Vaccination programs?
  - Trade?
  - Research needs?
  - Legislation / OIE




DE BOERDERIJ.

The Global FMD Control Strategy
State of play
after the Bangkok Conference

Joseph Domenech and Samia Metwally

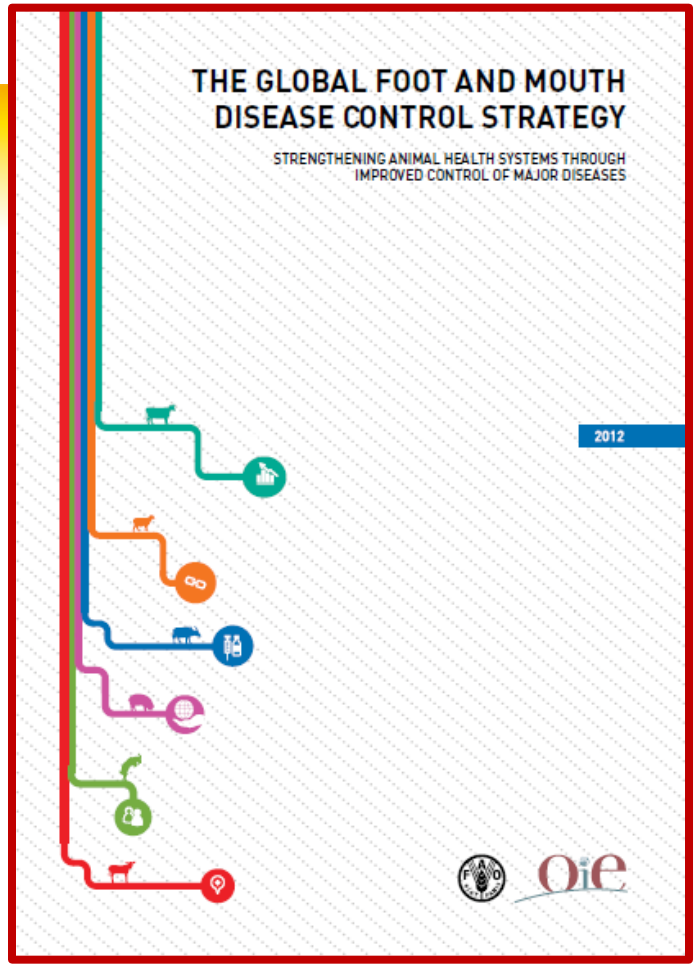
on behalf of the FAO/OIE GF TADs Working Group

40th General Session of the European Commission for the control of Foot and Mouth Disease (EuFMD)
22-24th April 2013, Rome, Italy

Towards Global Control and Eradication of FMD

OIE/FAO Global Conference on Foot and Mouth Disease
with the support of the EC
THE WAY TOWARDS GLOBAL CONTROL
24-26 June 2009, Asunción Paraguay

FAO/OIE GLOBAL CONFERENCE ON
FOOT AND MOUTH DISEASE CONTROL
BANGKOK, THAILAND
27-29 JUNE 2012



Head lines of the joint FAO/OIE Global FMD Control Strategy

- FMD control is not an utopia: we can do much better with existing means and methods
- Only regional approaches will be successful as history has shown (Europe, South America, SE Asia)
- Regional approaches should take into account regional differences (for instance wildlife issue in Southern Africa)
- FMD-endemic countries should be better aware of the damage caused by FMD and the opportunities lost [clear need for more socio-economic studies]

Head lines of the joint FAO/OIE Global FMD Control Strategy

- Focus should be on FMD-endemic countries using a progressive, risk-based approach

- Maintain FMD-free status and countries are requested to support the Global FMD Control Strategy, for reasons of solidarity as well as well-understood own interest (control at source)

- FMD control hand in hand with improvement of Veterinary Services (VS) – FMD Control Strategy Component 2

- Will create better possibilities to control other major diseases of livestock – FMD Control Strategy Component 3

The FMD Control Strategy intends to strengthen the vital disease control supporting functions:

- Laboratories: national, regional, international, coordinating global lab and Networks; provision of additional expert staff

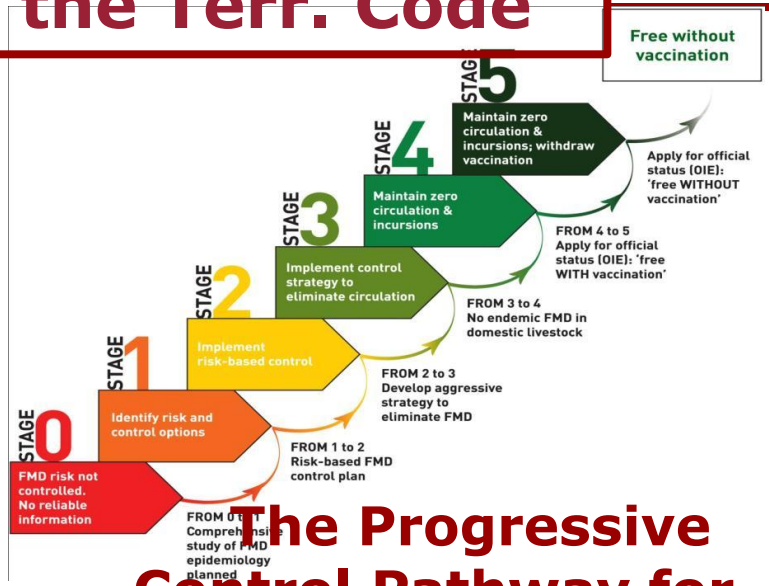
- Epidemiology (and economics): national teams, regional, international centers/Collaborative Centers, Networks; additional expert staff

- Vaccines: availability, Quality Assurance; Quality Test Centers, regional vaccine banks; correct use, vaccination planning

Tools

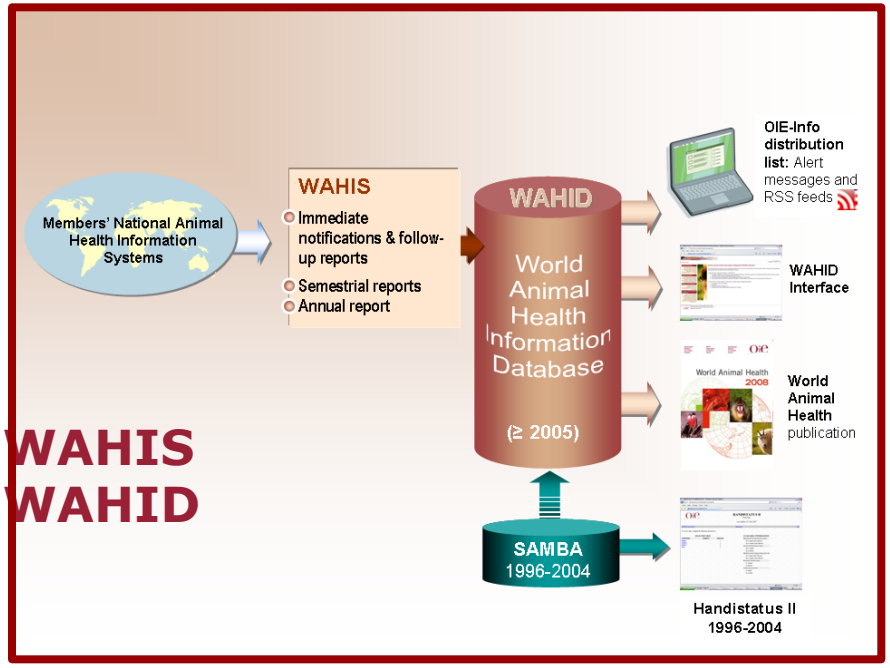
Epidemiology teams

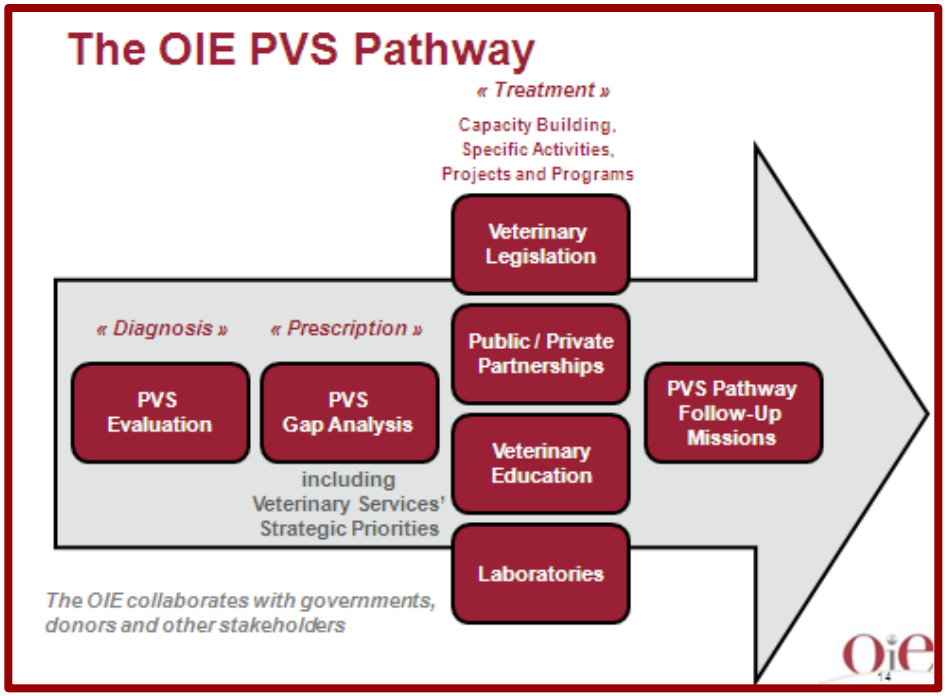
OIE: Standards, new article in the Terr. Code



The Progressive Control Pathway for Foot and Mouth Disease (PCP-FMD)

Laboratories Vaccines





The FMD Control Strategy supports in the more advanced FMD-PCP control stages:

- **Emergency responses**
- **Identification of farms and animals**
- **Biosecurity**
- **Public/private partnerships**

The FMD control Strategy advocates for continued research, in particular in the field of diagnostics, strain characterization, vaccines, vaccine quality control and epidemiology

GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

Chronogram of the Global FMD Control Strategy (Component 1)

PCP Stage at year 0	PCP Stage at the end of year 5					PCP Stage at the end of year 10					PCP Stage at the end of year 15				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
0	100[8]					10	75	15				50	50		
1	10	75	15				60	30	10			10	70	20	
2	–	25	50	25				60	30	10			25	50	25
3	–		50	25	25			10	50	40			10	20	70
4	–			50	50				25	75					100
5	–				100					100					100

GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

Expected results:

Of the countries presently in FMD-Progressive Control Pathway (PCP) stage, at the end of year 5:

- **0. 100% has reached PCP stage 1**
- **1. 75% has reached stage 2; 15% stage 3 and 10% remained in stage 1**
- **2. 50% has reached stage 3, 25% stage 4 and 25% remained in stage 2**
- **3. 25% has reached stage 4, 25% stage 5 and 50% remained in stage 3**
- **4. 50% has reached stage 5 and 50% remained in stage 4**
- **5. (Officially FMD-free with vaccination): 100% maintained their status**

Action plan

Action plan was worked out in the form of typical activities

- **At country level – for each of the PCP stages and for each of the Strategy components**
- **At regional level (for stages 1 - 5)**
- **At global level (for stages 1 – 5)**

The Global FMD Control Strategy and supporting documents are available on the websites

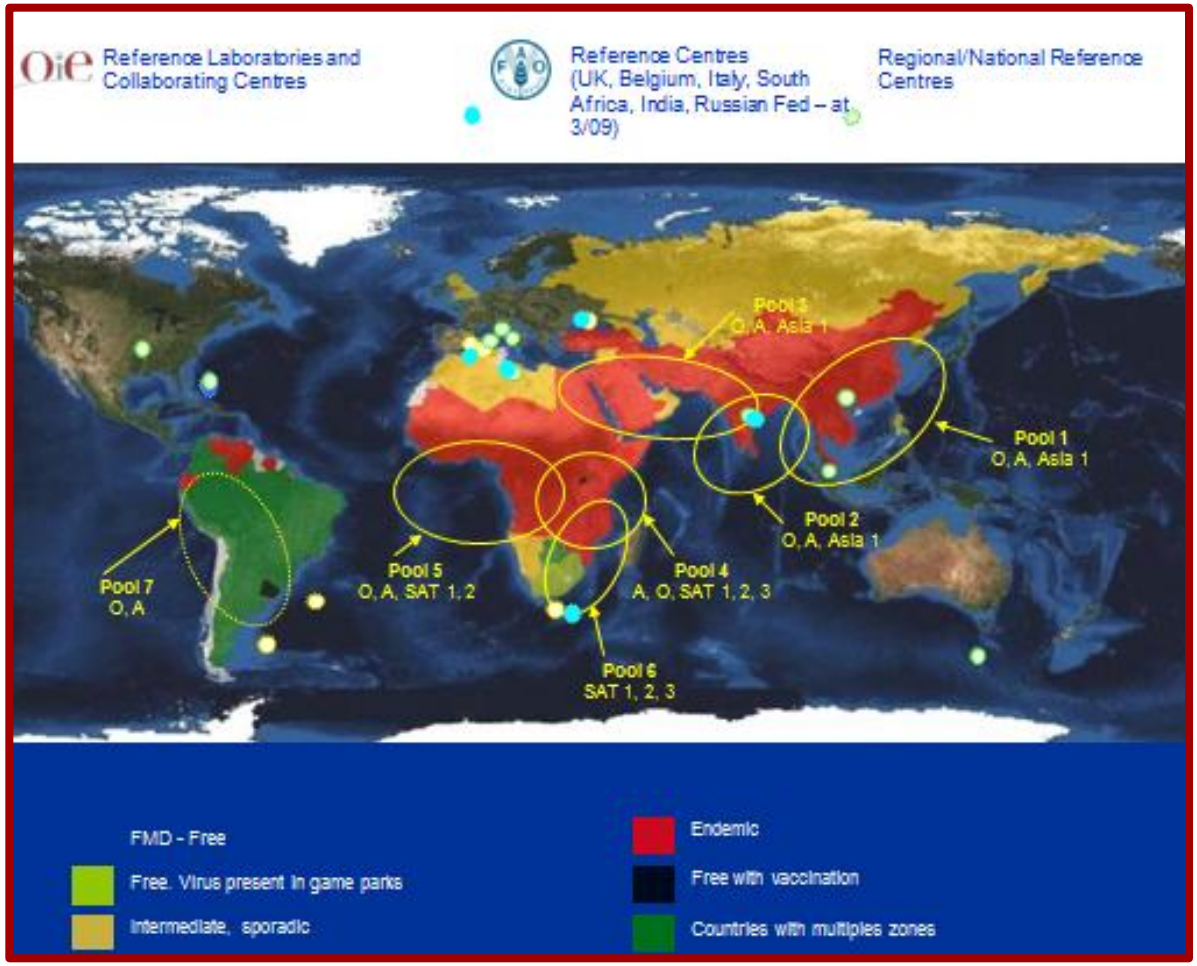
- **www.FMDconference2012**
- **http://www.oie.int**

From concept to practice

- Bangkok was not a pledging conference

- Over 100 countries, regional org., development partners and stakeholders supported the FAO/OIE Global FMD Control Strategy

New or intensified FMD control programmes at the national level, but in a regional context, in particular in virus pool, regions 3, 4, 5 and 6



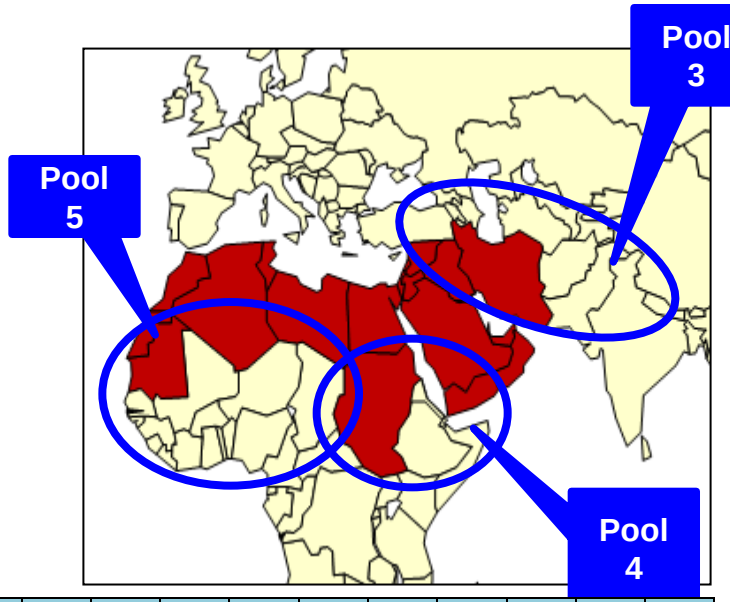
To convince countries to step up their FMD control activities

Regional meetings

- To advocate for more committment and investment.
- To promote harmonized preparation of national strategies and project proposals
- To monitor the situation and control program implementation
- To develop regional and sub regional strategies when appropriate

Regional meeting
Near East and North Africa
4-5 December 2012, Cairo, Egypt

- **Presented approaches in the development of regional contingency plan and methodologies of conducting socioeconomic impact analysis**
- **Identified priorities and actions for regional support**
- **Drafted and reviewed the regional strategy for the Near East and North Africa**



Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Algeria	OIE-CP									
Bahrain	1	2	2	3	3	3	4	4	4	4
Egypt	1	1	1	1	2	2	2	2	3	3
Iran	2	2	2	3	3	3	4	4	4	4
Iraq	2	2	2	2	2	2	2	3	3	3
Jordan	1	1	2	2	3	3	4	4	4	4
Kuwait	2	2	3	3	3	4	4	4	4	4
Lebanon	1	1	2	2	3	3	3	4	4	4
Libya	1	1	1	2	2	2	2	2	3	3
Morocco	OIE-CP									
Mauritania										
Oman	2	2	3	3	3	4	4	4	4	4
Qatar	2	2	3	3	3	4	4	4	4	4
Saudi Arabia	1	1	1	1	2	2	3	3	3	4
Sudan zone A	1	2	2	2	2	2	2	3	3	3
Sudan zone B	1	2	2	2	2	2	2	2	2	2
Sudan zone C	1	2	2	2	2	2	2	2	2	2
Syria	2	3	3	3	4	4	4	4	5	5
Tunisia	OIE-CP									
UAE	1	2	2	3	3	3	4	4	4	4
Yemen	1	1	1	1	2	2	2	2	3	3

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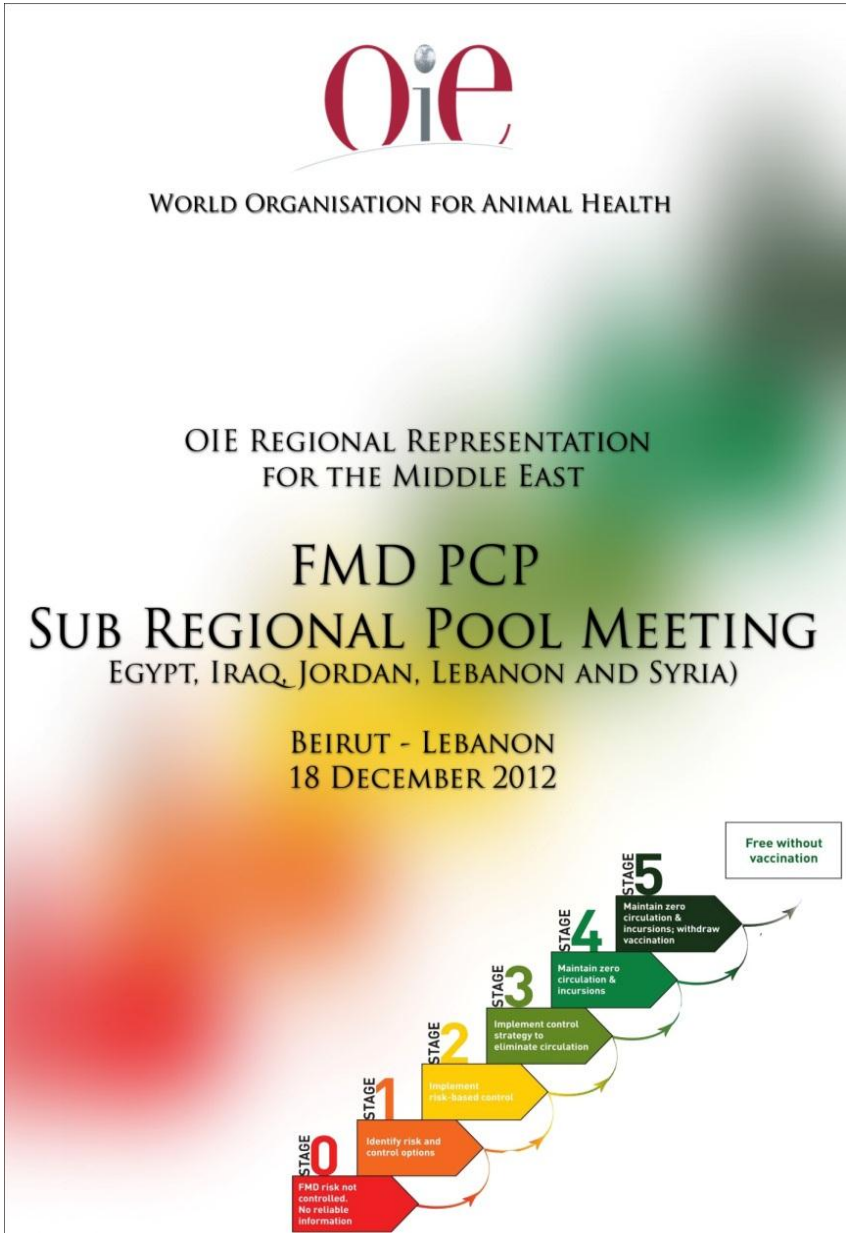
Regional meetings for the Middle East

18 December 2012
Beirut, Lebanon

East Mediterranean Countries
Egypt, Iraq, Jordan, Lebanon, Syria



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GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

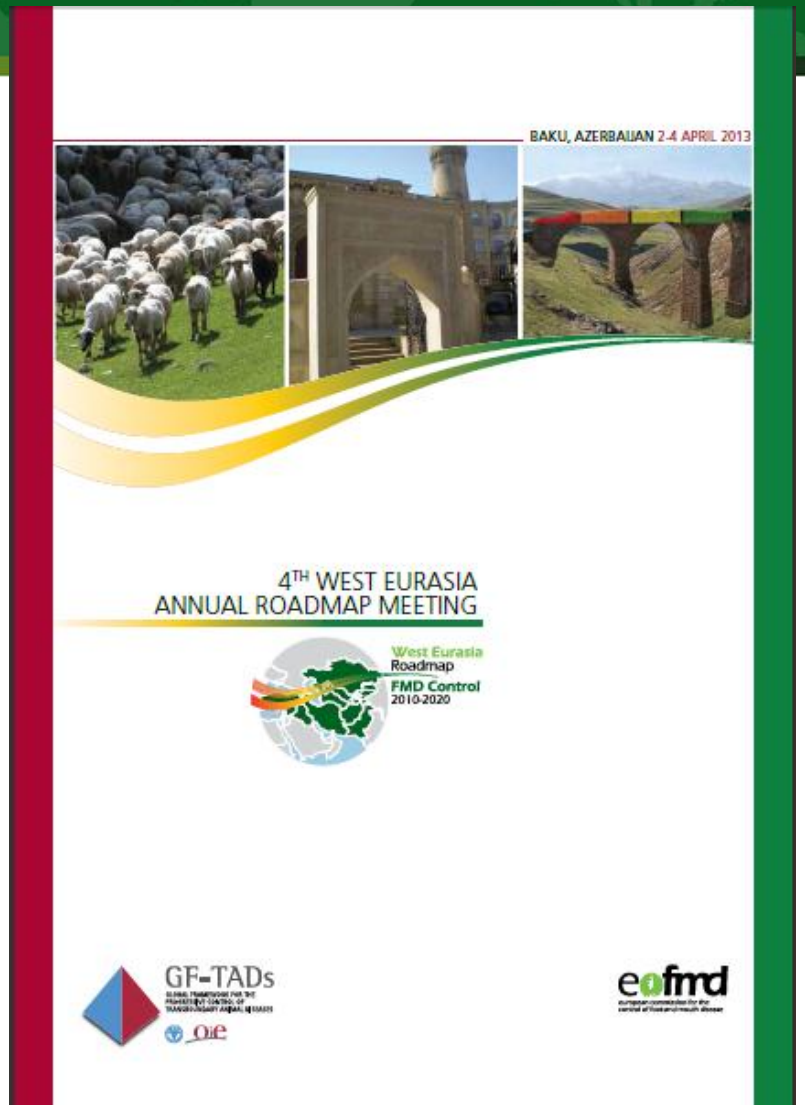
oie

eufmd

WestEurasia Roadmap

2-4 April 2013
Bakou, Azerbaijan

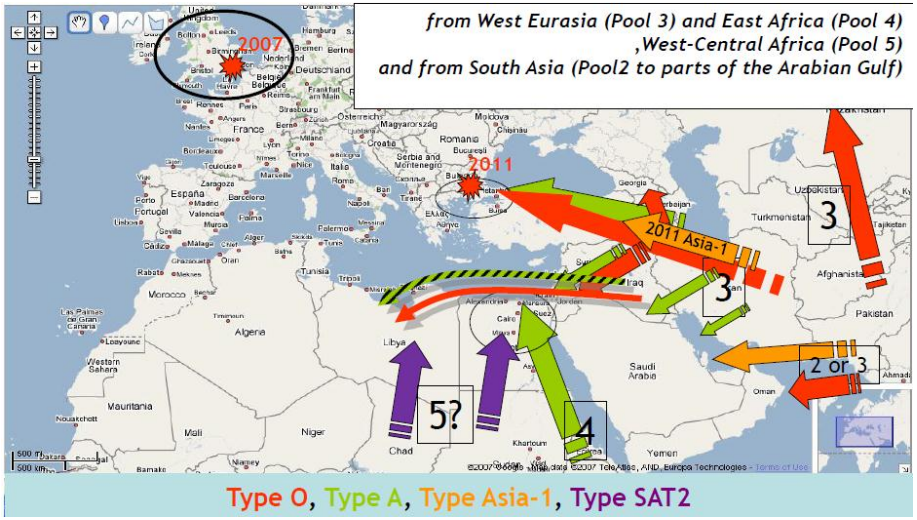
		2008 Shiraz	2009 Istanbul	2010 Istanbul	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
West Eurasia	Afghanistan													
	Armenia													
	Azerbaijan													
	Georgia													
	I.R. Iran													
	Iraq													
	Kazakhstan													
	Kyrgyzstan													
	Pakistan													
	Syria													
	Tajikistan													
	Turkey													
	Turkey *Thrace*													
	Turkmenistan													
	Uzbekistan													



8 April 2013, Dubai, United Arab Emirates

Gulf Cooperation Council (GCC) + Yemen

Bahrain, KSA, Kuwait, Qatar, Oman, UAE and Yemen



FMD Control Roadmap

North Africa

REMESA
Réseau Méditerranéen Santé Animale

- REMESA meetings (Secret FAO-OIE)

- FMD Regional meeting of the UMA Permanent Veterinary Committee (FMD control strategy in the Maghreb area, Rabat, July 2012)

- CMC-AH mission to Libya (re-emergence of FMD SAT2 in the country, May 2012)

FAO Wide meeting Dec 2012

Review FMD programs in FAO five regions with the goal to harmonize and identified needs:

-Support countries in embarking on FMD control program (i.e) formulating project proposal

-Establishing regional programs for FMD management

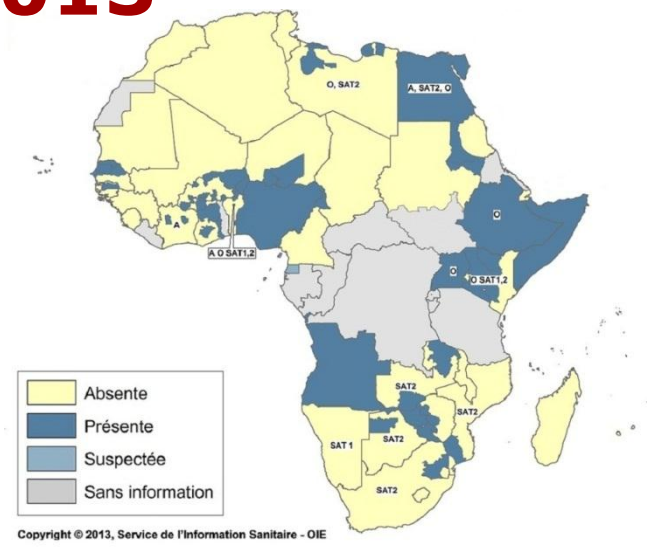
-Develop guideline for socioeconomic impact study

FAO IAEA research coordination meeting, Rome, April 8-12 2013

Upcoming Events

GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

- **Second regional roadmap workshop for SAARC countries in India, 2013**
- **Roadmap meeting in West and Central Africa**



FAO Support to Regions & countries

Regional Coordination:

- **China-Mongolia-Russia**: TCP on cross border trade and TAD risk reduction (special focus on FMD)
- **NENA**: Regional coordination program

Southeast Asia: FMD control through application of PCP

National Projects (selected, on going):

- **Pakistan**: Development of Technical Framework for the Progressive Control of FMD
- **Ethiopia**: Strengthening the capacity of FMD diagnosis and surveillance
- **Kenya**: National FMD control programme
- **Tanzania**: Establishment of Disease Free Zone in Rukwa Region to facilitate international trade in Livestock and Livestock Products
- **Sudan**: Surveillance and Diagnosis of FMD

OIE Specialized Commissions and Groups

- OIE Ad Hoc Group on FMD Status Evaluations
  - October 2012
  - December 2012

- OIE Scientific Commission for Animal Diseases (SCAD)
  - February 2013

- Terrestrial Animal Health Standards Commission (Code Commission)
  - February 2013

OIE Support to countries

- Support to South East Asian countries:
  SEA FMD OIE Sub-Commission
  SEACFMD Programme

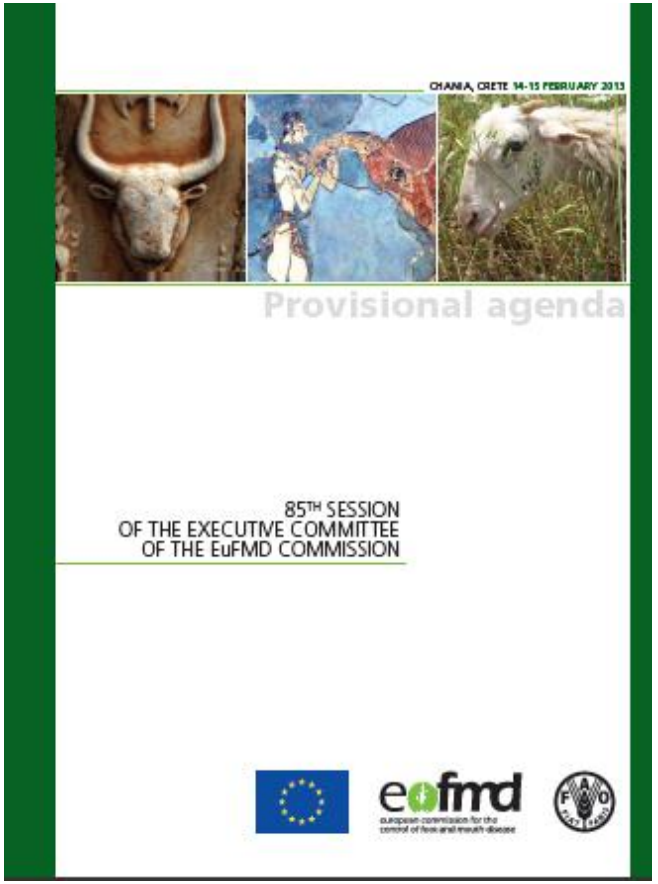
- Support to South American countries:
  Agreements with CVP-PAMA …

- Near future: establishment of an OIE FMD Unit for Central Asia in Astana, Kazakhstan

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

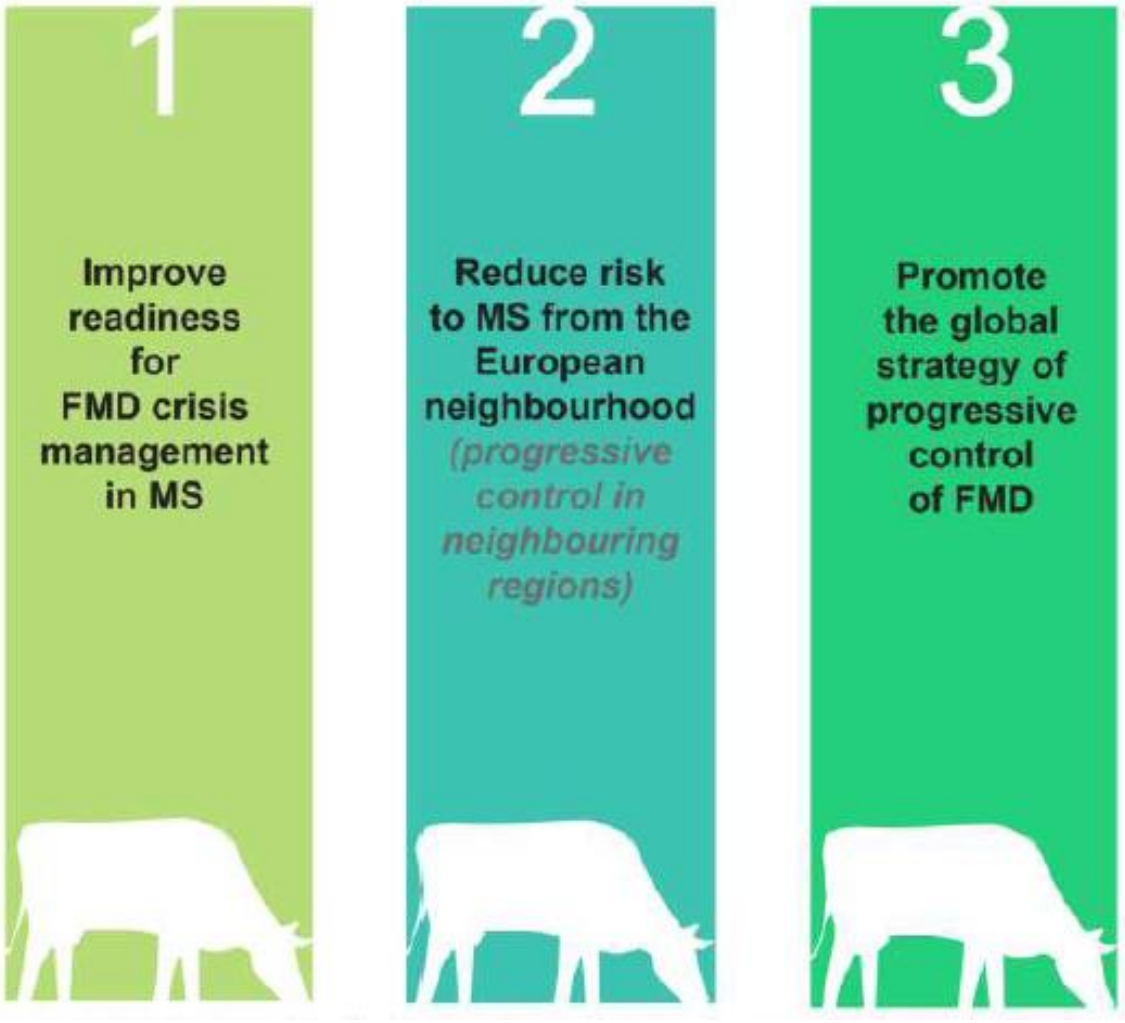
- 85th Executive Committee meeting, 14-15 February Chania, Crete, Greece

- 40th General Assembly 22-24 April 2013, Rome, Italy



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

Pillars 2 and 3 of the New EUFMD Strategic Plan



Activities of EUFMD contributing to the control of FMD worldwide besides of reducing the risks to European countries

Joint FAO/OIE FMD Working Group
Meets every two months

- Support to and coordination of regional meetings

- PCP guide update and Assessment tool preparation with EUFMD

- Bangkok Conference follow up and website update

- Support to the preparation of regional control strategies

- Establishment and training of a group of experts

- Resource mobilization:

Support countries to bring resources for national projects: Beirut, Dubai and Bakou meetings

Regional and global resources

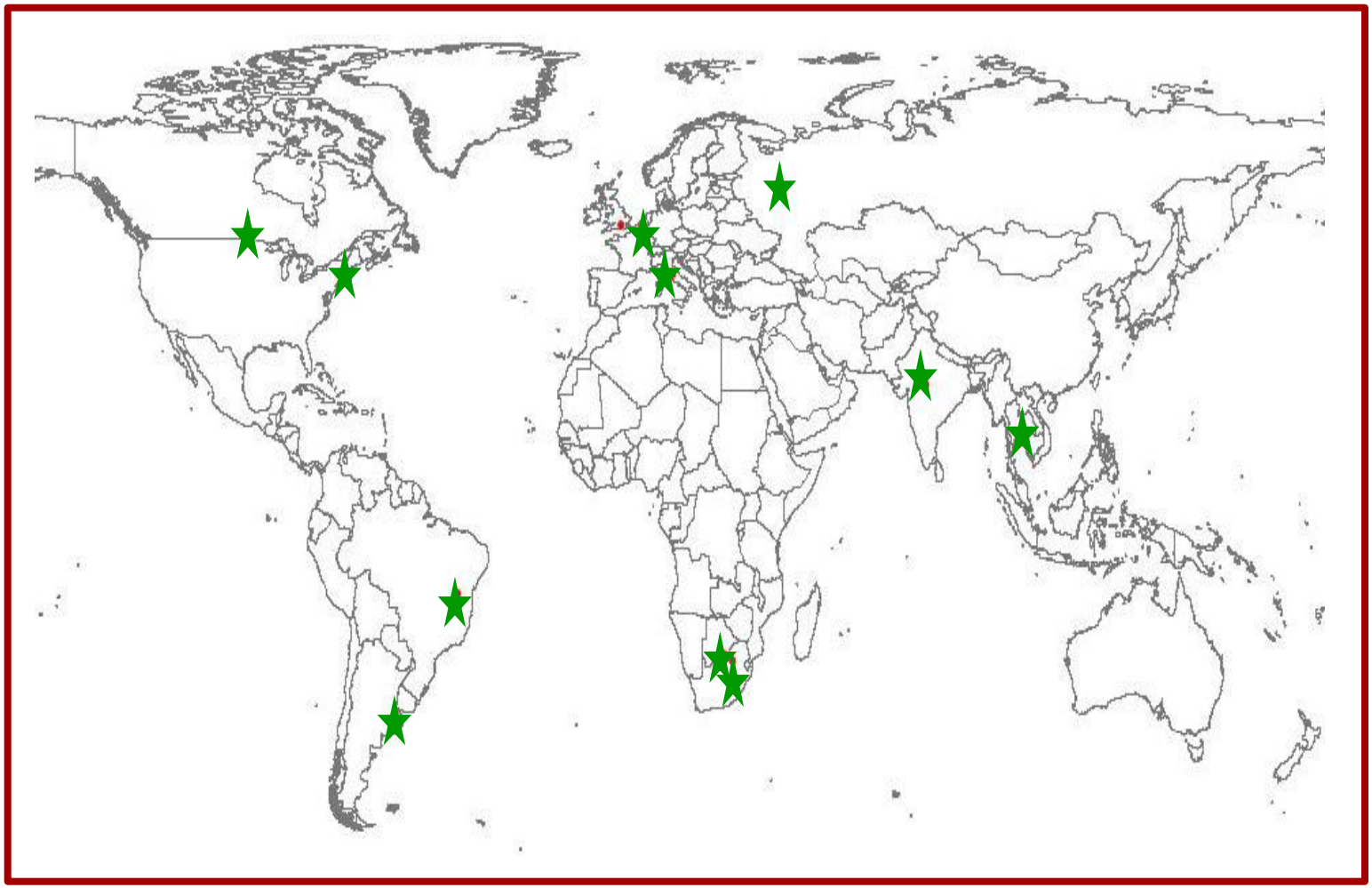
- Support to the preparation of regional control strategies

- Promotion of socioeconomic impact studies

- Annual report to the Global GF TADs Steering Committee on the implementation of the Global FMD Control Strategy

Global Laboratory Network

see specific presentation by S Metwally



Post Vaccination Monitoring Guidelines

Coordination:

WG of the OIE-FAO FMD Reference Laboratory Network, with associated experts

Objective:

To describe methodologies to use PVM in different epidemiological situations with regard to FMD status in a country.

Thank you for your attention

GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

Global FMD Surveillance Laboratory Network

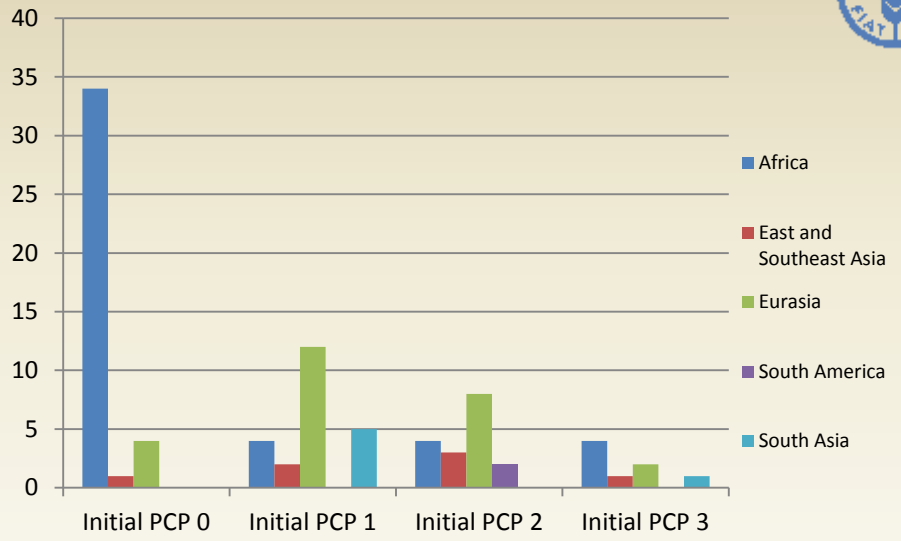
Samia Metwally, FAO
Juan Lubroth, FAO
Vincent Martin, FAO
Jemi Domenech, OIE

Pillars of the Global FMD Control Strategy

- Strategy combines and integrates FAO and OIE tools:
  - PCP and regional roadmaps
  - PVS competencies for each PCP stage
- Strengthens:
  - **Laboratories**
  - **Epidemiology**
  - **Vaccines**
- Supports at advanced FMD-PCP stages:
  - **Emergency responses**
  - **Identification of farms and animals**
  - **Biosecurity**
  - **Public private partnerships**
- **Advocates for continued research** in particular in the field of diagnostics, strain characterization, vaccines, vaccine quality control and epidemiology

Pattern of Countries per PCP Stage (2012)

- Majority of countries (34) at PCP stage 0 are within Africa
- Majority of countries (12) at PCP stages 1 and 2 are within Eurasia
- More emphasis for capacity on virus pools 3, 4, 5 & 6



	Africa	East and Southeast Asia	Eurasia	South America	South Asia	Total
Initial PCP 0	34	1	4	0	0	39
Initial PCP 1	4	2	12	0	5	23
Initial PCP 2	4	3	8	2	0	17
Initial PCP 3	4	1	2	0	1	8
Total	46	7	26	2	6	87*

Laboratory Network- One Tool of the Global Strategy

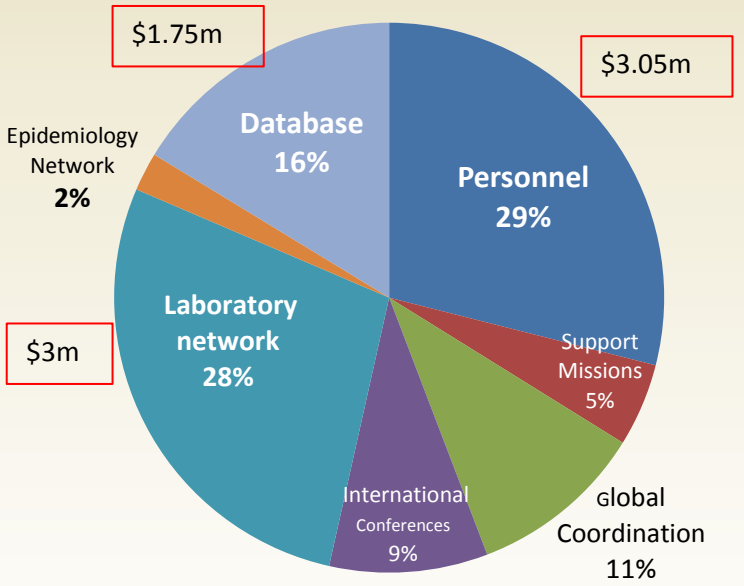
1. Develop, maintain and strengthen an integrated international, regional and national networks of laboratories that can respond quickly to needs for rapid and accurate testing, and timely notification
   I. Gain more intelligence on FMD virus strains circulating in regions
   II. Improve vaccine selection – supporting both endemic and free countries and essential to progressive control
   III. Enhance diagnostic capability for other priority diseases in the region

Lab Network- at Global Level

- Training for regional and reference labs/centers
- Support to proficiency testing
- Supply of diagnostic kits
- Virus characterization on pre-screened samples
- Personnel for the management and technical support of the global laboratory network

5-year cost at global level

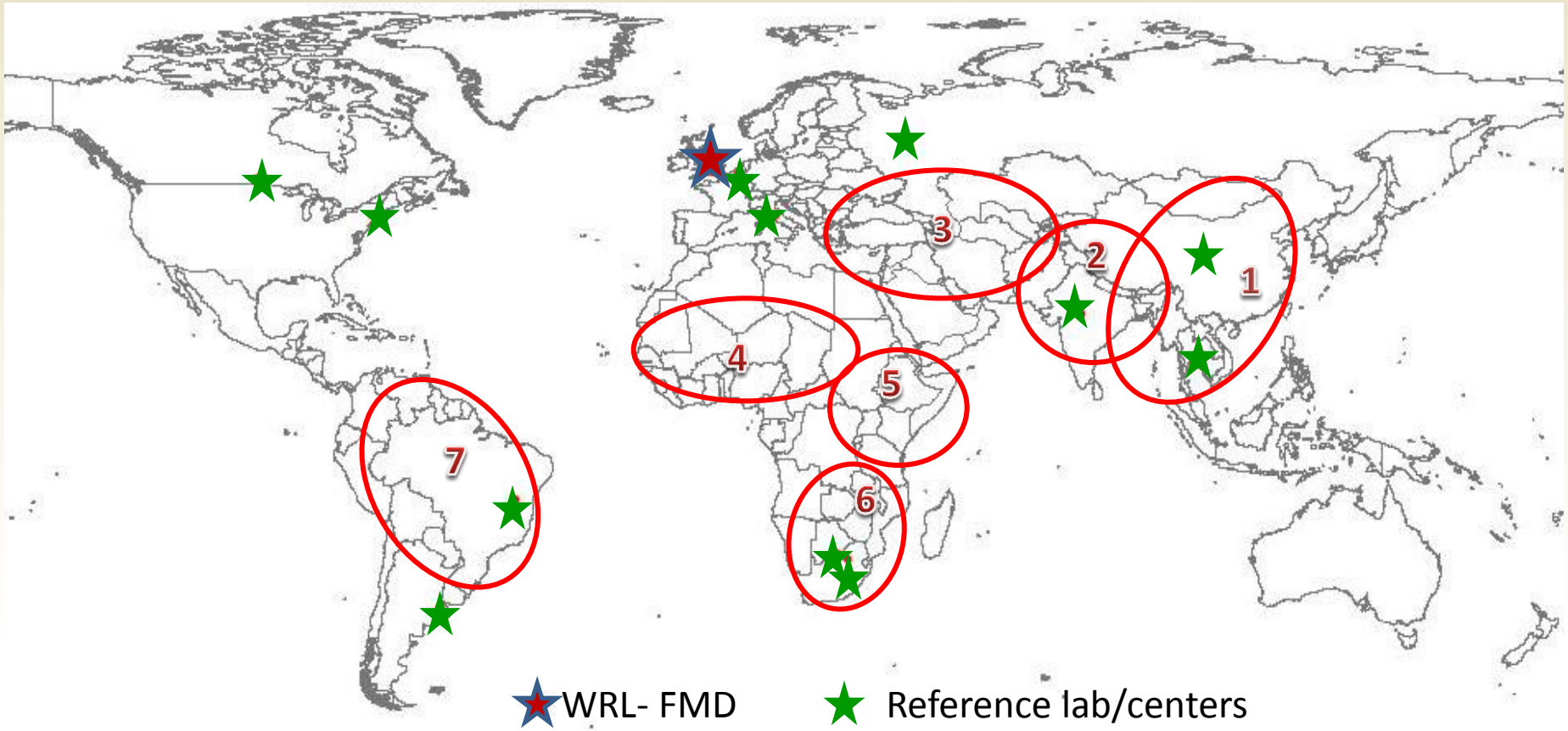
10.7 of 819 M USD



Source; cost estimate of global strategy by Emiko Fukase, world bank

OIE/FAO FMD Ref Lab Network

FMD Seven Regional Virus Pools



Number of samples received at WRLFMD and FAO/OIE Ref centres (FORC)

Data obtained from the annual reports of OIE-FAO FMD reference laboratory network

Virus pool	2010		2011		2012	
	WRL	FORC	WRL	FORC	WRL	FORC
1 Eastern Asia	108	132	183	216	78	133
2 Southern Asia	303	244	428	409	88	790
3 Eurasia	323	15[a]	332	41[a]	417	15[a]
4 Eastern Africa	354	0	70	0	151	127
5 Western Africa	83	0	0	0	0	0
6 Southern Africa	20	666	33	588	30	123
7 South America	9	37	1	8	0	1
Total	1,200	1,094	1,047	1,262	764	1,189

[a] Testing performed in FORC located outside of the virus pool

Proposal: Global Laboratory Network; Diagnostics for Global FMD Control Strategy

Overall Objective:

This project is aimed to strengthen and expand the global FMD laboratory network to better coordinate, harmonize and enhance the quality of the global diagnostics that is pivotal in the implementation of the global FMD control strategy

- **Global coordinating lab (GCL)**
- **FAO and OIE reference labs/centers (FORC)**
- **Fostering regional laboratories in virus pools 3,4 & 5**
- **Link diagnostics with epidemiology, risk-based surveillance and other streams of the global agenda**

Project Outputs & Activities

- **Output 1:**
  Coordination of the global laboratory network

- 1.1 establishment of procedures for the harmonization of the communication and data sharing between all laboratories within the network, FAO and OIE;
- 1.2 organization of the annual OIE/FAO reference laboratory network meeting including all additional laboratories of the global network and support of regional leading lab participation;
- 1.3 annual report on the global FMD status based on information sharing within the global laboratory network .

Project Outputs & Activities

- **Output 2:**

  Advanced global capability to provide information and confirmation on the status of circulating FMD virus for effective control measures and selection of appropriate vaccine strains

- 2.1 diagnostic analysis of samples by GCL and FORC from regional leading laboratories and countries in regions

  Antigen detection and serotyping
  P1 sequencing, vaccine matching
  Timely reporting to submitting countries, FAO and OIE

- 2.2 supply of diagnostic kits to the regional leading laboratories (max. 6)

  ELISAs, PCR reagents and pen-side tests – pre-screening

- 2.3 support to sample shipment from the regional leading laboratories in virus pools 3, 4 and 5

Project Outputs & Broad Activities

- **Output 3:**

  Improvement and harmonization of FMD diagnostics within the global laboratory network coordinated by the GCL in collaboration with experts from FORC.

- 3.1 classroom and bench training to all regional leading laboratories (max. 6)
  virus isolation, FMD antigen and antibody ELISAs, molecular assays (PCR)
- 3.2 classroom and bench training to FORC (max. 12)
  vaccine matching, P1 sequencing, phylogenetic analysis
- 3.3 training to FORC and leading laboratories on the preparation of proficiency test panels and inter-laboratory comparison tests
- 3.4 in-country training at all regional leading laboratories
- 3.5 supply an annual inter-laboratory proficiency test panels all laboratories and implementation of relevant follow-up activities to improve performance of laboratories that could not strive to pass the proficiency tests

Project Outputs & Activities

Output 4: Project monitoring and link with technical and policy related activities for the implementation of the global strategy

- 4.1 Monitoring and evaluation by an advisory group; yearly meetings for progress evaluation and feedback on the project implementation.

- 4.2 GF TADs FMD WG inputs to the global laboratory network activities providing the necessary feedback from the other streams of implementation of the global strategy.

Expected Outcomes

- Strengthening and expand the global FMD laboratory network, as proposed in the FAO/OIE global control strategy, that will have a close and continuous link with the the global control agenda
- Increasing the knowledge on the circulating FMD virus world-wide, and improve vaccine selection for effective and immediate response to outbreaks
- Building capabilities for FMD diagnosis in regional virus pools 3, 4 and 5 through establishing regional leading laboratories (future FORC)

Thank you for your attention

Appendix 14

FAO OF THE UN

Summary of EuFMD actions implemented under the EC/EuFMD agreement (Reporting period: Sept 2011-April 2013)

April 2013 | EuFMD Secretariat

CONTENTS

SUMMARY

This Report is provided to the 40h Session of the Commission as a summary of the activities undertaken under the EC funding agreement for the three reporting periods since the 39th Session in April 2011. The EuFMD/EC agreement is for 48 months, from September 2009 to September 2013. More detailed reports are provided at each Executive Committee meeting and available online - and directly to the EC to fulfill the contractual agreements.

The EuFMD Commission, at the 38th General Session in April 2009, adopted a four year Strategic Plan of activities, involving six components, with priorities for in-country actions being to support FMD control in Southeast Europe through greater management of the FMD risk in countries bordering to Turkey, in West Eurasia. These projects are coordinated with those of other Directorates of the EC and other funding agencies, to promote progressive control in the West Eurasian countries along a long term Roadmap.

Following signature of the financing agreement, specific activities of the EuFMD were initiated following response of the EC to proposals from the Secretariat or decisions of the Executive Committee at which the EC is represented.

The EC support is provided through a Trust Fund (TF), MTF/INT/003/EEC, with a total funding of € 8 million for the four year period of the current agreement. Since September 2009, the EC has agreed funding of actions in six of the Strategic Plan components, with by far the largest being for in-country programmes in the Trans-Caucasus and Iran aimed at reducing the risk of new incursions of FMD into Turkey and Eastern Europe. Funding is also provided for training of European veterinarians, for surveillance in the African proximity, for short technical studies, and for surveillance for FMD in Egypt. At the 39th Session in April 2011, the EuFMD Commission recommended **three additional components**. These are indicated as Components 7-9 below. For two of these, expenditures or activities had not been committed before April 2012, but actions and expenditure has commenced in the current 6 month period (*i.e*. April-September 2012).

The nine Components of the Programme

Note that Components 1 to 6 were agreed at the 38th Session; 7-9 added at the 39th Session.

As summarized in the Update Report these are:

1. Risk reduction in South-East Europe through support to FMD control in West Eurasia;
2. Activities to reduce FMD risk in the South and East Mediterranean countries;
3. Field based FMD Training Programme;
4. FMD surveillance in the African proximity;
5. Technical studies;
6. Response to FMD Emergencies;
7. Strengthening FMD laboratories in the Balkan Region;
8. Improved Contingency Planning through use of decision support tools;
9. World Reference Laboratory (WRL) contract – FMD surveillance support activities.

The work under each component was scheduled for completion in 2012, or before the completion of the term Funding Agreement (September 2013).

Implementation

As per the Agreement with the EC, the activities are implemented directly by the EuFMD Secretariat in FAO. Where field based activities occur, in countries with FAO offices, FAO regional or national office staff are used to establish the working agreements with the veterinary services of the countries concerned and thereafter may be used to assist arrangements on a payment for services basis. Where the field activities are expected to be used repeatedly, a Memorandum of Understanding (MOU) with the Government Service and/or a national project consultant may be hired to assist delivery, such as training courses. Letters of Agreement (LoA) (with not for profit organizations) or contracts (with companies) are used where specific services are more efficiently delivered, for example the LoA with Laboratories for Diagnostic Services, and Contracts with Diagnostics suppliers. The cost of major procurements of diagnostics was reduced by negotiation of a Global FMD Diagnostics Contract, awarded to Pirbright/Prionics and IZSLER, Brescia; it is the first of its kind in FAO and has been used to achieve bulk order savings available to all FAO Offices and the FAO/IAEA Joint Division. All procurement of goods, services including consultants conform to the FAO Administrative Manual. The Executive Secretary of the EuFMD acts as budget holder for the MTF/INT/003/EEC activities and a financial officer (consultant) has been employed since January 2012 to assist.

The full time professional technical services to support the programme are provided by the EuFMD Secretariat (One P5 Officer and one P3 Animal Health Officer) plus the short term professionals (STP) officers seconded by Member States. These services are NOT charged to the EC programme, so the latter pays “on an additional cost basis” for the work with consultants being used as needed, since the EuFMD full time staff are few.

Communication and Reporting

DETAILED reports are available for each of the six-month reporting periods, as indicated below.

All **field actions** are required to give **Monthly Reports** to EuFMD.

Those resulting in surveillance information are then reported TO MEMBER STATES in the Monthly FMD Global Report.

The field activities usually result in samples sent to FAO/OIE reference centers - and thus fulfill international reporting. Therefore, outputs of EuFMD support to surveillance should be publically available.

Progress on all Components actions is reported every six months to the Executive Committee and after this, online to the Member States.

Information Outputs	Activities supporting	Communication to MS	Notes
Immediate early warning messages		e-mail to MS from Secretary.	Used sparingly. May be joint with FAO as an early warning.
Reports of Technical Studies	#5, Technical Studies	Published Reports and EuFMD and other Open Sessions.	Significance of findings needs extra effort to communicate to policy makers.
Monthly FMD Global Surveillance Report (EuFMD)	Components 1, 2 and 4: *National Focal Points and Regional Animators supported under required to give monthly reports to EuFMD.*	Monthly reports e-mailed and placed online	FAO/OIE FMD Ref Centers are always asked to review and contribute (by mid-Month).
Progress Reports and situation reviews	All 9 components	Narrative Report every six months to ExCom/EC.[1] Outputs: E-mail and online	Narrative Reports and financial reports formally sent to EC when funds requested, as per contract.
ANNUAL reporting	Principally #9, WRL Pirbight *Components 1, 2 and 4 and 9 generate FMDV intelligence data and FMDV typing:*	Online (Pirbight + EuFMD)	Annual Surveillance Report: WRL

Achievements

The project outputs are designed to contribute to the outcome of improved functioning of national systems for FMD risk management.

Achievements can be summarized for each component as:

1. ***Risk reduction in South-East Europe through support to FMD control in West Eurasia***
    - Establishment of the West Eurasia Roadmap as a regular platform for regional risk assessment, information sharing, Roadmap progress review, and better co-ordination of assistance and prevention measures, in support of regional and global GfTADS FMD control strategies;
    - Progressive Control Pathway (PCP) based national prevention and control measures in place in Georgia, Armenia and Azerbaijan, with full handover to national responsibilities of vaccination programme maintenance in 2013;
    - Significant progress in Iran, with a PCP based national FMD control strategy developed, improved management capacity in the borders with Turkey, and full participation in regional efforts through establishing capacity for local FMDV typing for early warning, and progress towards a national animal movement system;

[1] Narrative Reports on the EC funded programme are provided also when any call for installments of funds is made. The six month update reports to the Executive Committee were established after September 2011. Reports are available for periods 9/2009-9/2011; then each 6 months (a total of 4 Reports to 2/2013).

- Establishment of a program in Thrace for surveillance to assure neighbors of confidence in disease freedom (a first).

2. Activities to reduce FMD risk in the South and East Mediterranean countries

- Introduction into Egypt of a PCP based national strategy development process (partially completed PCP Stage 1), with training of staff to complete the Stage; established capacity for rapid diagnosis of exotic FMDV strains;
- Establishing trained and equipped (kits) diagnostic capacity for SAT2 and other serotypes in NRLs in countries bordering to Egypt and Libya in mid-east and North Africa, within two months of SAT2 diagnosis, working through REMESA in North Africa.

3. Field based FMD Training Programme

- Re-establishment of a European cadre of veterinarians with experience of FMD outbreak investigations through training in the real-time field training programme; >200 Europeans trained, from 36 Member States.

4. FMD surveillance in the African proximity

- Establishment of FMD laboratory networks for sharing of FMD laboratory surveillance information and expertise, under the FAO led regional laboratory networks, in Eastern Africa (*EARLN-FMD*) and West/Central Africa (*Resolab-FMD*). These did not exist before 2010 and now receive support for surveillance from others (e.g. US IDENTIFY programme for early detection).

5. Technical studies

- Several supported studies have given immediate benefits;
- The full genome sequencing tools were used in the Bulgarian FMD tracing in 2011;
- The support for African serotype PCR tests gave rise to diagnostic advice to NRLs in the 2012 serotype SAT2 crisis;
- The wild boar studies have contributed to design of surveillance for freedom, and generated new potential tools for surveillance (non-invasive sampling to enable earlier proof of infection or freedom);
- Global FMD research reviews commissioned through GFRA to identify research gaps and overlaps.

6. Response to FMD Emergencies

- Delivery in 2011 of emergency vaccines and supplies to Turkey, and diagnostics for Bulgaria;
- Mission teams on the ground in Turkey, Bulgaria and Egypt within 10 days of each crisis, coordinated with the EC;
- Response to “non political crises” such as the Asia-1 epidemic where no other agency recognized the scale of the problem, and provided technical support to field assessment of vaccination effectiveness;

7. Strengthening FMD laboratories in the Balkan Region

- Trained personnel from each West Balkan country in FMD recognition and sampling in the field.

8. Improved Contingency Planning through use of decision support tools

- Eight countries trained in use of animal disease spread models to assess their contingency plans.

9. ***World Reference Laboratory (WRL) contract – FMD surveillance support activities***
    - Importance of the Proficiency Test Service (PTS) understood by most non-EU neighborhood OVS. The PTS offered to ALL Member States AND European neighborhood countries in 2009-12, with greater take up in 2012 than in 2008.

Note: *National, Official Veterinary Services (OVS) remain responsible for the goal of reduced FMD incidence and the EuFMD/EC project, although contributing to this objective, cannot be held responsible for the outcomes that are under national responsibility. Building better systems does not immediately result in the goal of reduced FMD cases.*

Evaluation by the Standing Technical Committee, January 2013

The Executive Committee reviewed evaluation arrangements. Taking into account the time taken for formal evaluation by FAO, they asked the Standing Technical Committee to review the programme before the 85th Session.

The STC reviewed the programme undertaken in 2011-13 in relation to the **3 Pillars** (New Strategic Goals) for the 2013-17 Programme.

The **3 Pillars** being:

1) **Improve** readiness for FMD crisis management in Member States
2) **Reduce** risk to Member States from the European neighborhood
3) **Promote** the Global Strategy of Progressive Control of FMD.

They reported their conclusions to the 85th Session. **Annex 1** provides a summary of their Observations.

Financing

Financing is provided by the EC through a multi-year agreement (Contract).

Financial Reporting to the EC is undertaken in accordance with the financing agreement and is also provided every six months to the EuFMD Executive Committee. The following is an extract from the report to the 85th Session (February 2013).

Expenditure was 7.308 mUSD up to 31/12/2012 against a total budget of 11.510m USD (equivalent to a commitment of 8 m€).

A DG-SANCO **financial verification mission** held in September 2012: the post-mission report was positive, indicating no financial consequences, and received in March 2013.

The expenditure breakdown for eight Components of the programme is given below. The system of establishing "baby projects" to report expenditures by components was not introduced until about two years after the project had started in 2009, so the expenditure in the program category contains the total expenditure plus the expenditures that cannot be broken down to components – such as the Pirbright Contract, the costs of administration and FAO project servicing charge.

Regarding staffing, only one professional (Training and Communications officer) is employed, plus one Clerk, on a full time basis. The human resources needed to deliver the specific components is provided by consultants and temporary clerks, according to work flow. The shift taken by the Executive, away from field projects towards training programmes created a great increase in the need for consultants and temporary Clerks, associated with the increased work in managing travel and training.

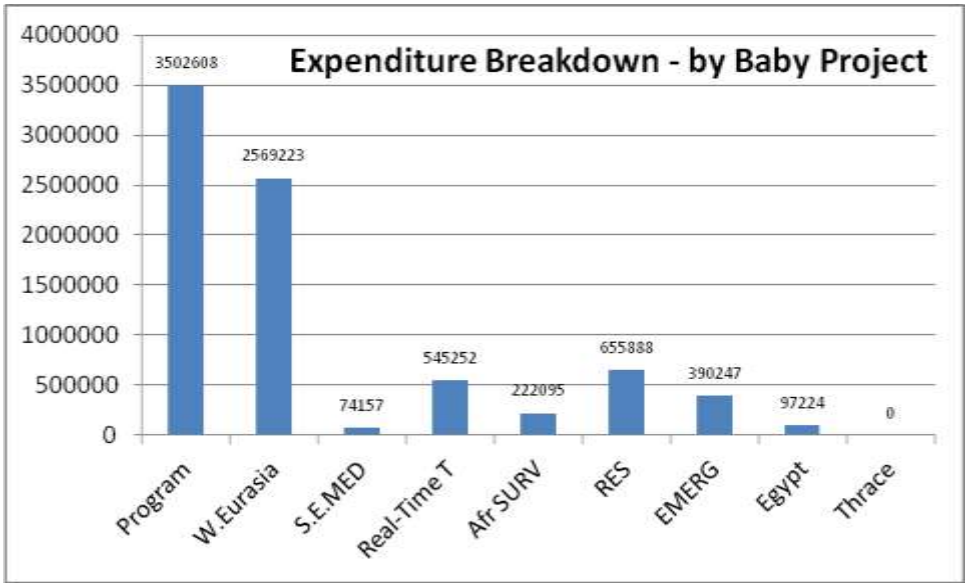
Key to figures

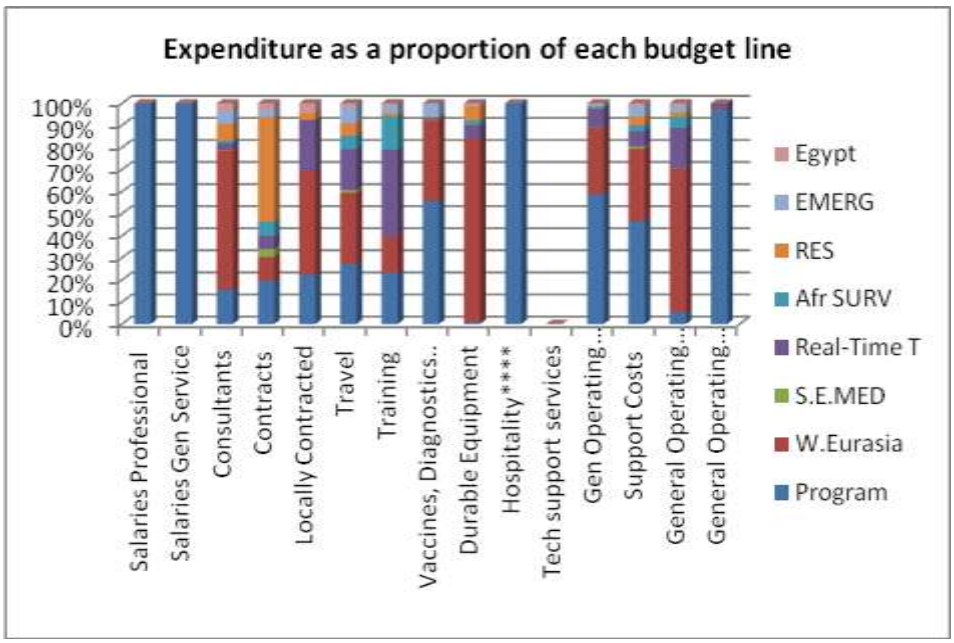
Budgeting and expenditure is followed through the use of CHILD (Programme) and baby projects (Components) that corrspond closely with the components in the EuFMD Activity Plan.

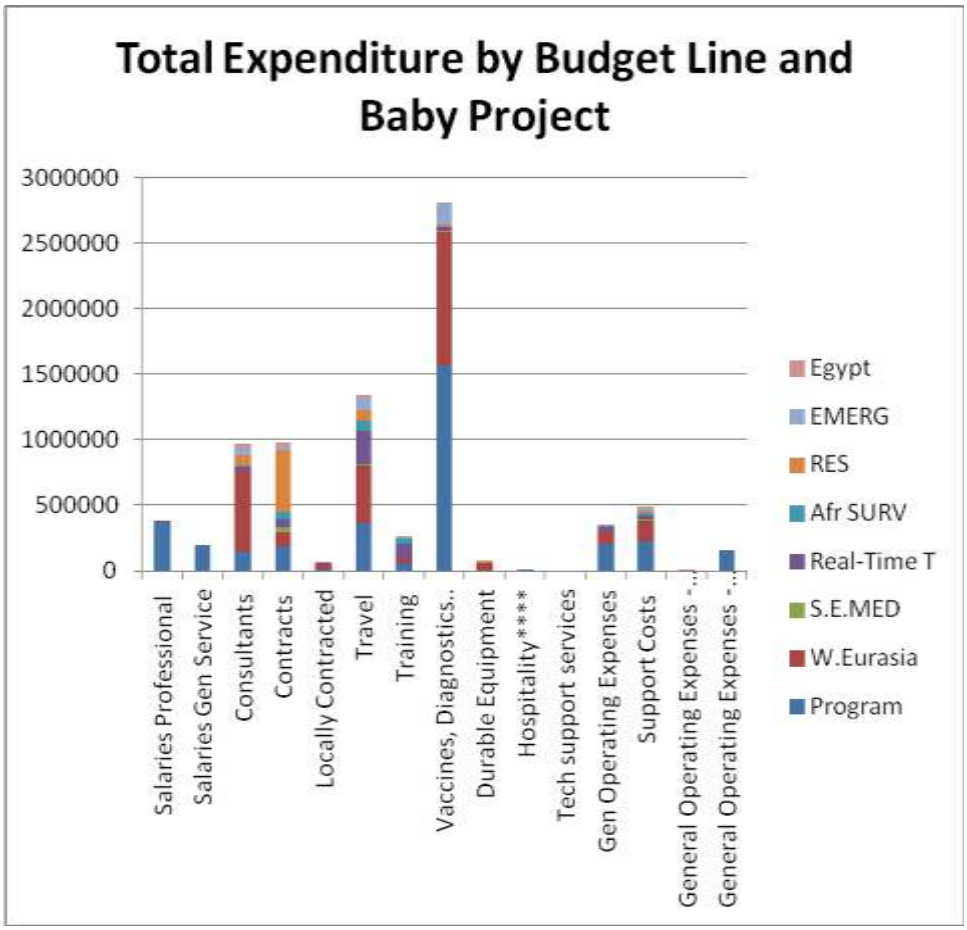
CHILD level are expenses that are **general to the programme**, and include those which occurred before the Baby project accounting system was operationally set up for the EC project.

The eight **baby project numbers** are given below.

BABY01	BABY02	BABY03	BABY04	BABY05	BABY06	BABY07	BABY08
W.Eurasia	S.E.MED	Real-Time T	Afr SURV	RES	EMERG	Egypt	Thrace




Expenditure as a proportion of each budget line
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Salaries Professional
Salaries Gen Service
Consultants
Contracts
Locally Contracted
Travel
Training
Vaccines, Diagnostics..
Durable Equipment
Hospitality****
Tech support services
Gen Operating...
Support Costs
General Operating...
General Operating...
Egypt
EMERG
RES
Afr SURV
Real-Time T
S.E.MED
W.Eurasia
Program


Total Expenditure by Budget Line and Baby Project
3000000
2500000
2000000
1500000
1000000
500000
0
Salaries Professional
Salaries Gen Service
Consultants
Contracts
Locally Contracted
Travel
Training
Vaccines, Diagnostics..
Durable Equipment
Hospitality****
Tech support services
Gen Operating Expenses
Support Costs
General Operating Expenses -...
General Operating Expenses -...
Egypt
EMERG
RES
Afr SURV
Real-Time T
S.E.MED
W.Eurasia
Program

OVERVIEW OF THE MAJOR COMPONENTS OF THE FOUR YEAR PROGRAMME - SINCE SEPTEMBER 2009

Component	Subcomponent	Year 1 09/2009-08/2010	Year 2 09/2010-09/2011	Year 3 October 2011 to Sept 2012	ACTIVITIES– October 2012 to February 2013	STATUS April 2013
1. **Risk reduction in South-East Europe through support to FMD control in West Eurasia**	**West Eurasia Roadmap – Secretariat** **Collaboration with:** FAO, OIE	1st Roadmap Regional Progress Review (10/09)	2nd Roadmap Review (11/2010)	3rd Review (2/2012)	4th Review (4/13)	Roadmap Platform established. Integration with GfTADS workplans agreed.
	West Eurasia – Risk assessment **Collaboration with:** EMPRES-i	Monthly and 6 monthly	Monthly and 6 monthly	Monthly Surveillance Report (Output)	Monthly Surveillance Report (Output)	Functioning, in use with four countries.
	West Eurasia- training in progressive control				PeP-C Course 1 : 6 countries	Epi-Network established, 6 countries trained.
	WELNET –lab network	Supported +++	Supported ++	Annual Meeting	Consultation only	Needs support.
	Thrace – improved surveillance for early detection of FMD		Yes (outbreaks in BG)	Yes (Design)	Yes (on programme)	Operational from April 2013.
	Trans-Caucasus project	TCC Multi-Country Programme	TCC Multi-Country Programme	TCC Multi-Country Programme	END: 2/2013	Completed. PCP Stage 2 strategies need formal acceptance.
	Iran project	Phase II Project (END)	Phase III Project	Phase III Project	Phase III Project	To be completed Sept 2013. PCP Stage 2 strategy needs formal acceptance.
2. **Activities to reduce FMD risk in the South and East Mediterranean countries**	**Egypt**		Project (150 k USD)	Project end Feb 2012. Emergency programme (to 09/2012)	None except Training (PeP-C)	Activities completed. Further PCP progress at risk.

Component	Subcomponent	Year 1 09/2009-08/2010	Year 2 09/2010-09/2011	Year 3 October 2011 to Sept 2012	ACTIVITIES– October 2012 to February 2013	STATUS April 2013
	Co-ordination in FMD response and progressive control programme development			TAIEX Meetings	FAO Regional Strategy Meetings	At risk. Needs programme agreed and supported.
3. Field based FMD Training Programme	**Real-Time Training programme (NTC)**	Yes (in Turkey)	Yes (Turkey +Kenya)	Yes (Kenya)	Yes (Kenya)	Cycle of training completed (EC program).
4. FMD surveillance in the African proximity		Yes (shipments)	ExCoM decision to support Lab Networking.	Yes (EARLN-FMD, RESOLAB-FMD)	Support Co-ordination only	Established networks and information sharing. At risk.
5. Technical studies	**Projects funded through Concept Note Review Process**	YES	YES	YES	YES	Several ongoing for completion by September.
6. Response to FMD Emergencies			YES - Bulgaria	YES- SAT2 multicountry response		Response activities completed.
7. Strengthening FMD laboratories in the Balkan Region				Tender	Gap analysis	Reported. Decision on follow-up needed.
8. Improved Contingency Planning through use of decision support tools			Consultation, survey – identify need and scope	Europe-wide Workshop (Denmark) Workshop in Turkey (endemic regions)	Training Workshop (8 countries, Vienna)	Reported. At risk some countries will not use. Future support on demand (Menu of training options).
9. WRL contract +PTS		YES- Annual (EUFMD TF)	YES- Annual (EUFMD TF)	YES- Annual (EU TF)	YES- Annual (EU TF)	Extension to cover 2013 agreed.

SUMMARY : MAIN ACTIONS UNDERTAKEN BETWEEN SEPTEMBER 2011 AND APRIL 2013

Three six-month reporting periods are shown corresponding to the reporting to the Executive Committee Sessions.

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
10. Risk reduction in South-East Europe through support to FMD control in West Eurasia	**West Eurasia Roadmap – Secretariat** **Collaboration with:** FAO, OIE	3rd Roadmap progress review meeting held in Istanbul, March 2012	Draft recommendations (at meeting). Provisional Roadmap completed. Report being drafted	3rd Roadmap progress review meeting held in Istanbul, March 2012 Planning for 4th Roadmap meeting initiated: possible to be held in Baku	Report circulated and online	Planning and preparation for **the 4th Roadmap Meeting**, to be held in Baku 2-4 April 2013. Procedure followed for GfTADS labeling of the event; GfTADS Management Committee agreement reached (Jan 2013) that event will be labeled as GfTADS. Draft agenda prepared and circulated to GfTADS Regional SC Europe and Mid-East.		4th Roadmap Review completed.
	West Eurasia – Risk assessment **Collaboration with:** EMPRES-i			FMD database : transition to EMPRES-*i* GEO, ARM, AZER, TURKEY participate in data sharing (monthly)	Monthly reports (TCC)	**West Eurasia FMD Database**: Consultation with FMD National consultants (TCC, TUR, Iran) (Istanbul, Dec 2012)on data access. EMPRES-I system software components configured for automated reporting and restricted data access **Turkey**: fully participates in data sharing. Mission to resolve GIS mapping of all epi-units and animal demographics.	*Monthly FMD vaccination reports (TCC)* *Monthly FMD surveillance and vaccination report (Turkey)* *Monthly FMD surveillance and vaccination report (Iran).*	Database established, 4 countries participate and utilize. Regional interest, further uptake /country participation expected

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
	West Eurasia-training in progressive control			Practical epidemiology for progressive control (PeP-C) Training course developed and initiated	PeP-C Week 1 completed (12 participants), Sept 2012	1st course (4 weeks over 4 months) delivered, involving 16 trainees from 6 countries (ARM, AZB, GEO, TUR, EGY, IRN) Ongoing communication with trainees through Wikispace	*Reports available from each training week, plus overall report (McLaws BTORs)* *Training material on PeP-C Wikispace* *Presentation (Prezi) describing course*	Training Completed, Network of Trainees established. Outlook: 2nd Course proposed. Russian version needed.
	WELNET –lab network			Agreement Iraq-Turkey on sample submission to SAP Institute		Activities promoted at no cost to EuFMD/EC: **1.** FMDV samples from Iraq transported in RNA later by land route to Turkey, sequenced and analyzed in SAP Institute; results show trans-boundary circulation of A/Iran-05/SIS-10 strain. **2.** FMDV sequences shared between Iran and Pirbright. **3**. Collaboration with: USAID funded FAO project (Pakistan), on improving capacity for molecular analysis in Pakistan through collaboration with European institutes .		Status Awaits decision on actions/funding. Outlook: WELNET is vital. Funding needed.
	Thrace – improved surveillance for early detection of FMD			Support letter from SANCO received. Workshop held September 18-21st in Istanbul (TUR, GRE, BUL)	Draft report received. Report to ExCom	Surveillance model finalized (AusVet Consl). Invitations issued for **Tripartite** (TUR,GRE, BG) meeting to finalize surveillance programme for 2013 on 13th Feb	*Report on workshop and surveillance model received.* ***Report to ExCom***	Status: initiated only in 4/2013. Outlook: Good – country commitment.

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
	Trans-Caucasus project	Autumn vaccination completed. Co-ordination meeting held for Spring 2012 campaigns. EC agreed to provide 500,000 doses of vaccine to fulfill project commitment to provide vaccine in spring 2012.	Co-ordination Meeting report. Monthly reports (to February- March 2012).	Vaccine use assessment mission completed (Krnjaic/Ryan) following EC provision of 500,000 doses of vaccine. Protocol governing authorization of release of EC-supplied vaccine reserve written. Project activities on track. Mission Potzsch (July to GEO, ARM) and project co-ordination mission (Tbilisi). Final phase activities planned (lab training, Simulation Exercise (lead Consultant: Robert Paul). **Coordination with:** USDA & US DTRA activities in Georgia.	Co-ordination meeting report. Monthly reports (to August 2012). Report of vaccine assessment mission circulated to EC.	**Activities funded from EC TF**: **1.**Desktop simulation exercise for **Georgia, Armenia and Azerbaijan** held in Sighnaghi, Georgia, 6-7 November. Leaders: C.Potzsch, R. Paul, T. Alexandrov. Observer: C. Danielsson, Swedish Board of Agriculture. **2**.Laboratory training course in the use of **real-time PCR** to detect FMDV held in Tbilisi, 4-8 February, with trainees from all three countries. Trainers: Thomas Bruun Rasmussen, Vesna Milicevic. **3**. Transfer of data to **EMPRES-*i*** discussed in further detail at PeP-C week 4, Istanbul, with TCC national consultants.	*Co-ordination meeting report.* *Monthly reports (to December 2012).* *Report of vaccine assessment mission circulated to EC.* *Reports of the Simulation Exercise, 11/2012 from leaders and from the observer.*	Status: 3 year Programme 2010-12 completed. Outlook: No new TCC programme or No further delivery of vaccine. Need for continued technical support to promote FMD management, under the West Eurasia programme.

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
	Iran project	Major activities on track. Supervision mission completed 12/2011. Project timetable and delivery reviewed in march 2012 at co-ordination meeting in Istanbul.	Monthly Disease information reports. 6 monthly progress report – April 2012.	Major activities on track. Supervision and training mission completed June 2012. Animal identification and registration study tour to Montenegro completed in June 2012. Activity plan to 12/2012	Monthly Disease information reports, Mission Reports. Proficiency test Results for Central Lab (WRL-PTS)	**Activities supported under EC TF, Iran** project Agreement: **1**.4 trainees from Iran attended 4 weeks of PeP-C training course; **2.** Project meeting – Istanbul Dec 2012, including activity planning through early 2013; **3.** L. Bakkali mission 16-22 Nov 2012: progress in the QA system for the subnational FMD laboratory network; **4**. Questionnaire survey of animal markets completed Dec 2012 (data entry ongoing); **5.**K. van Maanen missions to train staff in cattle challenge (full vaccine potency tests) at Razi Institute in a series of missions in Feb-Mar 2013; **6.** Market Swab sampling: initial feasibility study completed, protocol for further work developed.	*Monthly Disease information reports, Mission Reports.* *Proficiency test Results for Central Lab (WRL-PTS)*	Status: Three year Programme will conclude by Sept 2013. Outlook: National commitment high, but progress has been good. Diagnostics and vaccines are major challenge given sanctions. Need for continued technical guidance to promote FMD management, under the West Eurasia programme.
11. Activities to reduce FMD risk in the South and East Mediterranean countries	**Egypt**	Technical missions; lab and epi-support. National Sero-survey for PCP Stage 1 completed. EuFMD Project Phase 1, Final Workshop 29th February 2012.	Final Workshop report -29th March. National sero-survey completed and analyzed. Risk report (29th Feb) provided to EC/Executive.	**1**.FMD mgt Emergency missions to Egypt (April, May).**2**. National FMD mgt. workshop, Cairo 2-3rd May. 3.Surveillance Programme proposal developed and submitted to EC-SANCO in August for support	Mission reports. Waiting for EC response	Funded under **EuFMD/EC programme**: **1.**Diagnostic kits and training for SAT2 diagnosis had been supplied in previous 6 months. **2**.Surveillance reports (Egypt): not received as request to EC for surveillance support in previous 6 months had received no answer and FAO/EuFMD national consultants contracts	*Action plan developed for surveillance support (Bartels, EuFMD).* **Requires ExCom decision.** *Mission reports.* *Cairo FMD Workshop Report (FAO).*	Status: Specific support actions completed. No EC or Executive response to proposals made in 2012.

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
				Collaboration with: FAO ECTAD, FAO RNE, EMPRES		terminated. **3**.Action plan developed for surveillance support to Egypt in first 6 months of 2013. **Requires ExCom decision.**		
	Co-ordination in FMD response and progressive control programme development **Coordination with: FAO-CMC, TAIEX, OIE, FAO Tunis, REMESA**			Participation in TAIEX workshop in Cyprus, Sept 2012, covering FMD regional threats; EuFMD chaired session on vaccination strategies.	Report on TAIEX website due soon; report to ExCom.	Activities funded by **FAO:** Workshop on Regional Coordination of Foot and Mouth Disease Surveillance, Diagnosis and Control in the Near East and North Africa, Cairo, Egypt, 4-5/12/12. *Keith Sumption and Dimitrios Dilaveris participated with FAO support, assisting in PCP self-assessment and Roadmap construction.* Funded by **OIE**: Five country meeting (EGY-IRQ-JOR-LEB-SYR) on FMD held in Beirut, 18th/12. EuFMD not invited. FAO participated (M Tibbo).		Outlook: Future actions under Pillar 2 , and agreed with GfTADS
1. Field based FMD Training Programme	**Real-Time Training programme (NTC)**	**Four** real-time Training Courses held in period.	Each Course reported (Training wikispace).	**One** real-time Training Course held in period (September 2012) New Real-Time training approach	Each Course reported (Training wikispace). Very positive feedback-	**Funded under EC-TF:** **Three** real –time training courses held from December to January NTC11- 12-13) training a total of **35** MS vets plus 9 local vets. *[Note: in addition one FAO staff member (H. Ormel, NL)*	*Each Course reported (Training wikispace).* *Very positive feedback- trainees*	Status: 8 courses completed since 9/2011. Outlook: Proposed continuation under

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
				piloted (Sept 2012). Use of smart-phone apps for rapid epidemiological investigations and local risk factor investigations, with knowledge transfer to trainees	trainees	*and one West African lab expert from RESOLAB FMD network , funded by NL Government and FAO Identify projects at no cost to EuFMD]* -Smart-Phone based **epi-data collection** implemented in each course for rapid assessment of FMD spread. Implementation of new exercise-centered training approach. -Use of **questionnaires** to evaluate training experiences (both a standard evaluation form and a survey monkey one), including evaluation of a proposed e-learning module. -Training manual revised. -Photo and Video library expanded. -Collaboration: Improvement to operations through FAO Kenya by greater involvement of FAO Animal health Team (ECTAD) in Kenya.		new programme 2013-15
2. FMD surveillance in the African proximity		Annual FMD surveillance network meetings held and workplans generated.	Monthly FMD report of the EuFMD includes input from the Network coordinators. Regional		**Monthly FMD report** of the EuFMD includes input from the Network coordinators.	**Complementary**, no cost (to EuFMD/EC) activities: **1**.Delivery of FMD diagnostics to East and West African labs: funded by IDENTIFY project	*Monthly FMD report of the EuFMD includes input from the Network coordinators.* *Regional surveillance report - Annual Meeting.*	Status: Positive evaluation by STC. No current support (2013).

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
		West/Central Africa: RESOLAB-FMD (Bamako, 12/2011) Eastern Africa : EARLN-FMD (Nairobi, March 2102).	surveillance report - Annual Meeting.		Regional surveillance report - Annual Meeting.	(FAO/USAID). **2.**EARLN-FMD: publication on East African Lab functions and capacity published (no cost to EuFMD; Uganda/DVI project Lead)		Outlook: Workplans for 2013 proposed for support by FAO field offices. Very low cost, high need for continuation. GfTADS issues.
	West/Central Africa: via RESOLAB-FMD **North Africa – via REMESA Lab Network** **Collaboration with: USAID IDENTIFY, EMPRES, FAO ECTAD, FAO RAF, RESOLAB**			FMD-SAT2 laboratory diagnosis course held in ANSES, Paris (May 2012) with North African and Sahelian zone countries. Surveillance plans developed with each country. **Collaboration with:** ANSES, FAO Tunis FMD diagnostic course held in Accra, Ghana (funded by USAID IDENTIFY project , EuFMD provided lab trainers and planning). Nine counties have a new capacity and kits for FMD	Surveillance plan for North Africa: report to ExCom Surveillance plan for West Africa: being drafted.	Supported by **EC TF** : **1**.EuFMD consultant (L. Bakkali-Kassimi) supported to attend annual RESOLAB meeting in Dakar in December, for coord/planning 2013 RESOLAB activities.	*Monthly FMD report of the EuFMD includes input from the Network coordinators*	See above

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
				serotyping, with mainly US funding. Follow up actions identified, to be funded by USAID with technical input from EuFMD.				
	Eastern Africa: EARLN-FMD			Sample shipment Eritrea, Ethiopia and Sudan to WRL **Collaboration with: EMPRES Shipping Service** FMD Manual developed by network. Vaccine matching capacity – technical advice to establish provided (van Maanen mission).	**Monthly FMD reports to EuFMD**	**2**.EuFMD consultant provided backstopping for vaccine matching, in Kenya (at the only lab that conducts vaccine potency and quality tests in East Africa, in Kenya).**3**.East and West Africa network animators provide Monthly Update reports to EuFMD on outbreaks and lab findings	*Monthly FMD report of the EuFMD includes input from the Network coordinators*	As above
3. Technical studies		Implemented: Anatolia wild boar surveillance project (CN approved 10/2011) 2. Wild boar tracking project Submitted to STC: CN for non-invasive	Final report awaited from the Anatolia Wild Boar project. Initiated 3/2012 STC report, 3rd Feb.	Completed: Anatolia wild boar surveillance project Implemented: Wild boar tracking and non-invasive sampling project • Contracts with IAH and DTU for PCR-typing of African serotypes and methods of transporting samples cheaply	Final report awaited from the Anatolia Wild Boar project. Progress reports	**1.Closed Meeting** of the Research Group held, identified priorities for further work (October 2012).**2.Technical study** funded to apply smart-phone app on data collection to FMD outbreak investigation and risk factor determination; this study is now partially completed, and an interim report is due at the end of February.**3.Wild Boar** tracking study: ongoing.	*Papers presented at Jerez on studies commissioned in 2011-12.*	Status: All current projects to be completed by September 2013. Outlook: Research Fund to be established under new programme.

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
		sampling		• Vaccine effectiveness studies (in Turkey) • Contract to develop an "FMD surveillance design and analysis model "	First of the serotyping PCRs used for SAT2 in Egypt; to be reported at Open Session	**4.Wild Boar non-invasive diagnosis study**; agreements with FLI and Serbian national laboratory developed for *in vivo* and in vitro testing.**5.FMD Surveillance model** finalized and published/ online (Ausvet). **6**.Project to develop **serotyping PCRs for African FMDV**: ongoing.		
4. Response to FMD Emergencies		• Egypt- emergency mission • SAT2 diagnostic assays ordered. • Asia-1 vaccine effectiveness study, Turkey • Trans-Caucasus; negotiation with EC, provision by EC of 500,000 doses of TV vaccine in place of EuFMD project procurement.	Reported March 2012. Reported Feb 2012. Delivered March 2012.	• Egypt- emergency missions in April-June • SAT2 diagnostic ELISA kits provided to at risk Mediterranean fringe countries. • Surveillance in high risk border zones: workshop Cyprus June 2012 (Israel, PAT, Egypt, Jordan, Cyprus). • Surveillance and FMD management regional workshop, Rabat (under UMA/ REMESA), funded by EC through EuFMD • Asia-1 vaccine effectiveness study, Turkey	Reported. Reported Feb 2012. Delivered March 2012. Report Report	No emergency responses in period. Funded by **FAO** or **national** (Libya) funds: **1.**EuFMD participated in Cairo workshop in December to evaluate regional PCP progress and control strategies.**2**. EuFMD participated in two meetings (Rome and Brescia) on a proposed Italian-funded, REMESA-supported project on FMD control in Libya, in coordination with FAO EMPRES and IZSLER. **3.**Two Libyan trainees attended EuFMD Kenyan real-time training courses in January. This was fully funded by Libya, and will assist them in developing their outbreak investigation abilities.		Status: Israel/Palestinian Territories mission 4/2103. Other recent emergency actions closed. Outlook: To retain technical capacity in team to respond, and financial and operational mechanisms agreed with EC (and FAO).

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
5. Strengthening FMD laboratories in the Balkan Region		Tender launched 12/2011. Referred to the EuFMD Executive, 83rd Session.		Gap analysis missions undertaken by IAH for EuFMD, Aug-September. Meeting held with representative of EC IPA project on rabies & CSF in West Balkans to coordinate epidemiological and laboratory support **Coordination with: EC IPA project**		Funded under **EC TF**: **1**.Gap analysis missions by IAH for EuFMD, October 2012 – February 2013 (Bosnia and Herzegovina, Kosovo, Montenegro, Albania, FYROM, Moldova). **2.** Participation (Eoin Ryan) in IPA Laboratory Networking Workshop held in Belgrade in order to coordinate activities with CSF/rabies Project	*NRL assessments(summary tables) available from each mission provided by IAH consultant, Dr J Bashiruddin. Final report and recommendations by IAH* ***expected at ExCom*** *Report* ***expected at ExCom***	Status: Gap analysis missions complete. Outlook: To widen to emergency management issues under Pillar 1 of the new programme
6. Improved Contingency Planning through use of decision support tools		Series of Workshops planned, with 1st CVO Workshop in Denmark, June 2012. Decision on support after WS 1 referred to 83rd Session.		First Workshop held at the CVO Meeting in Denmark, June 2012. Second workshop planned for Vienna, October. Secretary and Chairman of the STC participated in RAPIDD policy/modeling for FMD workshop, September (RAPIDD funded)	***Report to ExCom***	Funded under EC TF, **Component 8:** **1.** Workshop on the use of modeling and decision support tools held in Vienna in October. 16 trainees from 8 countries (Austria, Serbia, Croatia, Hungary, Slovakia, Slovenia, Czech Republic, Malta). Very positive feedback. **2**.Follow-up plans for further actions discussed with Standing Technical Committee.	***Report to ExCom***	Status: Workshops completed. Outlook: Menu of training in this field proposed under the Pillar 1 Training Initiative
7. WRL contract		Funding agreement received from EC.	Outputs are services to countries and diagnostic reports to FAO; reports online;	Contract (150,000 per annum US$) developed with IAH covering	**As before**	Funded under **EC TF**, **Component 9**: **Letter of Agreement** (LoA)	*As before* *Signed and implemented. First payment made on*	Status: LoA to be extended to include additional

Component	Subcomponent	ACTIVITIES– October 2011 to March 2012	Reports (1)	ACTIVITIES– April 2012- to Sept 2012	Reports (2)	ACTIVITIES– October 2012 to February 2013	Reports (3)	STATUS April 2013
		Contract under development with WRL covering surveillance activities 2011-12.	reported every 6 months to ExCM and annually (Global Surveillance)	surveillance activities 2011-12.		for services in 2011-12. Discussions on coordination of **EuFMD/WRL activities** with overall proposed FAO/WRL global contract held with FAO FMD unit. Discussion on improved coordination of management of **PTS** for EuFMD-supported labs held with WRL colleague.	*21 Dec (USD 91,000).* *Proposal by FAO developed for discussion at ExCom.* .	years of support (2013). Outlook: Pillar 3 action supporting the Global Strategy, decision on support to be taken in late 2013 for years 2014-15.

ANNEX 1. EVALUATION BY THE STANDING TECHNICAL COMMITTEE, JANUARY 2013

The Executive Committee reviewed evaluation arrangements. Taking into account the time taken for formal evaluation by FAO, they asked the Standing Technical Committee to review the programme before the 85th Session.

The STC reviewed the programme undertaken in 2011-13 in relation to the 3 Pillars (New Strategic Goals) for the 2013-17 Programme.

The 3 Pillars being:

1. To Improve readiness for FMD crisis management by Members;
2. To Reduce risk to Members from the FMD situation in the European neighbourhood (progressive control in neighbouring regions);
3. To Promote the global strategy of progressive control of FMD;

They reported their conclusions to the 85th Session. This provides a summary of their Observations.
Several components they identified as important under **Pillars 1 to 3** for European countries were not represented directly in the components of the 2009-13 programme. Regarding each component, of note is their conclusion on #4, African surveillance networks:

”The studies were very successful and represented excellent value for money thanks to the approach of collaborating with local networks and third party funding agencies”.

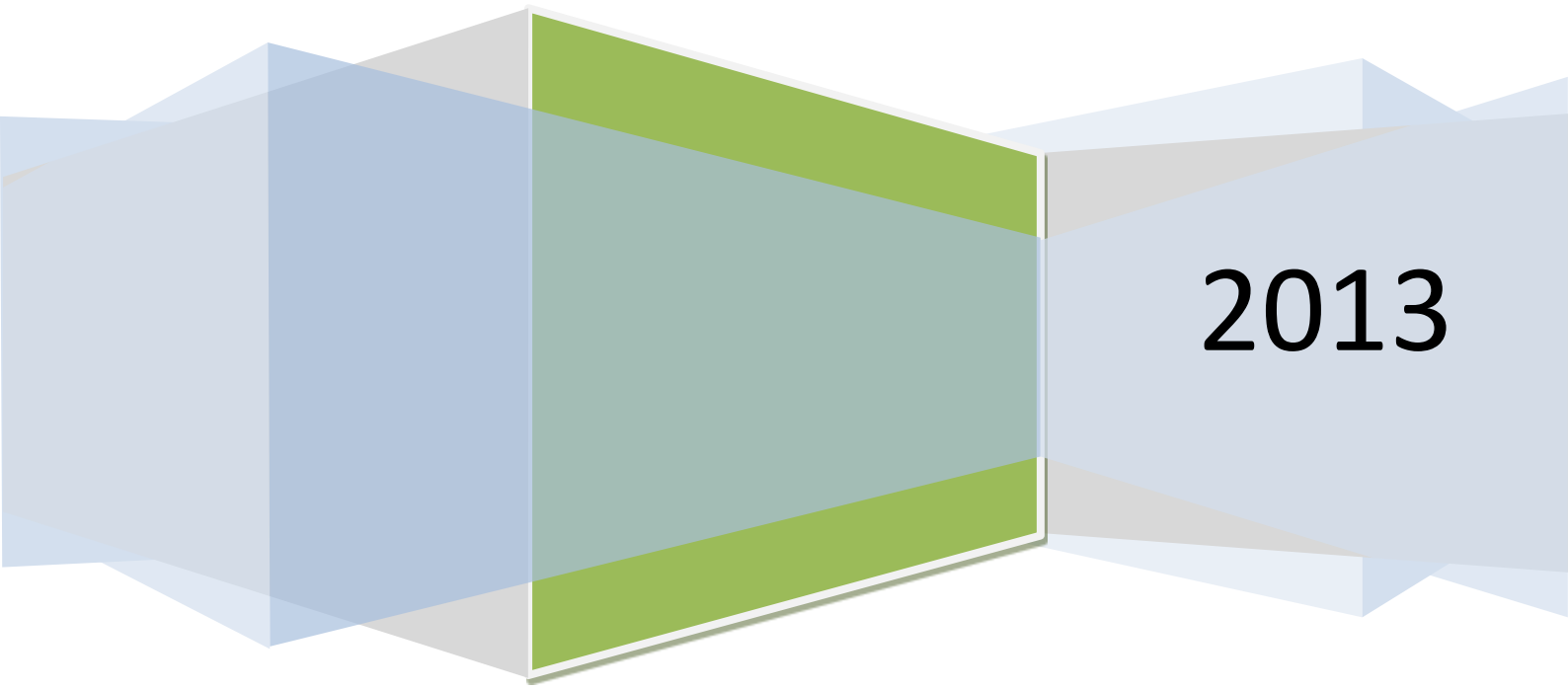
Summary of STC Observations on EuFMD Work Programme (from Report of the 85th Session, Feb 2013)

Component of the 2009-13 Programme	*Pillar*	*Activity*	*Comment*
	1	Overall	This is the **main priority** and should be adequately funded.
	1	Horizon scanning	Very important, for example to take account of changes in the industry (e.g. different incentives for livestock keepers) and in technology (e.g. modeling to assist in contingency planning). Therefore need broad mix of expertise within Special Committee on Research and Programme Development.
3	1	Training	Very successful programme. Good plan to increase reach by e-learning but need to understand the model for growth and sustainability.
	1	Expertise	Need to strengthen expertise in Epidemiology, Economics and Outbreak Management within the Special Committee on Research and Programme Development.
9	1	Laboratories	Agree value of maintaining proficiency testing to non-EC MS (e.g. Balkans). Need to ensure that findings are followed up to secure improvements where needed. Should representatives from these labs be funded by EuFMD to attend annual meetings of the EC National FMD Reference Laboratories?
5	1	Vaccines	Still need to develop position paper to set out current process and possible short-comings in relation to how the public-private partnership works to make available new vaccine strains.
	1	Expert Groups	The Special Committee on Research and Programme Development is in many ways a EuFMD version of what is required within individual MS. Worthwhile to review practices in different MS at same time as changing EuFMD model.

5	1	Biosecurity	Need to ensure that there is a lead on this within the Special Committee on Research and Programme Development (Bernd Haas) and that this person is empowered to review processes.
1	2	PCP support	Needs to be integrated into wider FAO plans. Doubts over credibility of timetables and concern over lack of critical review process.
2	2	Middle East	Good idea to better coordinate EuFMD consultancy support to the region. EuFMD investment/effort should be as a partnership and linked to local commitment to disease control.
6	2	Emergency response	Egypt model of getting in fast to provide immediate advice, but then leaving larger scale (and more expensive) follow-up/programme development to others seems a good one.
4	3	Wider surveillance	EuFMD activities need to be integrated into wider FAO plans for Lab Networks

Appendix 15

FAO-EUFMD/EC/OIE Tripartite Meeting on control of FMD and other exotic diseases in the Southern Balkans



2013

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FAO-EUFMD/EC/OIE Tripartite Meeting on control of FMD and other exotic diseases in the Southern Balkans

13th February 2013 Chania, Crete, Greece

Introduction

A meeting of the FAO EuFMD/EC/OIE "Tripartite" on the Control of FMD and other Exotic Diseases in the Southern Balkans was held in Chania, Greece, on 13th February 2013, with the participation of senior representatives from the State Veterinary Services of Bulgaria, Greece, Turkey, and Serbia, and from the EuFMD, FAO, EC and OIE (see Appendix 1 for list of participants).

The main objectives of the meeting were:

- To review and discuss surveillance and control activities for FMD and other exotic diseases in the common border regions of Greece, Bulgaria and Turkey in 2012, and planned for 2013.
- To discuss the outcomes of a workshop on risk-based surveillance for FMD in the common borders area and follow-up plans to develop this activity further.
- To discuss how co-operation in strengthening FMD emergency preparedness in the West and Southern Balkan countries might be organised in the future.

Relating to FMD

Conclusions

1. The meeting endorsed the Report of the Tripartite Surveillance Workshop on development of a risk based, continuous surveillance approach to maintain confidence in FMD freedom in the common border regions of Thrace.
2. The immediate notification system had operated well in 2012 and the Bulgarian and Greek representatives expressed satisfaction with the level of communications received on new outbreaks of exotic diseases in Thrace region.
3. The Meeting noted the major change in FMD vaccination policy in Turkey, in effect to regionalise the use of vaccination in Thrace and Western Anatolia. While appreciating the efforts and investment of Turkey and the EU to ensure Thrace region was included in campaign vaccination in large and small ruminants, and the focus of vaccination in Western/central Anatolia, they were concerned that the major change in policy had occurred with unclear consequences for risk from epidemics in unvaccinated eastern Anatolia.
4. The impact of FMD in Bulgaria and the duration of the loss of FMD-free status was noted, and it was concluded that other Balkan countries may be less prepared and might face greater difficulties for control if contingency plans are not well developed and practised.

Recommendations

1. That a memorandum of understanding be drawn up between EuFMD and each of the Tripartite countries covering the risk-based surveillance activities to be undertaken in 2013 in Thrace region.
2. That the proposal for developing a Balkan FMD emergency preparedness network, encompassing laboratory and epidemiology/contingency planning sub-networks, be put to the EuFMD executive committee at the 85th meeting, and an action plan developed further based on those discussions and consultations.
3. That the further attention and study be given to the regionalisation policy for vaccination in Anatolia, as means to achieve a higher health status in the regions identified for increased control; and that major changes in vaccination policy should be communicated in advance to the Tripartite, allowing an opportunity for reflection and possible policy assistance on the impacts of the management changes for the neighbourhood.
4. The studies to develop low cost surveillance methods for monitoring FMDV infection in wildlife be continued, and more attention given to develop the management support systems for continuous monitoring of outcome of the surveillance actions and for assessing the impact of change in FMD vaccination and other measures, upon risk to Thrace region and the Southern Balkans.

Relating to Other Diseases

Conclusions

1. Concern was expressed regarding whether the investigations into PPR outbreaks in Thrace were of a sufficiently thorough and detailed nature, and whether follow-up surveillance efforts were intense enough.

Recommendations

1. That Turkey conduct full and detailed investigations into the PPR outbreaks in Thrace, and summary reports be made available, as has been done for FMD investigations in Thrace region in the past.
2. That a generic standard operating procedure be developed for investigating exotic disease outbreaks in Thrace region as part of the risk-based surveillance program.

REPORT OF THE TRIPARTITE MEETING

The meeting was held at the Mediterranean Agronomic Institute, Chania, kindly hosted by the Greek Ministry of Rural Development and Food. The meeting was opened by Dr Spiros Doudounakis who welcomed all participants. Dr Keith Sumption then highlighted the value of these meetings, which had been taking place for about 50 years following the Tripartite actions to prevent SAT-1 incursions into the Balkans in 1962. He noted the increasingly good co-operation of the three countries on information sharing and the development of a common surveillance approach is a new and exciting stage for the Tripartite countries.

Item 1: Agenda

The agenda was adopted without further comment.

Item 2: FMD situation and surveillance in the Tripartite Thrace region

This session was chaired by Dr Keith Sumption, EuFMD.

The majority of this session dealt with the FMD situation in Anatolia and the implications for incursions into Thrace region.

2.1 Turkey: FMD situation, surveillance activities in Turkish Thrace, epidemiological trends and vaccination

Dr Naci Bulut gave a detailed presentation covering this subject. The situation in 2011-12 has been complex, with outbreaks due to FMD serotypes O, A and Asia 1 following the incursions of Asia-1 in 2011. Virus typing is used to follow the entry and circulation of FMDV, and most recent circulating lineages are:

- O: Panasia 2/Far-09
- A: Iran 05/Sis-10; Iran05/USK11; WES11; AMS12; BAB12. [Note that A Iran 05 HER10 is no longer considering circulating in Turkey].
- Asia 1: Sindh 08.

There were 2052 outbreaks reported in Turkey in 2012, all in Anatolia and none in Thrace region. In January 2013, there were 28 outbreaks (5 O, 15 A, 7 Asia 1, 1 untyped), including several in the area of Anatolia close to Istanbul (Figure 1). Although the number of Asia-1 outbreaks have seen a big decline since mid 2012, cases are still continuing and the epidemic is therefore not yet over.

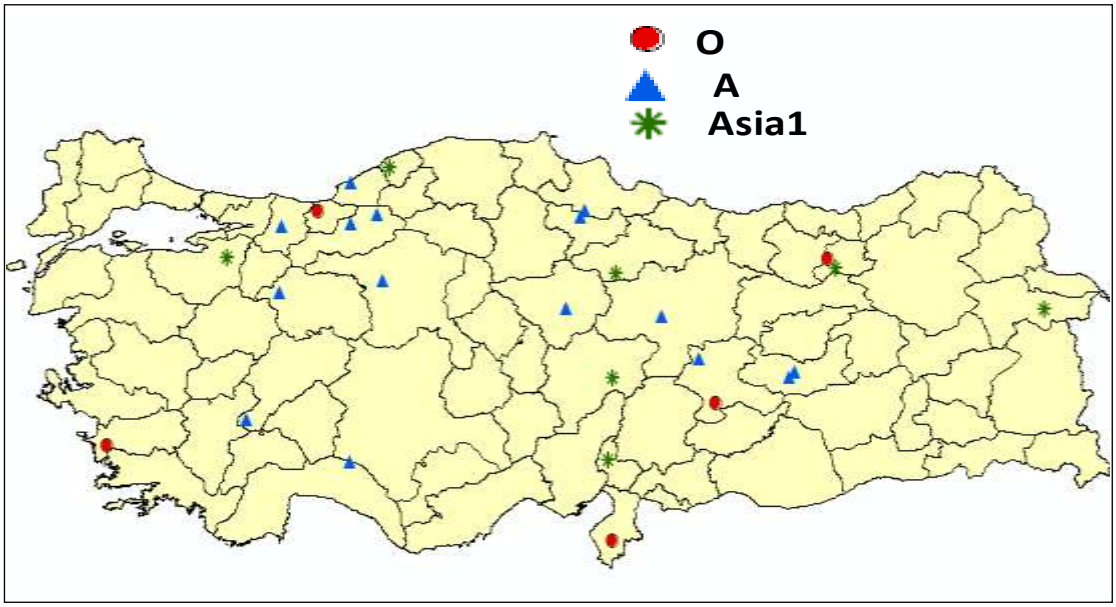


Figure 1: Location of FMD outbreaks reported in Turkey in January 2013.

The newest incursion detected was A Iran 05/Sis-10/BAB12, detected in November 2012 in Van (borders Iran); this lineage is closely related samples taken in Iraq in 2012 and sequenced in the SAP Institute, Ankara. The relationship between cattle and meat prices, currency devaluation in Iran, and FMD spread, was discussed and the usefulness of value chain analysis highlighted. One outbreak detected in December 2012 near Anatolian Istanbul was caused by this strain.

The vaccination strategy used in Anatolia in 2012 and proposed for 2013 was described. Due to insufficient doses of FMD vaccine, routine preventive (blanket) vaccination was not used in Anatolia in 2012, as had been the case in the previous years.

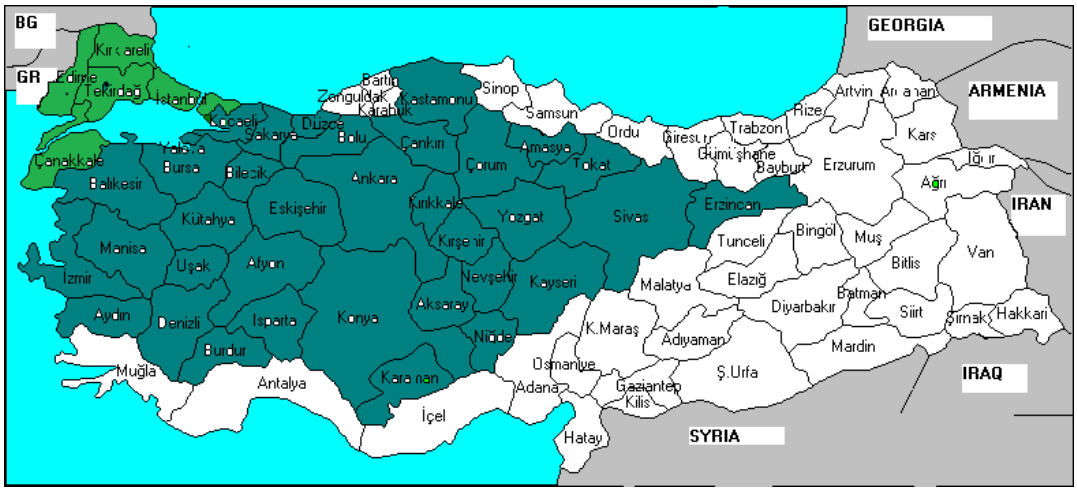
In Spring 2012, ring vaccination was used in response to outbreaks in most of Anatolia, while blanket vaccination was applied only in border provinces, including Thrace (**Figure 2**).

Ring vaccination in protection and surveillance zone of outbreaks

Provinces implemented vaccination campaign

Figure 2: Anatolian FMD vaccination strategy used in Spring 2012.

In Autumn 2012, the reverse strategy was applied, with blanket vaccination using trivalent vaccine applied in Central and Western Anatolia, while ring vaccination in response to outbreaks was used in Eastern Anatolia and along the border (**Fig. 3**).



Ring vaccination was implement, response to the outbreak

Provinces vaccinated with Trivalent vaccine by campaign

Figure 3: Anatolian FMD vaccination strategy used in Autumn 2012.

This is also the policy planned for Spring 2013 (**Fig. 4**).

Ring vaccination was implemented in response to outbreaks

Provinces where LR are to be vaccinated by campaign

Figure 4: Anatolian FMD vaccination strategy planned for Spring 2013.

Dr Bulut was explained that the change in strategy was because of the higher coverage possible in the Western areas and also the higher impact when FMD occurs in Western and Central Anatolia than the Eastern regions.

Dr Füssel commented that this major change was a form of regionalisation, since Government policy on vaccination in effect created a difference in health status between vaccinated and non-vaccinated regions; he asked what controls were in place to separate the two regions?
Dr Yacicioglu indicated that moving an animal from "ring vaccination" areas to "blanket vaccination" areas required such animals to be vaccinated against FMD 21 days prior to movement, and movement must be accompanied by animal health certificates. Vaccination in such cases is conducted by private vets using imported vaccine. Dr Sumption commented that this is a profound change in policy that appeared to be driven by shortage of vaccine than an overall strategy, and the implications - benefits and risks – needed to be studied. An unvaccinated eastern region was a new development that has implications also for the TransCaucasus countries.
The effectiveness of movement restriction controls between the two zones was raised as an issue, as was the impact of a single dose of vaccine 21 days prior to movement (rather than two doses).

The results of the 2012 Anatolian serosurvey were presented. 64,300 sera were tested; 15% of large ruminant samples were positive, as were 23.5% of small ruminant samples; the higher SR prevalence has been a feature of most prior surveys.

Surveillance activities for FMD in Turkish Thrace were described. 17,000 sera were taken as part of the annual serosurveillance for 2012; 700 samples were followed up. Follow up investigations are triggered by NSP positives, and involve probang sampling and liquid phase blocking ELISA testing of sera. All follow-up samples were negative, and no evidence of virus circulation was detected.

2.2 Bulgaria: FMD surveillance activities

Dr Tsviatko Alexandrov presented details of the Bulgarian surveillance activities for FMD and other exotic diseases in the past year.

Bulgaria regained its FMD-free status from the OIE in August 2012, 17 months after the last FMD outbreak. Between April and December 2012, blood sampling and clinical examination of animals was conducted in 37 border villages (Fig. 5). In 2013 this was reduced to 21 villages, regarded as the most at risk. In each of these 21 villages, 20 blood samples were taken from small ruminants and clinical examination conducted every month. All results were reported as negative, and no evidence of virus circulation was detected.

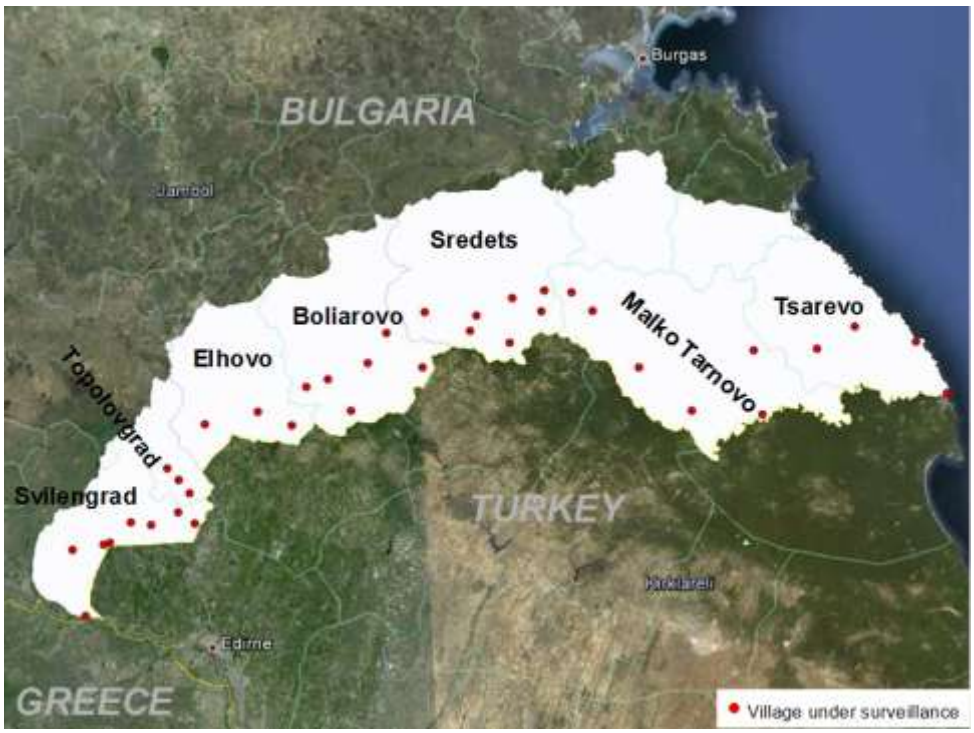


Figure 5: Locations of 37 villages where serological and clinical surveillance was conducted between April and December 2012.

Ongoing surveillance in wild boar was also conducted. In the 2012-13 hunting season, 1,095 wild boar sera were tested for FMD antibodies; all were negative. Bulgaria agreed to share the raw data from these tests to help establish test performance in uninfected wild boar.

2.3 Greece: FMD surveillance activities

Dr Eleni Chondrokouki presented the details of Greek FMD surveillance activities in 2012. In 2011, 8,980 serum samples had been tested for FMD as part of surveillance activities; in 2012, 1963 samples were tested (1,420 cattle, 540 small ruminants, 3 pigs, 0 wild boar). In 2011 there had been seven borderline samples, while in 2012 there were none.

Item 3: Development of a common surveillance approach for use in 2013.

In this session, recent activities to develop a common risk-based surveillance approach were reviewed and the issues for finalising an agreement, and implementation, were discussed.

This session was chaired by Dr Alf Füssel, European Commission.

3.1 Summary of the recommendations from the September tripartite workshop on surveillance

Eoin Ryan (EuFMD) presented a summary of the recommendations arising from the EuFMD workshop on risk-based surveillance held in Istanbul in September 2012, attended by two state veterinarians each from Greece, Bulgaria and Turkey. The report from this workshop was provided to all participants. The main recommendations were:

- There should be ongoing analysis of FMD surveillance data in Thrace region to estimate ongoing probability of freedom from FMD and to estimate reliability of early warning systems.
- Surveillance should be risk-based and use evidence from multiple activities.
- There is a need to improve data capture and management systems.
- Surveillance analysis should include all available sources of evidence in quantitative analysis of probability of freedom.

One of the key points was that surveillance activities which have a low sensitivity on an individual basis (such as abattoir surveillance) may still provide useful information if many data points are collected.

Another important issue was that the level of confidence in disease freedom based on serosurveys decreases over time if there is an ongoing risk of introduction. By incorporating data from ongoing activities such as clinical inspection, abattoir surveillance, etc, the level of confidence in disease freedom can be increased.

The goal of enabling early detection of possible future incursions is related to this; continual surveillance using a variety of methods (some of which may have low individual sensitivity) increases the probability of detecting an incursion earlier than would otherwise be the case.

3.2 Discussion on the recommendations from the September workshop.

The Chairman expressed his appreciation for this important work, on behalf of the European Commission. The Meeting then discussed this issue in further detail, including how this could be followed up. The Bulgarian authorities reported they plan in 2013 to conduct risk-based surveillance activities (serosurveillance and clinical inspection) in the area containing 21 villages which they regard as being at higher risk. In Turkish Thrace, cattle are vaccinated twice a year but must be clinically inspected prior to vaccination; in this way, clinical inspection is already carried out twice a year.

The issue of which zones are a higher risk was discussed. The consensus was that in Turkish Thrace, the districts in the Istanbul area of Thrace are at the highest risk of a new incursion; for Greece it is the area around the Evros river; and for Bulgaria, the area near the border where the selected 21 villages are located.

Parallel Session 1: Workshop on risk-based surveillance in Thrace region

A detailed report on this session is found in **Appendix 2**.

In summary, the working group reviewed existing surveillance activities which could be used to provide additional information to increase confidence in disease freedom, and discussed options for how additional risk-based surveillance activities could add further confidence and support early detection of incursions. This followed on from the September 2012 EuFMD workshop, and built on the discussions held earlier in the Tripartite meeting. Several recommendations were made, including the development of memoranda of understanding between EuFMD and the three Tripartite countries to set out specific actions to further develop risk-based surveillance in the Thrace region.

Parallel Session 2: Working Group on strengthening FMD emergency preparedness in the Balkans

A detailed report on this session is found in **Appendix 3.**

In summary, the working group discussed how to support improved FMD emergency preparedness and cooperation among the Balkan countries. It was generally agreed that the CVOs on the Executive Committee of the EuFMD from the Balkan region, and especially the Member representing Serbia, would be important for developing the action and co-ordination mechanisms. EU members bordering the Western Balkans are interested to participate particularly where cross-border issues, simulation exercises and FMD lab services would be discussed. A recommendation made to elaborate the proposal further in consultation with the Balkan CVOs, ensuring proposed activities are demand-driven and coordinated with other activities on Balkan-region exotic disease control.

Item 4: Other exotic diseases: Reports on surveillance findings for 2012 and plans for 2013 in the common border regions.

This session was chaired by Dr Antonio Petrini (OIE).

Greece

In 2012, bluetongue (BT) outbreaks were reported in Lesvos (3), Samos (12) and several islands of the South Aegean Sea (Dodecanese), namely Rhodes (37, 2 of those in sentinels), Kos (37), Kalymnos (1), and Halki (1). All outbreaks were due to BTV-4 except for 1 case of seroconversion in Rhodes (sentinel bovines) where both BTV-4 and BTV 16 were detected by Real Time PCR (April).

In April there was seroconversion in sentinel Bovines in Rhodes island while in September – October clinical outbreaks occurred in Kos and Rhodes islands and one clinical outbreak in Kalymnos island. In November seroconversion occurred in sentinel Bovines in Rhodes island , along with continuing clinical outbreaks in Kos and Rhodes , clinical outbreaks in Samos and Lesvos islands and

one clinical outbreak in Halki island while on December there were clinical outbreaks in Samos, Lesvos and Rhodes islands.

BT control measures in Greece include restrictive measures in infected holdings, euthanasia-destruction only of animals with very heavy clinical signs that are unlikely to recover, epidemiological investigation of outbreaks as well as establishment and maintenance of restriction zones already in place [Dodecanese prefecture (Rhodes, Kos, etc.), Samos prefecture, Lesvos island]. No vaccination is carried out against BT while only small ruminants destined for immediate slaughter are allowed to exit from the restricted areas to the rest of the country.

BT surveillance includes a network of sentinel bovines covering all restricted areas as well selected areas in the rest of the country , along with a network of vector surveillance (insect traps) in strategically selected prefectures. Random testing of imported animals (intra-community trade) is also carried out as well as investigation and sampling of all suspect cases.
Bulgaria reported on surveillance activities for BT, CSF and rabies. Previous Bulgarian BT outbreaks had been in the border regions to the South-East (1999) and West (2001). In 2012, 4,145 sera had been tested for BT; it is planned to test 4,550 sera in 2013.

An overview of CSF in Bulgaria was given, listing the outbreaks in commercial farms, backyard farms, wild boar and East Balkan pigs from 2002-2009. Current CSF control and eradication activities are structured according to the biosecurity level of the farm, and involve active and passive surveillance measures, surveillance in wild boar, and vaccination along the north and west borders. In 2012, 16,257 sera were tested for CSF and 73,897 clinical examinations conducted.

A breakdown of rabies cases in Bulgarian animals was given from 2002-2012. Only one case, in a fox, was detected in 2012. The Balkan mountains act as a natural barrier as most of the rabies cases during the past few years have been detected in North Bulgaria. Vaccination, using the Lisvulpen vaccine, is conducted in the North of the country, with an additional vaccination campaign along the South-West border in 2012.

Turkey provided an overview of the BT, PPR and sheep and goat pox situation. BT serotypes 4, 9 and 16 have been circulating in the Aegean and Mediterranean regions of Anatolia, but no data was provided. There have been 75 outbreaks of sheep and goat pox in Anatolia in 2012; no cases were detected in Thrace (Fig. 6). Nine of the 75 cases were in Anatolian Canakkale; part of Canakkale province is in Turkish Thrace, so on a provincial-level map of Turkey, this part of Thrace could be thought to have had a case; this misunderstanding was clarified by Dr Bulut. Only 64, 684 small ruminants were vaccinated against sheep and goat pox in 2012; vaccination is driven by demand.

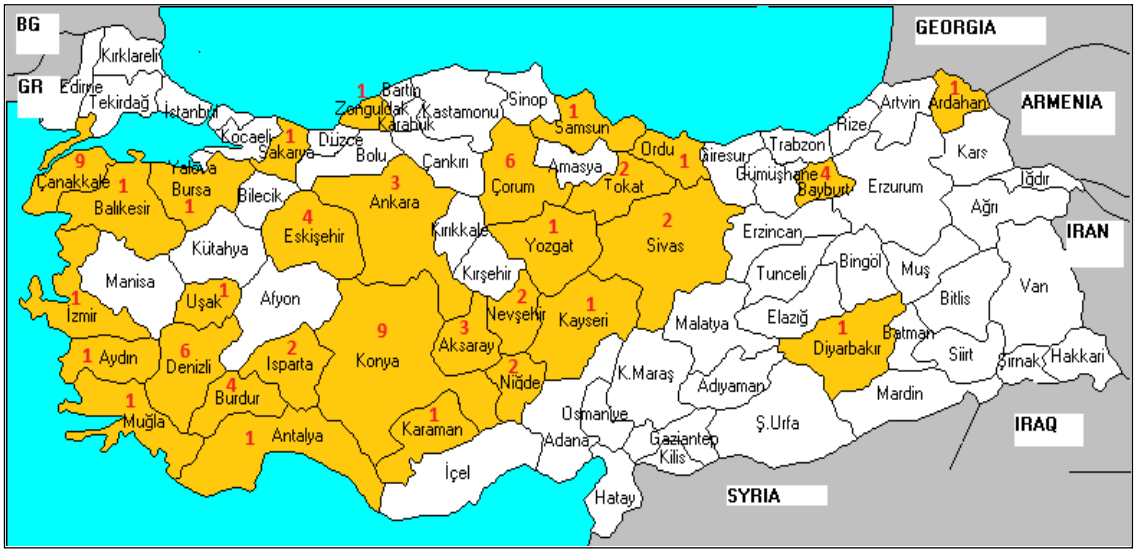


Figure 6: Province-level breakdown of the 75 cases of sheep and goat pox in Turkey in 2012. Part of Turkish Thrace is coloured yellow as that area is part of Canakkale province, most of which is in Anatolia. No sheep and goat pox cases have been detected in Turkish Thrace in 2012.

There were 59 reported outbreaks of PPR in Turkey in 2012, including three in Turkish Thrace (Fig. 7). Under the EU/Turkish PPR project, 52 million doses of vaccine have been provided for small ruminants. The reason for the three cases in Thrace was questioned; given that the EU/Turkish project on PPR has vaccinated all small ruminants in Thrace for the past three years, this raises questions about where the new cases came from. Participants pointed out that they represent either disease spread from Anatolia, or they are the result of continuous virus circulation in Thrace as a result if insufficient vaccination, and the Turkish authorities should investigate thoroughly to establish which is the likely cause.

Concern was expressed that the outbreak investigations carried out into these PPR outbreaks in Thrace had not been sufficient, and that more detailed and comprehensive investigations were needed to identify the origins of these cases and detect any further spread in a timely manner.

Addendum: On 28th February, an outbreak of sheep and goat pox was reported in the area of Turkish Thrace near Istanbul, reported to affect 10 sheep. This event highlights the importance of the issue of improved outbreak investigation and follow-up surveillance in Turkish Thrace discussed at the Tripartite meeting. The Turkish participants are encouraged to provide the results of such an investigation for the neighbouring countries and the Meeting Report.

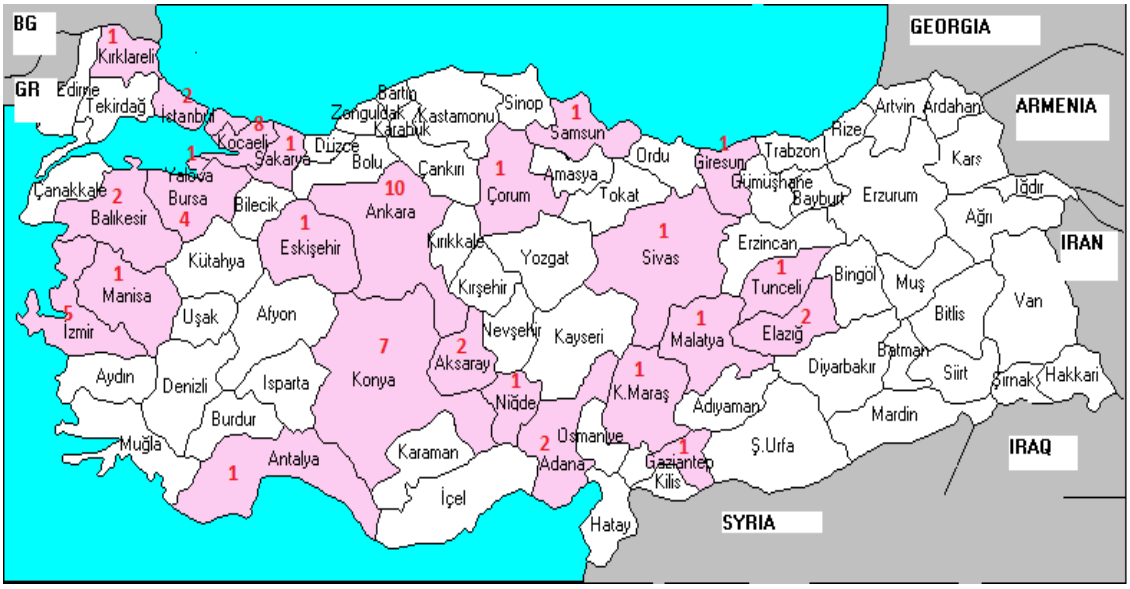


Figure 7: Provincial-level breakdown of the 59 cases of PPR detected in Turkey in 2012, including three cases in Turkish Thrace.

Item 5: Progress on the project on wild boar telemetry and non-invasive sampling.

Dr. Alexandrov presented the interim results of the ongoing EuFMD-funded project on wild boar surveillance, covering telemetry and non-invasive sampling. Telemetry studies were conducted in Strandzha (near the Turkish border) and Tutrakan (near the Romanian border). 14 wild boar have been collared, with excellent results from 10 of these 14. Data is collected in the form of hourly location reports using collars which can remotely report the location using GSM technology.

Work is also progressing on the development of non-invasive sampling methods. It was reported that the Friedrich Loeffler Institute, Germany, which had previously collaborated with this work, has withdrawn from the project and apparently plans to commercialise non-invasive sampling methods. The EuFMD non-invasive sampling project will proceed in any case, but will need to identify methods to evaluate how best to detect FMDV in non-invasive samples from infected animals.

Final discussion:

Dr Petrini suggested that the Agenda of the next Tripartite meeting should include other transboundary animal health problems, including zoonoses such as rabies and West Nile virus.

The Greek and Bulgarian representatives stated that they were satisfied with the functioning of the urgent communication mechanism, following the PPR cases in Turkish Thrace.

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Appendix 2: Parallel session 1: Workshop to address the relevant issues in developing risk based FMD surveillance in 2013, for Thrace region

The purpose of this workshop was to address at a technical level how each country can engage with the process of risk-based FMD surveillance in the Thrace region, building on the initial discussions and work carried out at the September 2012 workshop on the subject.

Several activities which could provide additional surveillance information and that are already part of routine surveillance were identified for each country; the goal was to examine ways to capture this information for use in building confidence in disease freedom, and to improve the probability of early disease detection.

The participants were Eleni Chondrokouki, Achilleas Sachpatzidis and Marina Douka (Greece), Tsviatko Alexandrov (Bulgaria), Naci Bulut (Turkey), Eoin Ryan, Gregorio Torres and Dimitrios Dilaveris (EuFMD) and Juan Lubroth (FAO).

The workshop was facilitated by Eoin Ryan (EuFMD).

Bulgaria

Ongoing activities include:

- Serosurveillance performed routinely in the 21 villages regarded as being in the high-risk zone (20 sera per village every month) and accompanying monthly clinical inspections of cattle and pigs.
- Wild boar surveillance activities are ongoing as part of the EuFMD-funded research project into non-invasive sampling of wild boar.
- There is no abattoir in the area.
- The epidemiological unit of choice in this area is the village.

Turkey

Turkey described several existing activities from which data could be captured for use in improving confidence in disease freedom in Thrace:

- An annual serosurvey is conducted in November.
- Vaccination is conducted biannually, in March/April and in September/October/November. All animals to be vaccinated are first clinically examined, and this information could be captured.
- A brucellosis vaccination campaign is also conducted, with clinical examination of animals.
- The high risk area for introduction of exotic diseases to Turkish Thrace was defined as the part of Thrace near Istanbul, consisting of 115 villages.
- There are abattoirs in this high risk area slaughtering local stock; ante- and post-mortem inspections of animals are performed.
- The epidemiological unit of choice in this area is the village.

GREECE

The high-risk area for exotic disease incursions was defined as being the area around the Evros river. It was acknowledged that some of the Greek islands near Anatolia area also at high risk, but the consequences of an incursion in those islands is far less serious, so they are not included in the area for risk-based surveillance.

Ongoing activities which can contribute to early detection and improved confidence in freedom include:

- Sera collected for routine surveillance purposes for bluetongue, sheep/goat pox (SGP), CSF, brucellosis and SVD, in addition to the sera collected for FMD surveillance. A selection of this sera, ideally those from the Evros region, could be transported to the Greek FMD NRL for serological testing.
- Abattoir surveillance: there is a pig abattoir in the Evros region killing roughly 300 pigs per day; there is also an abattoir in the neighbouring region which kills cattle and sheep from the Evros region. Data on ante- and post-mortem inspection of stock could be collected from these abattoirs.
- The epidemiological unit of choice in this area is the individual holding (farm).

RISK-BASED SEROSURVEILLANCE

The group then discussed how additional risk-based serosurveillance could be designed and conducted.

- For Bulgaria, risk-based serosurveillance is already being conducted (discussed above).
- For Turkey, the suggestion was that an additional 10 sera are randomly sampled from vaccinated cattle in each of the 115 high-risk villages (total 1,150 sera) every three months; this number is similar to that recommended in the September 2012 workshop. The collection of these sera would be accompanied by active clinical surveillance of the samples animals, with the potential to also clinically examine some cohort animals, thereby increasing information gained for little marginal cost.
- For Greece, the suggestion was that 1,500 sera be collected every three months from the Evros region. However, concerns were expressed that, in the initial phase, 1,500 sera may be too high given available laboratory resources. It was thought that a proportion of the 1,500 sera could come from other disease surveillance programs (as mentioned above) and some from the abattoirs mentioned. Further discussions are needed to agree how many sera should be collected by specific active surveillance visits, which could also involve active clinical inspection.

DATA CAPTURE AND ANALYSIS

All three countries agreed that they would share the results of the activities under discussion. The consensus from the tripartite countries was that, for the initial phase at least, the EuFMD secretariat should receive and analyse the relevant data as a service to the countries, to facilitate establishing the process.

The specific modalities of data capture are to be worked out by the secretariat and the country focal points. Initially, this is likely to consist of agreeing a standard data capture format, most likely an excel spreadsheet, to capture data on serology, active clinical inspection, and abattoir inspection.

Ideally, this should fit the input spread sheet for the risk-based disease confidence model developed for EuFMD for this purposes.

Other issues discussed

Other issues discussed included:

- The need for a follow-up workshop, ideally including a data management element, in four months.
- The benefits of developing a web-based portal for entering data from surveillance activities. This is to be explored by the EuFMD secretariat.
- The importance of including other diseases (principally sheep/goat pox and PPR) in the program. Clinical inspection of small ruminants for FMD could also contribute to surveillance for SGP and PPR, while small ruminant sera being tested for FMD antibodies could also be tested for SGP/PPR antibodies.
- The benefits from including private veterinarians in the process. Private vets routinely visit the high risk areas, inspecting and treating stock for other purposes. Information about these visits could be captured and used as a form of negative reporting, adding to confidence in disease freedom. The mechanisms for this require more discussion, but an initial phase could involve a small number of private vets in high-risk areas reporting to the country focal points about villages or farms which they had visited in the preceding time period (weekly?) and where they had not seen clinical evidence of FMD, SGP or PPR.

Funding issues

The estimated costs of these activities need to be further worked out. Key areas to address include:

- Laboratory costs: these include the direct costs of addition FMD serological kits (which could possibly be purchased directly by EuFMD) and the indirect costs of obtaining sera collected for other disease surveillance activities from the relevant laboratories and transporting them to the FMD laboratories for testing.
- Active surveillance costs: the costs of veterinary service staff visiting, inspecting and sampling stock in villages/holdings as part of the risk-based active surveillance.
- Data capture costs: It may be necessary to disburse funds in order for veterinary staff to record and submit data from activities such as abattoir ante- and post-mortem inspections, clinical inspections conducted in the course of vaccination campaigns, and recording inspection performed by private vets in the course of their routine activities.
- It was agreed that regular (six-monthly?) joint meetings would be useful to develop this area further, and that such meetings would include training and workshop elements.

Action points:

Several action points were agreed for follow-up to start the process:

1. EuFMD secretariat to develop a memorandum of understanding with each country setting out the objectives of the program, the actions to be taken by EuFMD, the actions to be taken by the individual countries, and the framework within which the risk-based surveillance actions will be developed, including additional targeted sampling to further increase confidence in disease freedom.

2. EuFMD secretariat to develop standard data reporting template, in discussions with country focal points.
3. Country focal points to take the lead on capturing data from existing activities, as discussed below.
4. Greece:
   (a) Capture ante-/post-mortem inspection data from abattoir in Evros (pigs) and near Evros (cattle/sheep). This may initially involve a proportion of stock, or stock slaughtered on one day a week, to get the process started.
   (b) Identify sera taken for other surveillance purposes, transport to FMD NRL, arrange for FMD serological testing.
   (c) Determine how many of these sera are from the Evros area; explore whether additional sera could be convenience-sampled from slaughtered stock in abattoirs.
   (d) Provide cost estimates for these activities.
5. Bulgaria: Provide information being captured and analysed from the ongoing activities in the 21 high risk villages to EuFMD secretariat; this will include serology and clinical inspection. Wild boar activities also to be reported.
6. Turkey:
   (a) Develop mechanism to capture clinical inspection data on stock in the 115 high-risk villages near Istanbul, which can be obtained during the March/April vaccination campaign. This should also be done for the next brucellosis vaccination campaign.
   (b) Capture ante-/post-mortem inspection data from at least one abattoir in the high-risk area. This may initially involve a proportion of stock, or stock slaughtered on one day a week, to get the process started.
   (c) Develop specific plan for conducting the agreed risk-based serosurveillance and clinical inspection in the high-risk area, which will involve 10 blood samples being taken from vaccinated cattle in each of 115 villages.
   (d) Provide cost estimates for these activities.
7. EuFMD secretariat to provide technical support where needed in data capture and analysis.
8. EuFMD secretariat to organise follow-up tripartite workshop, which will include a data management component, to be held in approximately four months.

Appendix 3: Parallel session 2: Strengthening FMD emergency preparedness for the Balkans

This session was chaired by Dr Ulrich Herzog (President, EuFMD Executive Committee).

The purpose of this session was to discuss the interest and ideas of the State Veterinary services of Balkan countries represented (BG, GR, TUR, Serbia) in how to improve emergency preparedness for FMD, following the recent gap analysis missions undertaken by Pirbright in response to the limited capacity of laboratories in some of the 8 non-EU territories for FMD confirmation.

The progress of the gap ongoing laboratory capacity gap analysis being performed in the West Balkans and Moldova by the World Reference Laboratory, was reviewed by jef Hammond. All countries, except Moldova, had received visits and report would be provided to the EuFMD. Keith Sumption indicated that the Secretariat had been in close contact with the EC funded IFA project to strengthen CSF and rabies co-ordinated control in the Western Balkans; this programme had addressed some similar laboratory services issues, and should provide an important lesson for FMD crisis preparation. The consensus emerging is that laboratory strengthening through training and or diagnostic support would not address more fundamental problems where exotic diseases are low on the priorities for support, and significant contingency planning would be more likely when the leading national actors are convinced of the impacts relating to lack of preparedness. The focus therefore should be on emergency preparedness exercises, FMD simulations, and assessing the level of services need in emergencies and how these could be provided (national and bilateral emergency agreements).
This wider support program would be more likely to achieve its goal of building capacity to detect and control FMD if it addressed key areas identified by the countries themselves; in other words, a demand-driven process, and was coordinated with other ongoing EU-funded projects addressing other transboundary animal diseases (specifically rabies and CSF).

The initial proposal for an FMD emergency preparedness network was provided by the EuFMD secretariat but not discussed in detail. The basic idea is support a process that will ensure attention to contingency planning encompassing:

- A laboratory support sub-network covering:
  (a) Regular network meetings and at least one animator
  (b) Building laboratory capacity to detect FMD
  (c) Supporting demand-driven solutions to issues relating to laboratory diagnosis of FMD.
  (d) Working towards a goal of each country having the capacity to have a sample diagnosed as having FMD with 24 hours, although this may not necessarily involve laboratory diagnosis within the country itself.

- An epidemiology and contingency planning sub-network covering:
  (a) Regular network meetings and at least one animator.
  (b) Supporting the development of contingency plans for FMD.
  (c) Building epidemiological capacity for FMD control, including a modelling element and the use of decision support tools where needed.

(d) Assisting the holding of cross-border simulation exercises for FMD.
(e) Supporting demand-driven solutions to issues arising.

The scope of the FMD emergency preparedness network was discussed; Serbia being the only Western Balkan country present, but considered the other West Balkan states would be interested to participate although other issues could be higher on the Agenda for immediate action. Moldova was suggested to be included, being a neighbour to Romania, and the EU neighbours were interested to know the cycle of meetings and may wish to participate in some, there being few current opportunities to meet he non-EU neighbours. It was agreed that not all activities at sub-network level would require the involvement of all parties. Some network members (EU members, for instance) may not require the level of support of others, and some may offer advanced facilities, for example Greece has the only laboratory licensed to handle live FMDV in the area.

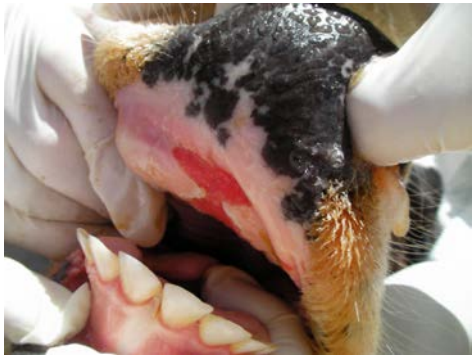
The proposal was discussed and approved in general terms. The consensus was that further CVO-level discussions should be held to ensure the candidate members were interested and to offer them the opportunity to comment further. Potential opportunities for this will be a West Balkan CVO meeting to be held in Brussels on 7th March (organised by TAIEX), at the EuFMD general session in April, and the OIE General Assembly in May. It was noted that Serbia has offered to host a workshop on FMD modelling, contingency planning and epidemiology, and this generous gesture was gratefully acknowledged by the group.

Report on pillar 1 activities

Improving readiness for FMD crisis management by Members

Eoin Ryan

EuFMD Secretariat



Summary of pillar 1 activities since 39th General Session

- Capacity building for FMD outbreak investigations: the real-time FMD training programme
- Training in modelling and decision support tools for FMD contingency planning
- Support to the West Balkans and Moldova: training, gap analysis and proposal for future support
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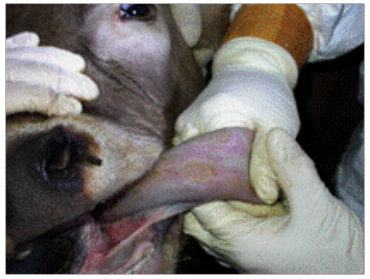
Real-time training in FMD outbreak investigation

<u>Key achievement</u>: Re-establishment of a ***cadre of European veterinarians*** with field experience of FMD outbreak investigations

>200 vets from 36 member states trained



- Programme started in 2009 in Erzurum, Turkey
- 2011-13: training conducted in Nakuru, Kenya

- Trainers: Internationally recognised FMD experts
- Trainees: state veterinarians, nominated by their CVOs
- Local vets also trained – benefits flow both ways

Why do we need real-time training?

- Continuous risk of incursions into Europe

Clinical recognition is the key to early detection!

Key learning objectives:

1. On-farm outbreak investigation skills
   - Clinical examination, lesion ageing
   - Correct sampling for diagnosis
   - Use of clinical findings to support epidemiology
   - Create timelines for tracing, prioritisation
2. Biosecurity awareness
3. Identify local risk factors

Real-time means...

- Real outbreaks investigated (suspected and confirmed)
- Samples collected, tested and results obtained within hours
- Decision making with limited information
- Using all skills and tools available
- Investigative skills practiced
- Working with uncertainty – how, why, when?
- Pressure – and team work

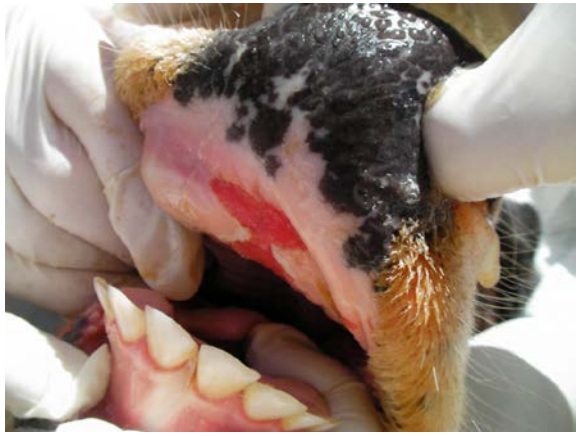
Monday: lectures, preparation

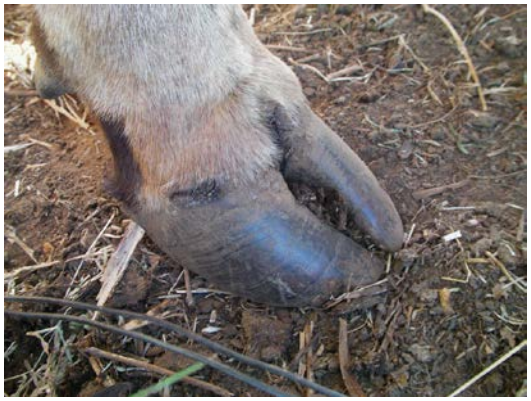
Tuesday/Wednesday: field work

Thursday: feedback, compile report, presentation

Friday: wrap up

Field Training





Clinical examinations

- Careful examination and lesion ageing
- Correct sampling – which samples to take, how to take them, how to preserve them for transportation
- Recording of findings
- Create timeline for disease entry and spread
- Biosecurity – practical application of the principles – ***risk reduction at every step!***
- How can these findings support epidemiological investigations?

- Use of penside tests for rapid diagnosis

Epidemiological investigations

- Identify the key issues to investigate
- What information should be recorded?
- How does disease spread, and how can it be traced?
- How can risk factors be rapidly identified – and what can be done to mitigate the risk?

Rapid Assessment of Local Risk Factors

Why?

Objective: teach trainees that there are risk factors for FMD spread which can be rapidly identified and used to target control actions. Relevance to decisions on control and surveillance in 3k and 10k zones during outbreaks in Europe

What?

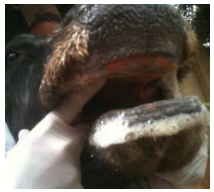
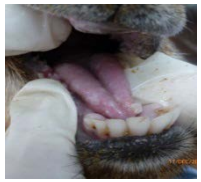
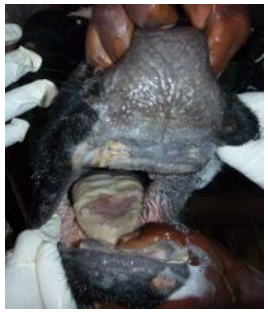
Collect information on risk factors for local FMD spread, learn how to use this to inform decision-making.

How?

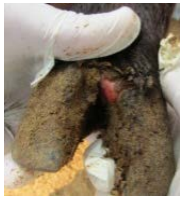
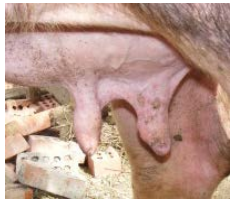
- Trainees are challenged to decide what information to collect and why it will be useful.
- EpiCollect smartphone app – developed by Imperial College London, open source software, free to use.
- Design questionnaire; input answers, collects GPS location
- Data uploaded from smartphones to server; collated data can then be downloaded as excel file & map
- Facilitates rapid assessment of risk factors for local spread
- UK used similar approach in 2007 – rapid case control study; informed targetting of surveillance efforts

Clinical examination of the animal

- Open mouth, look in – check tongue, dental pad, nostrils

- Lift feet, look between digits


- Examine teats of cows/ewes
- Take temperature of animal
- Step back: look at whole animal
- Any other signs? Could it be another disease? Discharge from eyes/nose?
- **Careful and thorough examination of animal essential!**
- **<u>Write down your findings</u>**, and link each sample taken with each animal examined

Sampling from lesions

- **Lesion epithelium:** richest source of FMDV, sample of choice for diagnosis

- Samples from **<u>at least 5 animals with obvious lesions</u>** should be sufficient to confirm a diagnosis

- The most suitable materials are
  - Vesicular epi, vesicular fluid, heart muscle (myocarditis cases)
  - For tissues
    - At least 2 cm^2 of epithelium from unruptured or freshly ruptured vesicles – **fingernail sized amount**
    - Transport medium - equal amounts of glycerine and 0.04 M phosphate buffer **pH 7.2-7.6**
  - For vesicular fluids (very hard to get!)
    - Plain, small volume tube

Lesion ageing and timelines

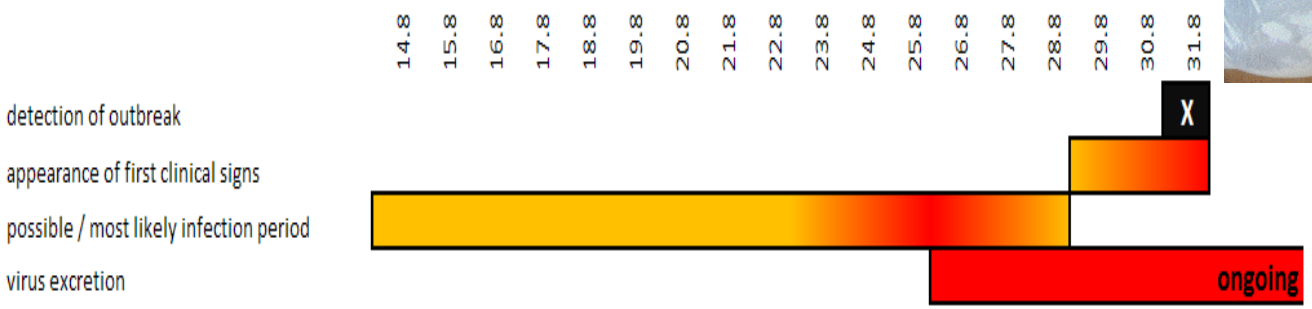
Essential for tracing disease spread

Lesion ageing: provides an estimate for duration and weight of virus excretion from infected farm.

Look for oldest lesion present; subtract incubation period of 1-14 days (and “most likely” IP of 2-5 days) to generate window for introduction of infection.

Enables **<u>prioritisation of tracings</u>** – essential if many contacts present and limited resources available to trace them.

Example from Kenya:



Real-time training: partnerships with others

- EuFMD requested by Australian DAFF to train 80 Australians over 8 courses (funded by DAFF)
- Training held in Nepal; four courses completed.
- The funds provided by Australia have contributed to expand EuFMD training services to EuFMD member states, thereby benefitting Europeans as well as Australians and Nepalese

- Vets from USA, NZ and Libya (self-funded) and Senegal (US-Identify project funded) have attended Kenya courses

- Training in field investigations also needed in endemic regions: skills of outbreak investigation, taking correct samples for diagnosis, etc are of critical importance

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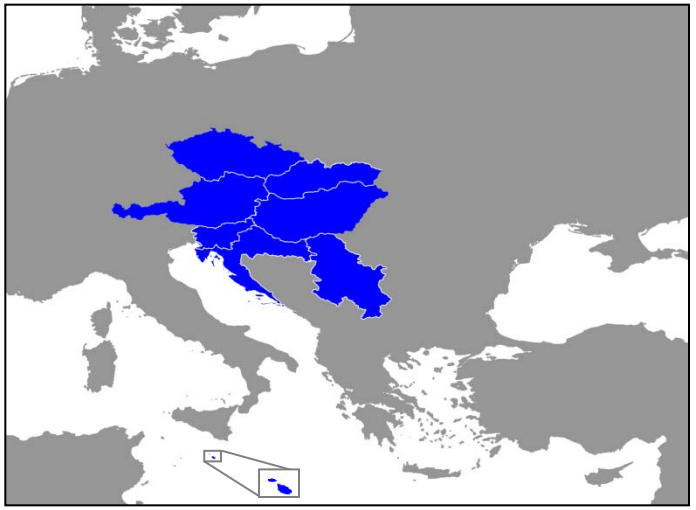
Modelling and decision support tools for member states

Key achievement: 16 vets from 8 countries attended workshop on the use of disease spread models & decision support tools for FMD contingency planning.

Workshop held in Vienna, October 2012 – very positive feedback

Menu of follow-up actions identified



Background

39th General Session, 27-28 April 2011

Survey results:

- Less than 25% of EuFMD MS have used disease spread models or resource management tools to inform contingency planning
  - Data to parameterize/build these models is widely available in most countries

Recommendations:

6. Member states should consider the use of modeling tools as decision making aids, while ensuring that the output of such models are clearly understood by decision makers with respect to uncertainty and sensitivity. Member states using such models should engage in comparisons with other states to constructively examine the issues affecting confidence in their use, and that support be given to assist countries to review the suitability of tools for their needs

Actions taken

EuFMD Standing Technical committee drafted *position paper* on how best to address this recommendation (P. Willeberg)

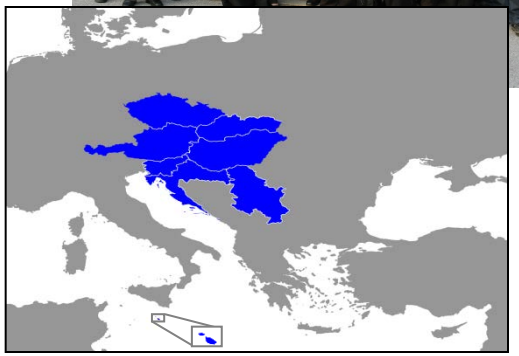
Proposal: a series of workshops at 3 levels:

1. CVO workshop: hold first to determine level of interest, get feedback
2. Vet services-Contingency planners
3. Vet Services – modelers (maybe outside partner or contractor)

CVO workshop:, Denmark, June 2012: Outcome:

- Support from CVOs for EuFMD proposal to hold a series of modelling workshops
- Preference for a ***regionally-based format*** for the workshops
- Workshops to focus on policy-making veterinary staff to enable them to interpret, question and commission models ("***intelligent customer" training***)
- CVO Austria kindly offered to host the first workshop in October.

Vienna Modelling Workshop, October 2013



- Austria, Serbia, Croatia, Hungary, Slovakia, Slovenia, Czech Republic, Malta
- Trainers: modelling expert (Colorado State, USA); vet policy expert working with models & FMD (USDA); vet contingency planning and operations expert (UK, retired)
- Trainees: senior state veterinarians, policy-making level
- Objective: enable trainees to commission and set-up modelling groups; understand the issues; data requirements; types of model; how models can be used for FMD contingency planning
- Facilitated cross-border discussions on contingency planning issues, including benefits of cross-border modelling exercises
- Positive feedback – but issue identified that some trainees felt they would not be able to make use of training due to lack of resources
- Dichotomy: some states very engaged, others less so

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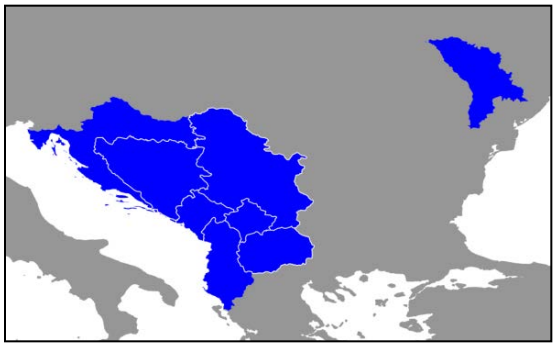
Outputs: training provided, laboratory gaps identified and proposal for Balkan FMD emergency preparedness network developed.



- Vets from each West Balkan country trained in FMD recognition and outbreak investigation.
- Laboratory gap analysis managed by WRL, funded by EuFMD, conducted for West Balkans.
- Meeting held with West Balkan CVOs/deputies in Denmark in June 2012: identified key capacity building needs.
- EuFMD has coordinated with other EU-funded capacity building projects in the West Balkans on rabies and CSF (IPA project) to avoid duplication and identify complementarities.
- Laboratory network meeting on rabies & CSF attended at kind invitation of IPA project (self-funded observer): very positive discussions with West Balkan lab experts re: FMD support.

➢ Proposal for Balkan FMD emergency preparedness network

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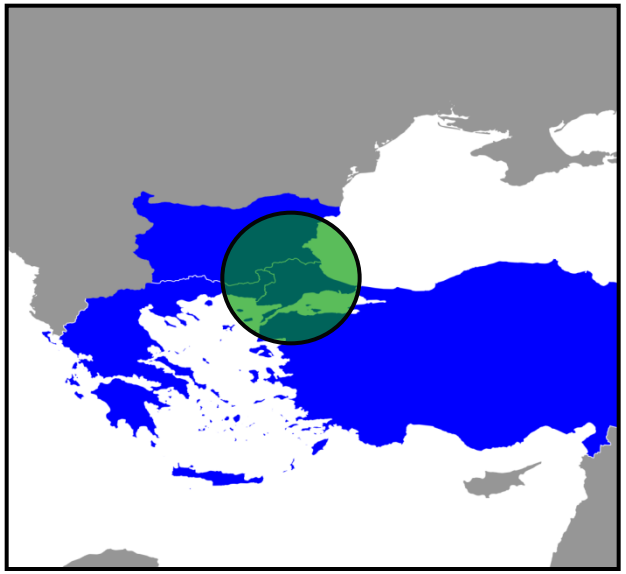
Risk based surveillance in Thrace region

Key achievement: establishment of a program in Thrace for risk-based surveillance to aid early disease detection and to maintain confidence in disease freedom.

- Risk-based approach to surveillance will allow improved early detection capacity and increased confidence in disease freedom.
- Initial workshop held in Istanbul in September 2012 for three countries, led by expert consultant.
- Follow-up workshop as side-event to Tripartite Thrace region meeting, Chania, February 2013.
- Surveillance activities to start soon; MoUs circulated, awaiting signature.



Risk-based surveillance: why it is useful

- Intuitive principles
  1. Old surveillance loses value (value of a survey this month versus same survey one year ago…)
  2. Confidence accumulates over time (ongoing surveillance activities)

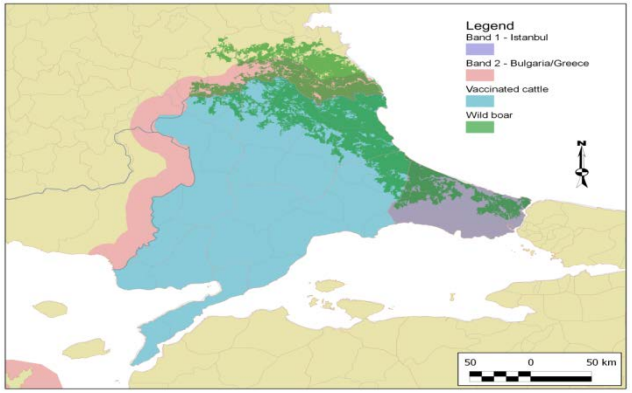
- How to describe these effects quantitatively?

Probability of freedom: Pr(D- | S-)

- Probability that the population is free from disease (at the design prevalence), given that surveillance found no positive animals
- Calculated using Bayes' Theorem

- Contributing factors
  - Surveillance sensitivity
    - Sample size, design prevalence, test Se, risk-based sampling
  - Multiple surveillance activities
    - e.g. serosurveillance + passive reporting + abattoir
  - Accumulation of historical evidence over **time**
  - Risk of introduction of disease over **time**

- Objective is no longer to regain FMD free status
- Provide ongoing evidence of freedom from disease
- Surveillance for early detection of disease incursions

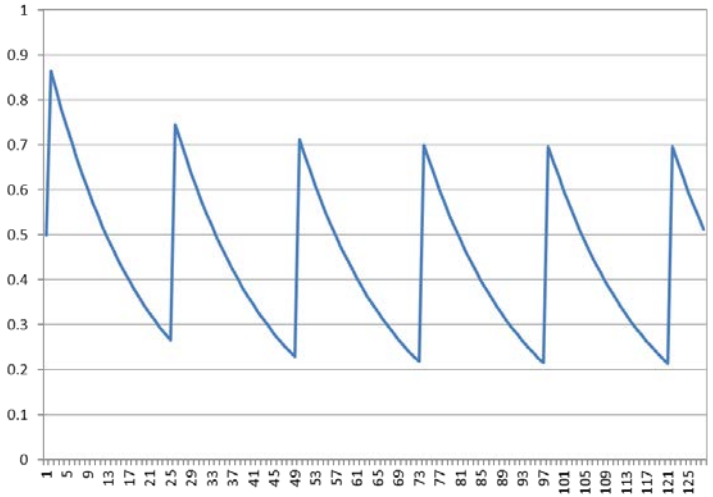


- early detection surveillance must be ***continuous***

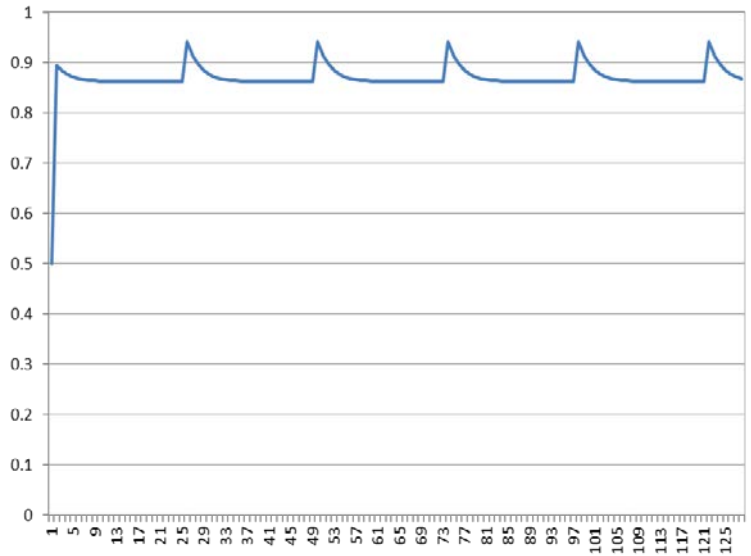
- ***design prevalence may be much lower*** than for demonstrating disease freedom

- ***high-risk sub-populations can be targeted***, if risk factors understood

- risk factors relate to ***consequence of infection*** as well as probability of infection



The effect of a survey with 95% sensitivity conducted every two years when the monthly risk of introduction of infection is 0.05. This frequency of surveillance is inadequate to achieve an ongoing high probability of freedom.

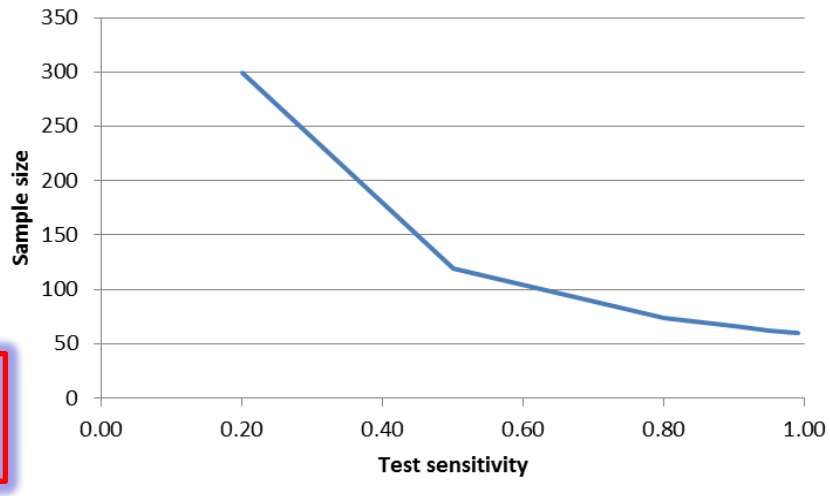


The same 2 yearly surveys, combined with two other ongoing surveillance components, each with a monthly sensitivity of 0.2 (for instance, passive reporting and abattoir surveillance).

Not all surveillance components need high sensitivity...

- The same surveillance sensitivity may be achieved using tests of different sensitivity, by modifying the sample size.
- Target surveillance sensitivity of 95% (doing representative sampling from a large population and using a design prevalence of 0.05):

Test sensitivity	Sample size
0.99	60
0.95	62
0.90	66
0.80	74
0.50	119
0.20	299



- Cheap tests of low Se (e.g. clinical examination of abattoir inspections) => same surveillance Se as high Se but expensive lab tests
- Only applicable if enough animals are examined.
- The overall cost of the low-Se test approach may be less

Risk-based sampling

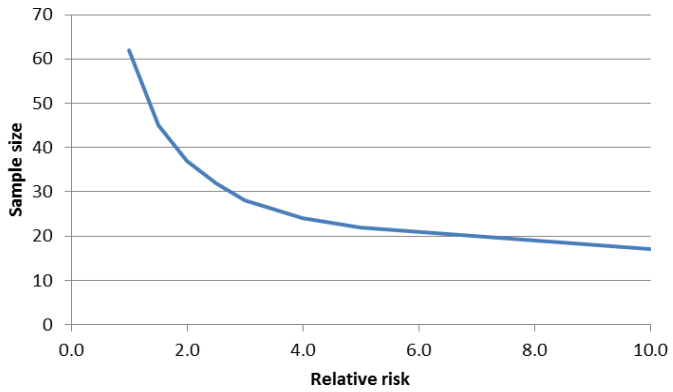
- More efficient approach to surveillance => able to achieve the same surveillance Se using smaller sample size
- Targets units with a higher risk of being infected
- Two factors – the strength of the risk factor used & degree of targeting

Relative Risk	Sample size
1.0	62
1.5	45
2.0	37
2.5	32
3.0	28
4.0	24
5.0	22
10.0	17

95% surveillance Se, test Se 95% & design prevalence of 0.05

Proportion from high risk group	Surveillance sensitivity
0%	29%
10%	34%
20%	39%
30%	43%
40%	47%
50%	51%
60%	54%
70%	57%
80%	60%
90%	63%
100%	66%

RR 2, 20% pop in high-risk group, test Se 95%, design prev 0.05, **total sample size = 10**



Home | Insert | Page Layout | Formulas | Data | Review | View

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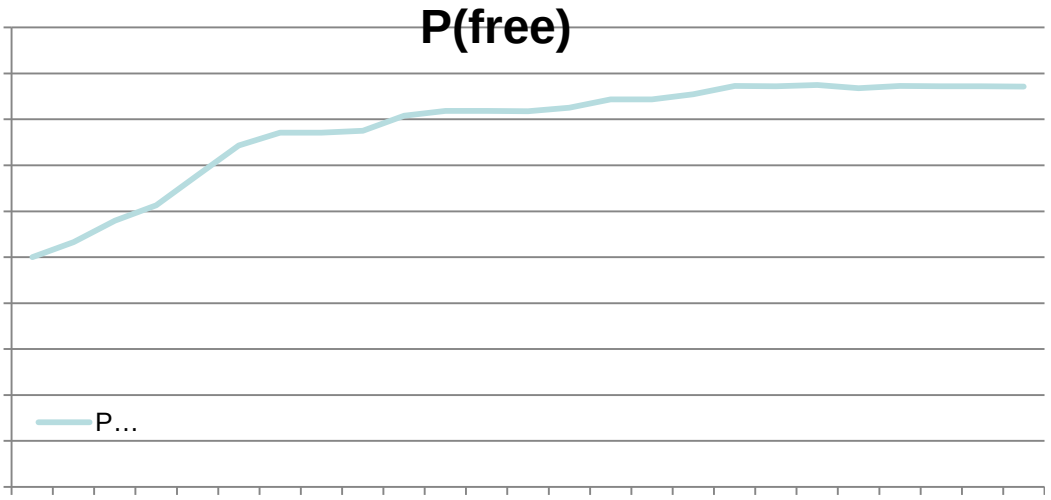
Calibri | 11 | Font

Wrap Text | Merge & Center | Alignment

B79

	A	B	C	D	E	F	G
1	**Analysis of FMD surveillance data to demonstrate freedom from infection**						
2							
3	**Parameters**						**Key**
4	**Design prevalence values**						User input
5	Herd level design prevalence	0.02	P^*_H				Calculated value
6	Animal-level design prevalence	0.2	P^*_A				
7							
8	**Probability of introduction**						
9	Annual P(intro)	0.02	annually				
10	Seasonal variation?	Yes					
11	Unadjusted monthly P(intro)	0.0017	monthly				
12	Monthly relative risk scores	Score	Adjusted P(intro)				
13	1	1	0.0007				
14	2	1	0.0007				
15	3	1	0.0007				
16	4	1	0.0007				
17	5	1	0.0007				
18	6	1	0.0007				
19	7	1	0.0007				
20	8	20	0.0129				
21	9	1	0.0007				
22	10	1	0.0007				
23	11	1	0.0007				
24	12	1	0.0007				
25							
26	**Herd-level risk factor**						
27	Risk factor name	Region	RR	PrP	AR	EPI	
28	High risk group	East	3	0.2	2.142857	0.042857	
29	Low risk group	West	1	0.8	0.714286	0.014286	
30							
31	**Prior probabilty of freedom**	0.5	Prior P(free)				
32							
33	**Surveillance sensitivty**						
34	Type	Combined Sensitivity					
35	Serosurvey	0.92					
36	Passive reporting	0.2					
37	Abattoir	0.3					
38	Surveillance type 4	0					
39	Surveillance type 5	0					
40	Surveillance type 6	0					
41							

Parameters | Data | Results | Graph



Summary of pillar 1 activities since 39th General Session

- Capacity building for FMD outbreak investigations: the real-time FMD training programme
- Training in modelling and decision support tools for FMD contingency planning
- Support to the West Balkans and Moldova: training, gap analysis and proposal for future support
- Maintaining confidence in disease freedom in South-East Europe: Development of a risk based surveillance programme for Thrace Region
- Support to World Reference Laboratory for services needed in Europe and the neighbouring region
- Bringing policy makers and FMD scientists together; the 2012 EuFMD Open Sessions at Jerez, Spain

Support to WRL, Pirbright

Key achievement: WRL proficiency test service is offered to all non-EU EuFMD member states and many neighbouring countries, with participation increasing from 2008 to 2012.

WRL, Pirbright supported by EuFMD funds of USD150,000 per year for 2011/12, with similar support for 2013 being arranged.

Summary of pillar 1 activities since 39th General Session

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- Bringing policy makers and FMD scientists together; the 2012 EuFMD Open Sessions at Jerez, Spain

EuFMD Open Session, October 2012 Jerez de la Frontera, Spain

- **Key achievement**: Bringing together policy makers and scientists at what has become the biggest FMD research meeting in the world
- A unique forum where scientists and policy makers can meet to discuss cutting edge FMD reseach
- Open discussions of how science can inform policy
- Over 220 delegates
- Over 70 oral and 30 poster presentations
- Multiple side-meetings and parallel sessions

Summary of pillar 1 activities since 39th General Session

- Capacity building for FMD outbreak investigations: the real-time FMD training programme
- Training in modelling and decision support tools for FMD contingency planning
- Support to the West Balkans and Moldova: training, ga… proposal for future support
- Maintaining confidence in disease freedom in South-Ea… Development of a risk based surveillance programme f…
- Support to World Reference Laboratory for services needed in Europe and the neighbouring region
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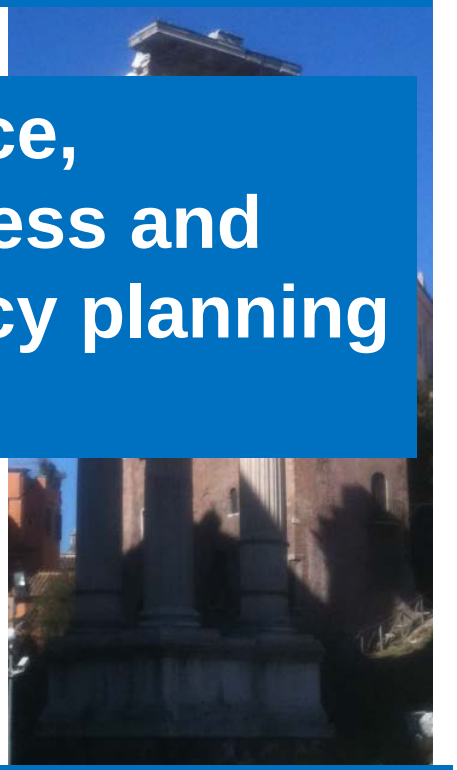
Field training issues

Surveillance, preparedness and contingency planning issues



Discussion of the issues

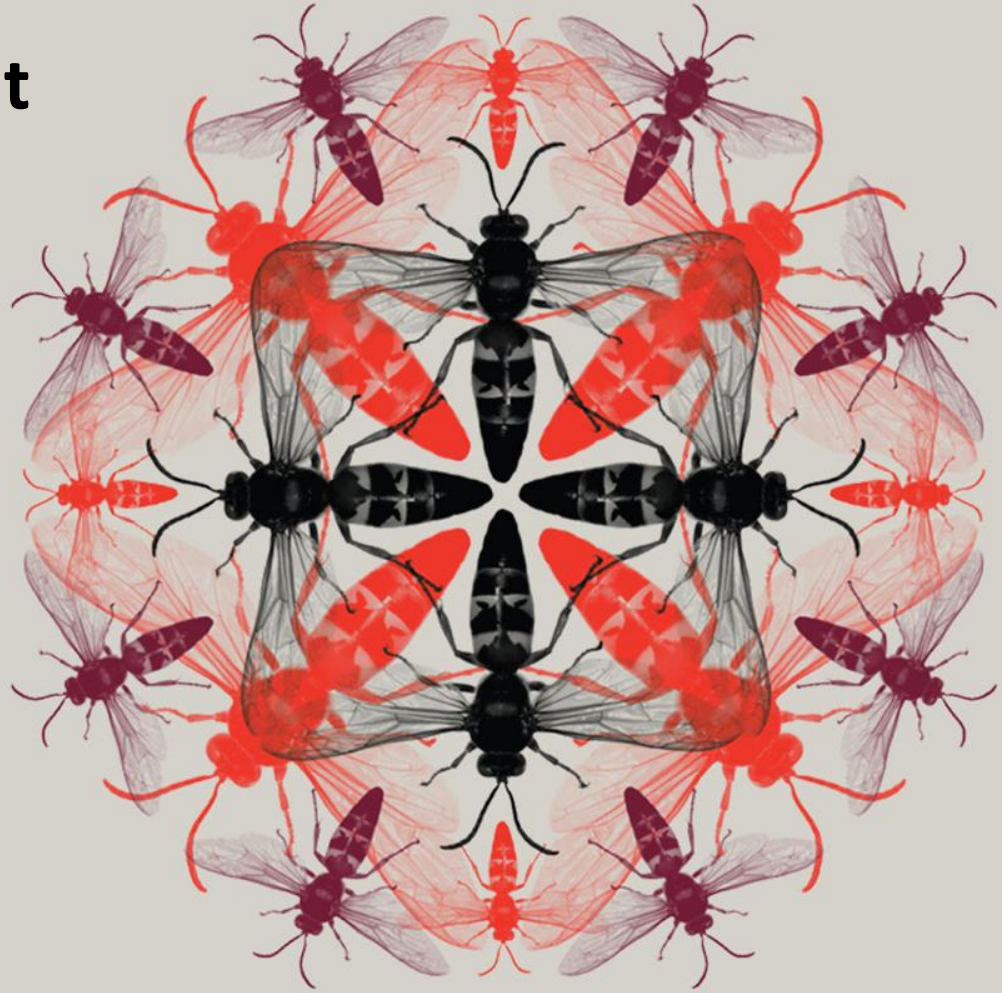
Australian Government

Department of Agriculture, Fisheries and Forestry

Australian Government collaboration

with

EUFMD



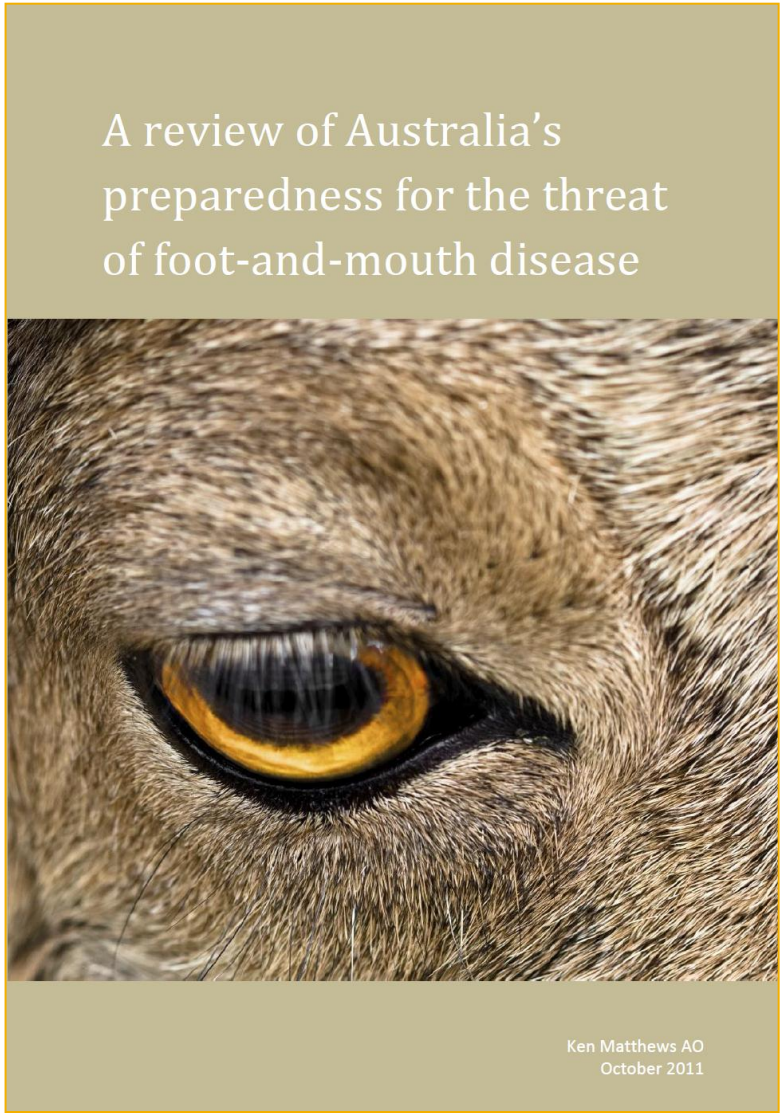
Sharon Turner, Director FMD Taskforce

15 May, 2013

Australia's renewed focus on FMD

- November 2011
- Concluded that Australia has a strong national biosecurity system
- Identified 11 key areas where preparedness and response capacity could be improved

Key message:
More preparedness work needed to be done



Eleven key issues

Issue 1: *Ability to anticipate risks and translate intelligence into action*

Issue 2: *The standard of assurances that Competent Authorities are operating to Australian requirements*

Issue 3: *The possibility of illegal importation*

Issue 4: *The effectiveness of swill feeding prohibitions*

Issue 5: *Australia's national capacity to sustain a large-scale response*

Issue 6: Traceability arrangements in the sheep industry

Eleven key issues (cont'd)

Issue 7: *Policy on the use of vaccination for FMD*

Issue 8: *Preparation for the known challenges of carcass disposal*

Issue 9: *The possibility that FMD may not be readily Detected*

Issue 10: *A lack of clarity about responsibility and accountability for national FMD planning processes*

Issue 11: *Planning for community recovery*

Australia's views on FMD

- FMD widespread
- Continuous threat to free-countries
- Continuous impact on livelihoods of smallholders
- Continuous impact on economic development
- Continuous impact on food security

Global FMD Strategy

- Australia committed to the objectives of the Global FMD Strategy:
  - Alleviate poverty
  - Improve livelihoods
  - Protect and further the global and regional trade in animals and animal products.
  - Improve FMD control in endemic regions thereby protecting other regions of the world.

- Global community targeting FMD at source: both regional and global objectives achieved.

Australia- EUFMD collaboration

- Avenue for Australia's contribution to global efforts
- Support existing EUFMD efforts
- Addressing common interests
- Building Australian capacity
  - Address domestic capacity gaps
  - Fulfill international obligations eg. IAHER

Real time FMD training

- Increase the likelihood of early detection
- Improve response capacity
- Increase awareness of EAD response arrangements
- Increase collaboration between government and private veterinary practitioners
- Build capacity in host country
- Contribute to objectives of Global FMD strategy
- Improve capacity to fulfill international obligations (eg. IAHER)

International Animal Health Emergency Reserve

- Agreement to provide resources in an EAD outbreak
  - UK
  - Ireland
  - USA
  - Australia
  - New Zealand
  - Canada

Success of collaboration - FMD training

- Nationally networked training – new partnerships across the country
- High-profile: media, biosecurity organisations, private groups, politicians
- EUFMD recognised as leaders
- Strengthened relationships with key stakeholders
- Core of FMD advocates
- Minister contacted by industry stakeholders
    - Full potential of collaboration to be explored

FMD VACCINE BANKS
A NETWORK APPROACH

Dr Jef Hammond
World Reference Laboratory for FMD
The Pirbright Institute
U.K.

Background & Concept

- 2004, OIE initiative – *Ad hoc* Group on Antigen & Vaccine Banks for FMD

"..to form a network of banks for exchange of information on cross-protection of vaccine antigens

".. harmonization of methods and standards

- 2006, progressed by EU Funded project
- 2009, endorsed at OIE/FAO Global Conference on FMD, Paraguay

..it's not just about sharing vaccines

THE Pirbright INSTITUTE

WRLFMD

INTERNATIONAL FMD VACCINE STRATEGIC RESERVES NETWORK

Supporting Global FMD Control

Annual Report 2010-2011

Prepared by Dr Jef Hammond December 2011

In May 2010, Dr Jef Hammond presented the network concept to the Quadrilateral Animal Health Committee (Quads) group at OIE HQ prior to the general session.

Presentations were also made to the EU (Dr Alf Fuessel) and the UK CVO (Dr Nigel Gibbens) and Defra.

The concept was favourably received and development of the network endorsed by all parties and the title of International FMD Vaccine Strategic Reserves Network' (IVSRN) was agreed

Establishment of the network was strongly endorsed by the OIE and FAO

INTERNATIONAL FMD VACCINE STRATEGIC RESERVES NETWORK

Supporting Global FMD Control

Annual Report 2010-2011

Prepared by Dr Jef Hammond December 2011

The network can facilitate:

- sharing of information and best practices
- Avoid duplication saving time, money and limited resources
- rationalisation and sharing of reagents
- independent testing of FMD vaccines
- monitoring of developments relating to emergency FMD vaccines
- identification and promotion of areas of research to improve emergency FMD vaccine reserves
- provide a unified voice in discussions with vaccine manufacturers
- Potential to share banked antigens through a 'virtual international FMD vaccine bank'

INTERNATIONAL FMD VACCINE STRATEGIC RESERVES NETWORK

Supporting Global FMD Control

Annual Report 2010-2011

Prepared by Dr Jef Hammond December 2011

Network outputs:

- A paper 'Toward a Global FMD Vaccine Bank Network' was published b OIE (Barnett et al, 2010)
- ToR were finalised in November 2010 and signed off by USA, Canada, Mexico, Australia and New Zealand
- NAFMDVB provided vaccine to South Korea
- NAFMDVB/ CFIA/Pirbright research project on vaccine matching
- An annual report has been produced and circulated to members
- A paper discussing the period for return to *FMD freedom* status following an outbreak was prepared (Geale et al 2012).
- Face to face meetings arranged to coincide with international forums.
- Meetings were held at 2nd global OIE/FAO FMD conference in Bangkok June 2012 and EuFMD Open session in Jerez October 2012.

INTERNATIONAL FMD VACCINE STRATEGIC RESERVES NETWORK

Supporting Global FMD Control

Annual Report 2010-2011

Prepared by Dr Jef Hammond December 2011

2013 and onwards

- From 2010 to 2012 WRLFMD Pirbright chaired the network and In late 2012 the leadership of the network was rotated to New Zealand
- Pirbright continue to provide web support and global surveillance data to the network.
- At the Quads meeting held recently in Australia the Chief Veterinary Officers of Australia, Canada, US and NZ re-emphasised their commitment to the network, and their belief that it will continue to develop into a very valuable initiative.
- The previous TOR were updated with an Addendum, and a meeting schedule with a provisional agenda was agreed by all members. As a first action it was agreed that each of the vaccine manufacturers would be approached in term with a questionnaire about their vaccines, and that they would be invited to participate in a teleconference.
- The next teleconference will be held on the 24 April 2013.

Proficiency Testing Scheme 2012

- During 2012, the European Union Reference Laboratories for FMD and SVD, in association with WRLFMD®, organised a round of combined FMD/SVD proficiency test scheme to help quality assure FMD and SVD diagnosis.
- The first priority was to supply proficiency panels to member states of the EU and of the EuFMD, but the panels were also made available more widely, including targeting of the OIE/FAO FMD Network Laboratories.
- The laboratory capabilities evaluated in this PTS were outbreak detection by virus, virus antigen and virus genome detection and diagnosis by serology.

Proficiency Testing Scheme 2012

Details of PTS:

- 59 labs took part in this study mostly supported by the EC and the EuFMD.
- 26 labs were from EU member countries
- 33 labs were from Non-EU countries.
- Participants were sent a package containing uniquely coded and labelled samples for testing
- Information was collected on tests in use, strains of virus used in tests, extent of ongoing testing, and quality accreditation status of tests.

Proficiency Testing Scheme 2012 EuFMD funding

Countries participating	Paid by FAO
Algeria	EUFMD
Armenia	EUFMD
Azerbaijan	EUFMD
Belarus	EUFMD
Botswana(BVI)	EUFMD
Croatia	EUFMD
Egypt	EUFMD
Georgia	EUFMD
Iran	EUFMD
Israel	EUFMD
Morocco (Zro)	EUFMD
Norway	EUFMD
Russia(ARRIAH)	EUFMD
Serbia	EUFMD
South Africa(OVI)	EUFMD
Switzerland	EUFMD
Tunisia	EUFMD
Turkey	EUFMD
Ethiopia	EUFMD
Lebanon	EUFMD
Thailand	EUFMD
Total (labs/countries):21	

Countries not participating
Albania
Bosnia (Velic)
Iraq
Kenya
Kosovo
Libya
FYR Macedonia
Moldova
Montenegro
Syria
Sudan
Ukraine
Total(Labs/countries): 12

Proficiency Testing Scheme 2012 EuFMD funding

Countries participating	Paid by FAO
Algeria	EUFMD
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Botswana(BVI)	EUFMD
Croatia	EUFMD
Egypt	EUFMD
Georgia	EUFMD
Iran	EUFMD
Israel	EUFMD
Morocco (Zro)	EUFMD
Norway	EUFMD
Russia(ARRIAH)	EUFMD
Serbia	EUFMD
South Africa(OVI)	EUFMD
Switzerland	EUFMD
Tunisia	EUFMD
Turkey	EUFMD
Ethiopia	EUFMD
Lebanon	EUFMD
Thailand	EUFMD
Total (labs/countries):21	

Thank You

Countries not participating
Albania
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Iraq
Kenya
Kosovo
Libya
FYR Macedonia
Moldova
Montenegro
Syria
Sudan
Ukraine
Total(Labs/countries): 12

West Eurasia: Report on Activities

Including Lessons Learned for PCP/FMD Management

Presented by: Melissa McLaws

Acknowledgements

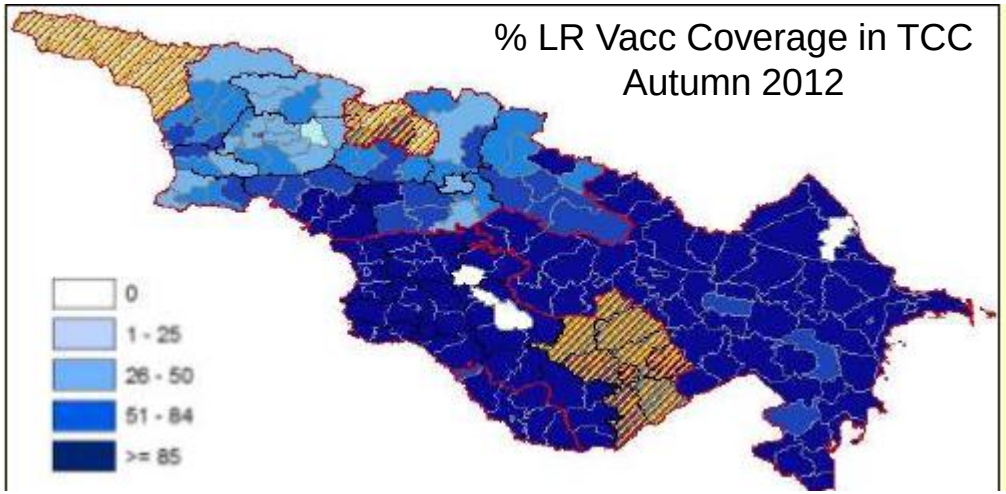
- **Turkey**: Naci Bulut, PEP-C trainees (Beyhan Sareyyupoglu & Yener Sekercan), Nahit Yazicioglu *and others*
- **TCC**: Satenik Kharatyan, Tamilla Aliyeva, Zurab Rukhadze, PEP-C trainees (Otar Parkadze, Ayten Hajiyeva, Smbat Ghushchyan, Lasha Avaliani) *and others*
- **IR of Iran**: Naser Rasouli, Darab Abdolahi, Javad Emami, PEP-C trainees (Parvaneh Seifori, Abbas Ganji) *and others*
- Chris Bartels, Carsten Potzsch, Kees van Maanen, Labib Bakkali, Theo Knight-Jones, Giancarlo Ferrari *and others*
- **EuFMD :** Keith Sumption, Eoin Ryan, Nadia Rumich, Manuela Zingales, Anda Fabrizi, Rossana Cecchi, Leonardo Leon *and others*
- European Commission support

Outline

- Context
- Approach
- Activities and Achievements
- Lessons Learned

Animal Market in Iran

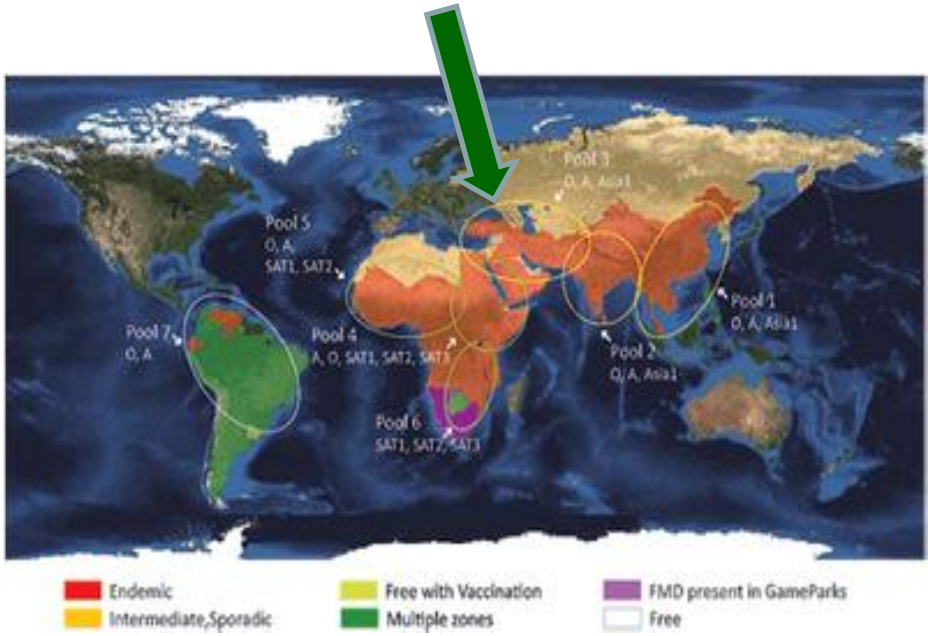
PEP-C outbreak investigation: photo with trainees from Turkey, Iran and Armenia



Context

- Agreed in 38th General Session EuFMD strategy 4 years ago to support FMD control in this region, to reduce the risk to SE Europe
- Diverse region:
  - Politically, climate, animal density, animal husbandry
- FMD endemic
  - Serotypes O, A, Asia-1
- FMD control primarily relies on vaccination
  - Diverse suppliers, schedules, coverage

West Eurasia: Virus Pool 3



- Animal movements important in FMD spread within and between countries

Approach

- Support to W. Eurasia Roadmap
  - Annual regional meeting with 14 countries, PCP evaluation and information sharing
  - W. Eurasia Laboratory Network development (WELNet)
- Country projects:
  - Trans-Caucasus countries (Armenia, Azerbaijan, Georgia)
  - IR of Iran
- Capacity building
  - Training: Practical Epidemiology for Progressive Control (PEP-C)

Activities: Support to W. Eurasia Roadmap

- Regional meetings for revision of progress along PCP in 2012 and 2013
- Development of 'Assessment tool'
  - Questionnaire used by countries in 2012 and 2013

	2008	2009	2010	2011‡	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Kazakhstan	1	1	1		1	1*	2	2	3	3	4	4	5	5	5	5	5	5
Kyrgyzstan	1	0	0		1	1												
Tajikistan	0	1	1		1	1	2	2	2	3	3	3	3	3	3	3	3	3
Turkmen	0	0	0		1													
Uzbekistan	0	1	0		1													
Afghanistan	0	1	1		1	1												
IR of Iran	2	2	2		2	2	2	2	3	3	3	3	4	4	4	4	4	4
Pakistan	0	1	1		1	1	2	2	3	3	3	3	4	4	4	4	4	4
Turkey - Anatolia	1	2	2		2	2**	2	2	2	2	3	3	3	3	3	4	4	4
Syria	3	1	1			1*	2	3	3	3	4	4	4	5	5	5	5	5
Iraq	1	1				1*	2	3	3	3	3	3	4	4	4	4	4	4
Armenia	2	2	2		2	2**												
Azerbaijan	2	2	2		2	2**	2	2	3	3	3	3	4	4	4	4	4	5
Georgia	2	1	1		1	1*	2	2	3	3	3	4	4	4	4	5	5	5

‡ No Roadmap Meeting was held in 2011, therefore 2010 Stages maintained

* To move to Stage 2 pending receipt of Control Strategy

** Will be changed to Stage 1 unless copy of control strategy received by end May 2013

Preliminary assessment of country Stage position for 2013, together with the expected progression to 2025

Activities: Support to W. Eurasia Roadmap

Roadmap is now established as **regular platform** for information sharing and regional risk assessment, coordination of control measures and assistance, as well as PCP progress review

Activities: Support to W. Eurasia Roadmap

W. Eurasia Laboratory Network (WELNet)

- Regional laboratory support
- Meetings in conjunction with WE. Roadmap
- Samples from Iraq recently
  - Circulation of A Iran05 SIS-10
- Sequences shared between Iran and WRL

TCC Project 2011-2013: Summary

- Overall Objective: strengthen FMD surveillance and control in TCC to assist progression in West Eurasia PCP.
- Started May 2010; due to finish Dec 2012 but extended to March 2013 due to delays
- EC trust fund: USD 2,000,000
- Follow-up to earlier FMD support projects, since 2004.
- 3 national consultants, 1 international consultant, 1 project secretary.

TCC Project: Objectives

1. Improved FMD monitoring and control

- TCC to advance in PCP
- Vaccination campaigns every 6 months, risk-based (funded by project in 2010 & 2011)
- Serosurveys: NSPs, SP, investigation of NSP clusters
- Simulation exercises
- Epidemiology training (PEP-C)
- Monthly data on demographics, vaccination and surveillance provided to EuFMD
- Monthly reports to EuFMD

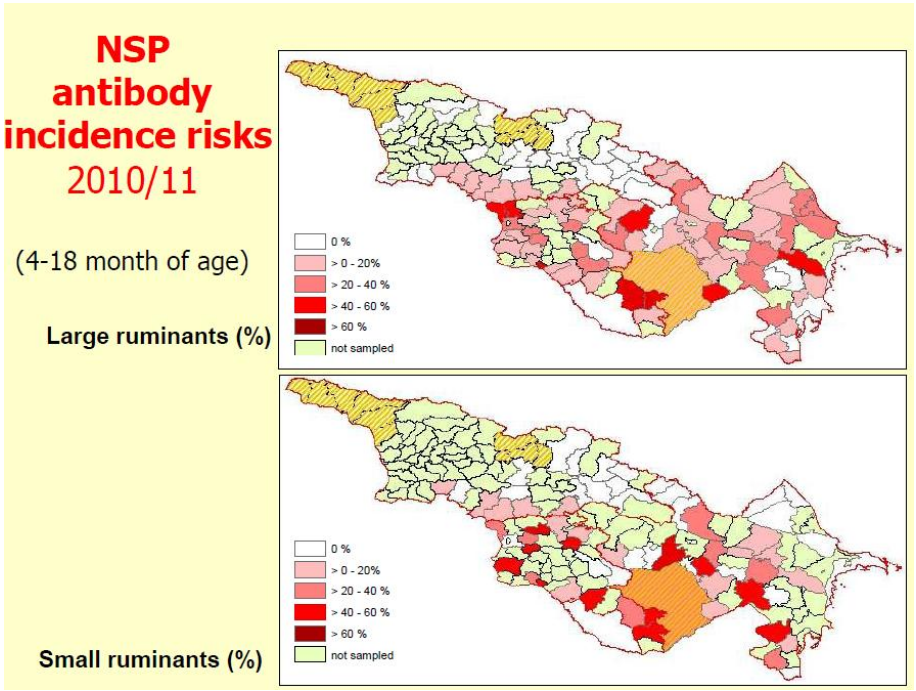
2. Enhanced laboratory capacity to support FMD monitoring and surveillance

- NSP, SP and Ag ELISA and PCR capacity developed
- Investigations of NSP clusters: probang samples, swabs, PCR, sequencing
- Field outbreak investigation training
- Sample management decision trees & reporting arrangements in place
- Annual serosurvey
- Participate in WRL PTS

Activities: TCC project 2011-13

Key achievements I:

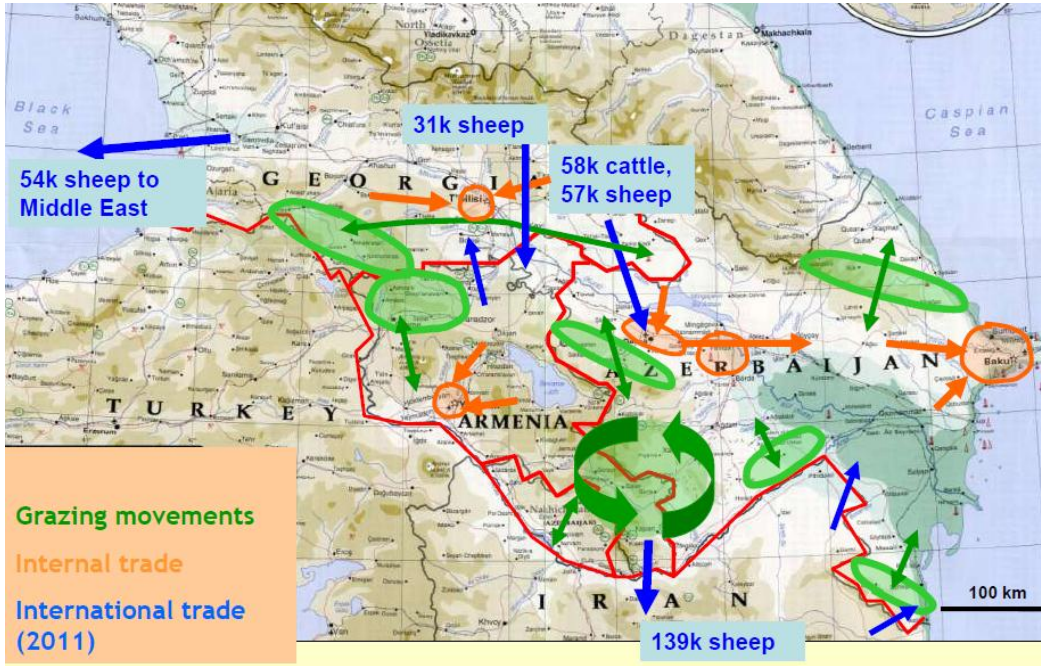
- PCP based national control measures in place in Armenia, Azerbaijan and Georgia
- 2013: Full handover of national responsibilities for vaccination programme maintenance
- Improved risk-based vaccination strategies



Activities: TCC project 2011-13

Key achievements II:

- Awareness of risk posed by animal trade and migration patterns
- Improved FMD diagnostic capacity and surveillance activities
- Regular (monthly) reporting of activities and regional cooperation



Ruminant movements in the TCCs

TCC Project: Recent activities

- March 2012: 150,000 doses of trivalent Merial vaccine supplied by EC to act as regional strategic reserve for TCC. Expires March 2014.
- June 2012: mission to assess vaccination campaign quality control (cold-chain, following strategy, implementation).
- August 2012: investigation of NSP positive clusters, probang sampling
- November 2012: Desktop simulation exercise for all three TCC, held in Georgia
- February 2013: Real-time PCR training course, at which samples from August NSP cluster mission were analysed.
- March 2013: integration of monthly data reports with EMPRES-i database system

FAO/GOVERNMENT COOPERATIVE PROGRAMME

Project of the Government of the Islamic Republic of Iran

Combating Foot-and-mouth Disease through enhanced and co-ordinated surveillance activities; Phase III of the FMD surveillance centre initiative.

- *3 yr project, effective starting date: Oct 2010*
- *EC Trust Fund Contribution: $ 956,500 USD*

Activities: Iran Project

Key achievements

1. Development of risk-based national FMD control strategy
2. Development of sub-national laboratory network
3. Improved FMD surveillance
4. Vaccine potency test performed to OIE standards
5. Large NSP serosurvey conducted in W. Azerbaijan province
6. Progress in W. Azerbaijan province

Activities: Iran Project

Key achievements

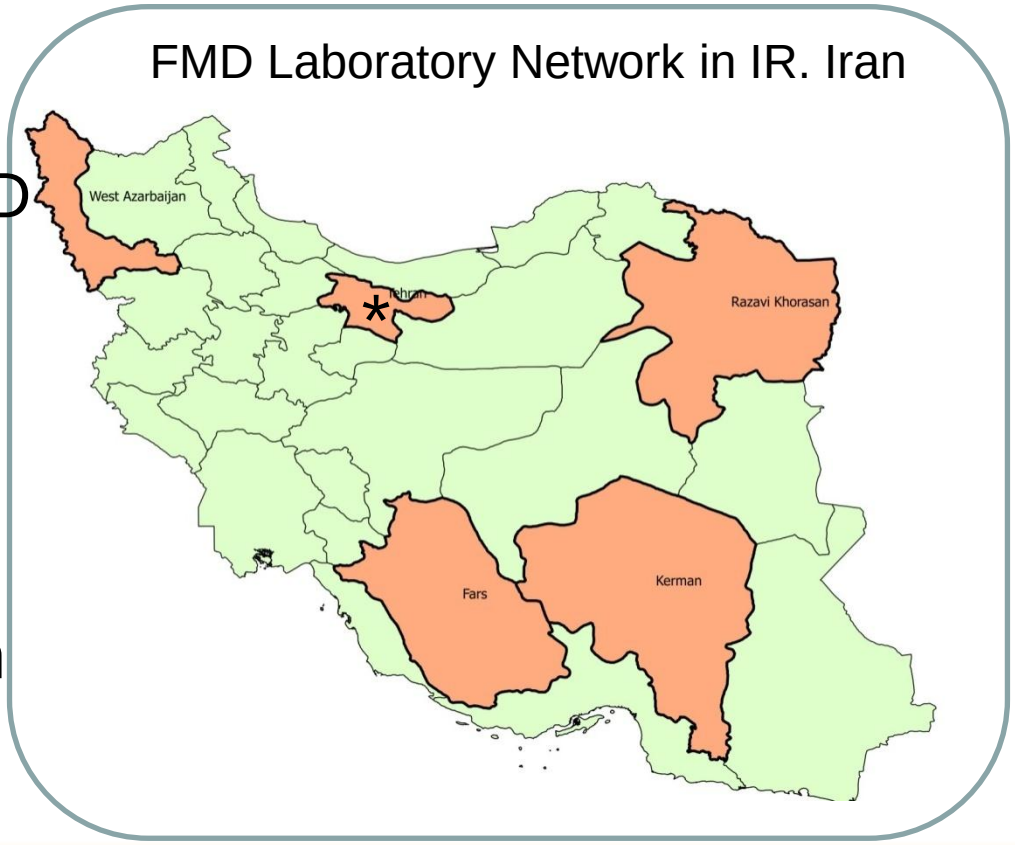
1. Development of risk-based national FMD control strategy
   - First documented control strategy ever produced
   - Based on Global Strategy, input from EuFMD missions
   - Main sections: Targeted surveillance, epidemiological studies, biosecurity, vaccination, training and information exchange, strengthening veterinary services
   - Surveillance and vaccination protocols vary by husbandry system, geographic location and FMD status

Activities: Iran Project

Key achievements

2. Development of sub-national laboratory network

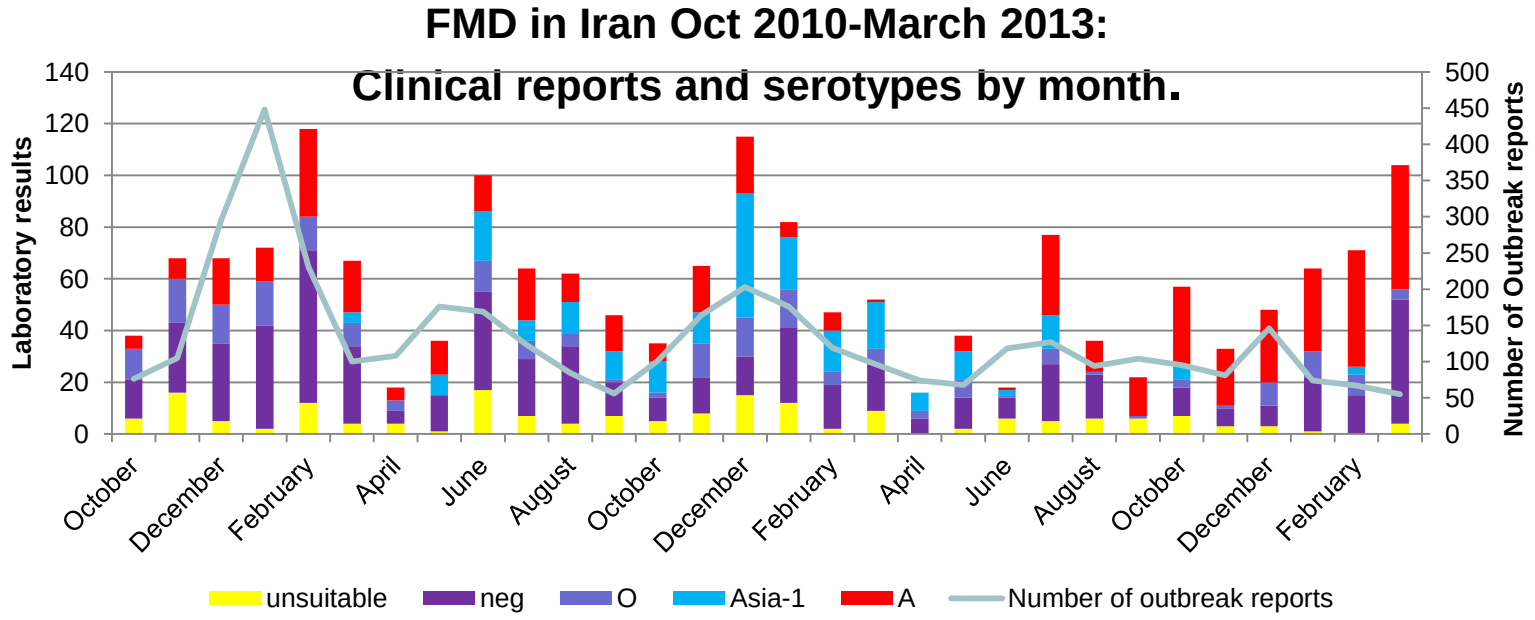
- Central Veterinary Laboratory officially nominated as National FMD Reference Laboratory (*on map)
- 4 provincial subnational laboratories: diagnose serotype within 24 hrs
- Quality assurance program developed
  - NSP and Ag ELISA



Activities: Iran Project

Key achievements

3. Improved FMD surveillance
   - early identification of serotype Asia-1 incursion..allowed for advance warning for Turkey
   - Currently serotype A currently dominant



Key achievements: Iran project

4. Vaccine potency test performed to OIE standards

- Potency test undertaken by Iranian vaccine manufacturer (Razi Institute)
- EuFMD expert provided onsite technical support over course of 2 missions
- New Double Oil Emulsion tetravalent vaccine tested, Serotype O challenge strain was used
- IVO has requested further potency testing from Razi to start immediately

Activities: Iran Project

Key achievements

5. Large NSP serosurvey conducted in W. Azerbaijan province

- Demonstrated widespread exposure to FMDV
  - 80% of epi-units and 40% calves
- Methodological advances to interpret results
  - Increased ELISA cut-off to be more certain that positive results due to infection vs. vaccination
- Subnational laboratory analysed samples, results confirmed by IZSLER in Brescia
- Results presented at Intl Epidemiology conference (ISVEE) by Dr. J. Emami from WAZB province

Key achievements

6. Progress in W. Azerbaijan province:

- Development of local laboratory epidemiology capacity, FMD taskforce
- NSP serosurvey and risk factor study
- Training and studies in Outbreak investigation : highlight importance of animal markets
  - Innovative animal marketing project to be piloted
- Value chain workshop

Iran project: Other noteworthy Activities

Animal Movement:

- Value chain workshop in W. Azerbaijan
- Market survey done, (data input/analysis ongoing)
- Animal Identification and Registration:
  - Consultant travelled to Iran to advise
  - Study tour to Montenegro

Training:

- 4 Iranians included in Practical Epidemiology for Progressive Control (PEP-C) training
- IVO initiated own epi training in collaboration with University in Tehran

Note: financial sanctions have delayed and impeded some activities

Activities: Practical Epidemiology for Progressive Control (PEPc) training

- 4 week training course
- Develop capacity in epidemiology (and socio-economics)
  - Skills to progress along PCP

➢ Problem-based, student oriented learning approach

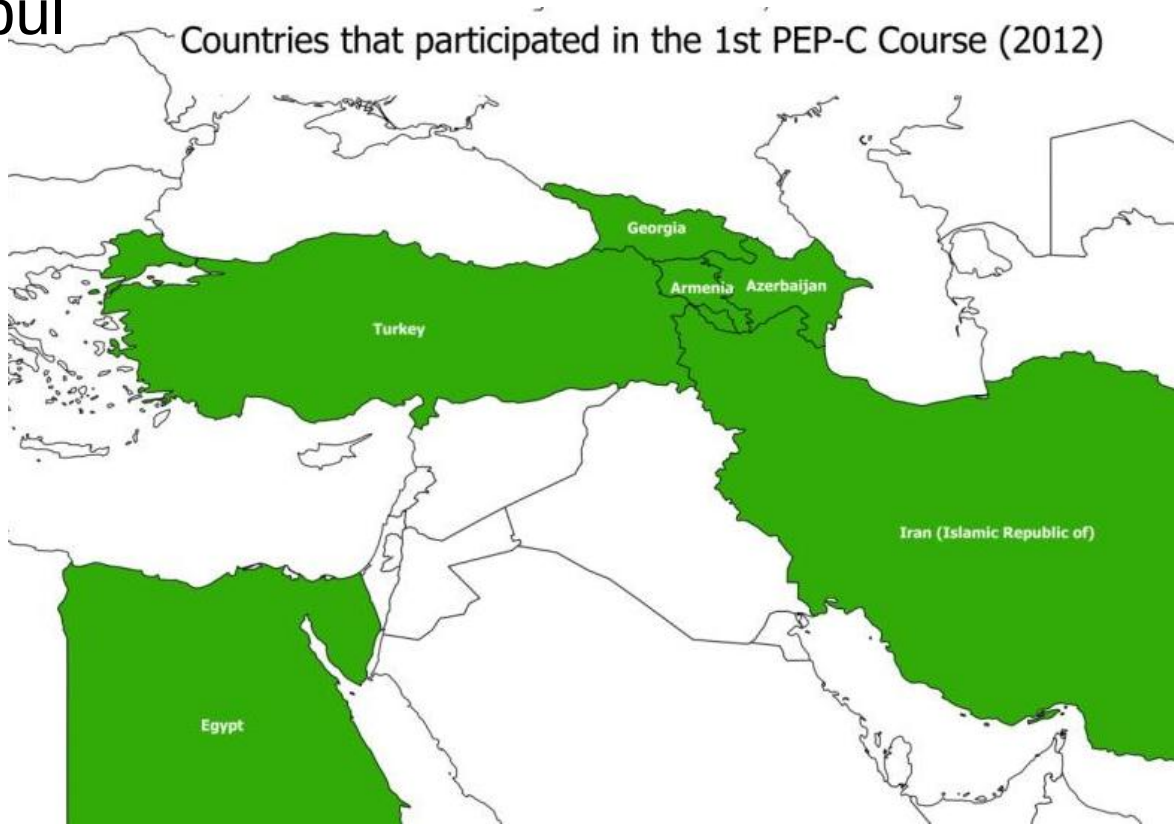
- Material developed for the course: Fit for Purpose
- Short lectures, Case-studies, problem solving, Group discussions, Field trips, homework
- Emphasis on active participation!!

Activities: PEPc training

- ✓Week 1: Outbreak investigation
- ✓Week 2: Socio-economics: value chains, impact assessment
- ✓Week 3: Surveys and Surveillance
- ✓Week 4: Designing a disease control strategy

Activities: PEPc training

- 1° course held in Istanbul Sept-Dec 2012
  - 1 week/month
- 6 countries:
  - PCP Stages 1 & 2
- Trainees from Vet Services
- Development regional epidemiology network



Lessons Learned for PCP/FMD Management

1. Regional approach/network is a good model
   - applied in TCC project, PEP-C & WELNet
   - countries share circulating viruses and challenges to control (eg animal movements, biosecurity, insufficient vaccine),
   - Optimise resources by development of tools and expertise available at regional (& global!) level
     - Laboratory (WELNet), Epidemiology, Socio-economics
2. Focus on Management of control
   - Development of risk-based National strategies:
   - Setting objectives, monitoring implementation and impact
   - Comprehensive approach: beyond vaccination

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

Thank you!

Report on activities in response to the SAT2 crisis

Pillar 2

Eoin Ryan

EuFMD Secretariat

Summary of key points

- Rapid response missions to Egypt following SAT2 incursions
- Introduction to Egypt of PCP-based national strategy development process
- Affected and at-risk countries trained and supplied with reagents to detect SAT2 incursions soon after crisis began
- Training provided to affected and at-risk countries at regional workshops on surveillance and management strategy for FMD
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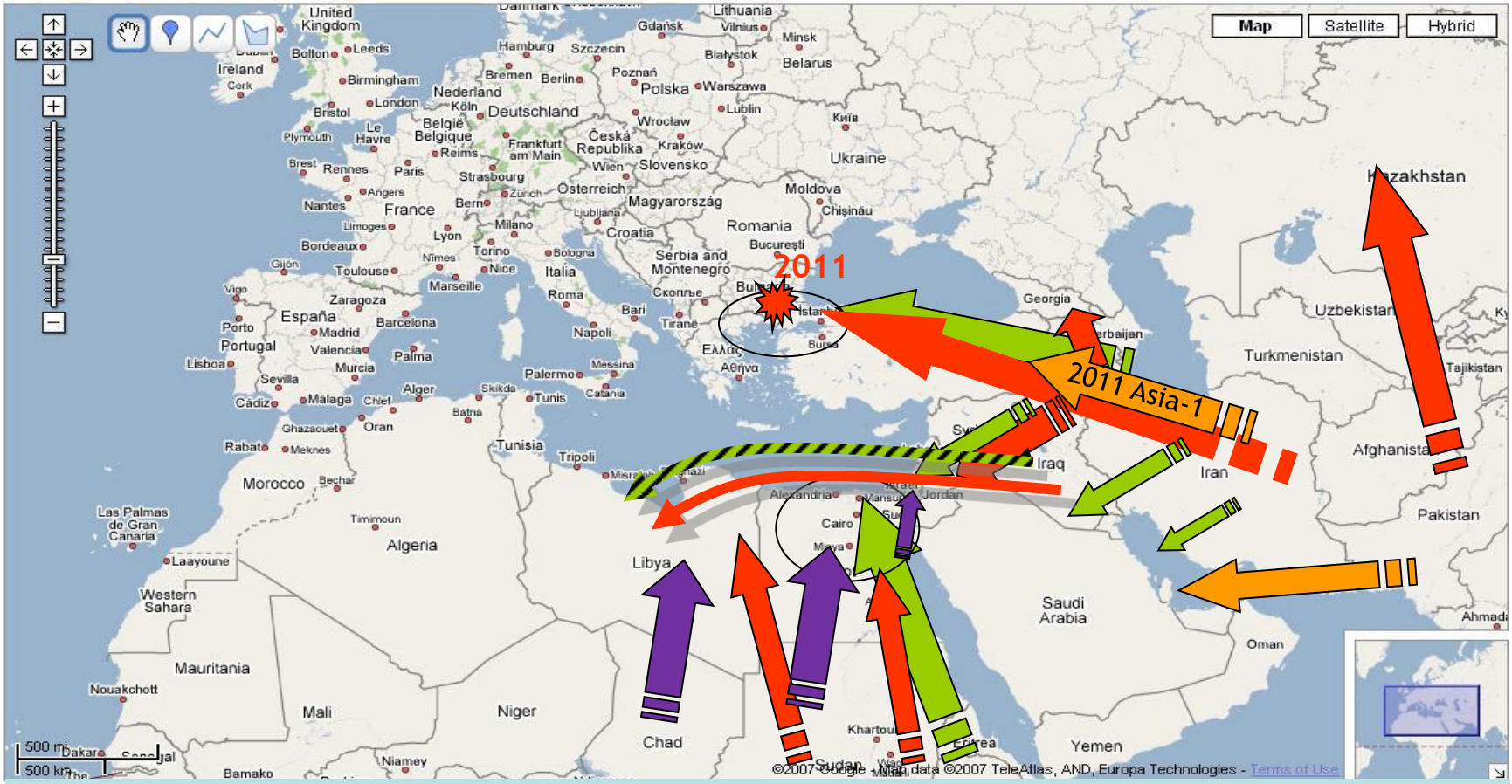
2010-2012: FMD incursions into North Africa and West Eurasia



Initial Detection of SAT2 in Egypt and Libya

- Final workshop of EuFMD/EC Egypt project to support PCP activities, including diagnostics, held 29/2/12 - analysis of lab results and epidemiological situation
- **SAT2** in Egypt confirmed by sequencing on 6/3/12 in Cairo lab (AHRI); subsequently confirmed in samples sent to WRL (two separate but related sub-lineages)
- Also detected in Egypt : **exotic type A virus** and **exotic type O virus**, both of sub-Saharan origin, unrelated to West Eurasia O and A viruses in Egypt
- Libya: samples taken from Benghazi (East Libya) in February tested positive for **SAT2** - different sub-lineage to Egyptian SAT2
- **Type O of sub-Saharan origin** also detected in samples taken near Benghazi during CMC-AH mission – very closely related to Egyptian type O
- Type O detected in samples from Tripoli (CMC mission): PanAsia2$^{Ant\text{-}10}$ sublineage

EuFMD Rapid Assessment Missions to Egypt

Key achievements: rapid deployment of first mission (within 5 days of SAT2 confirmation); series of follow-up missions; introduction of PCP-based approach to developing strategy

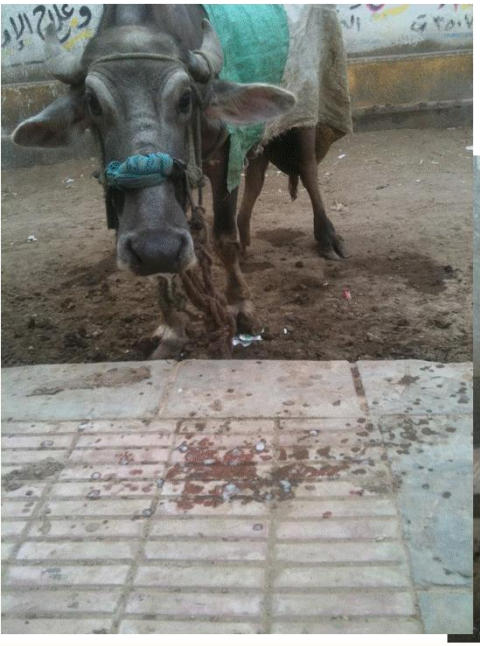
Objectives:

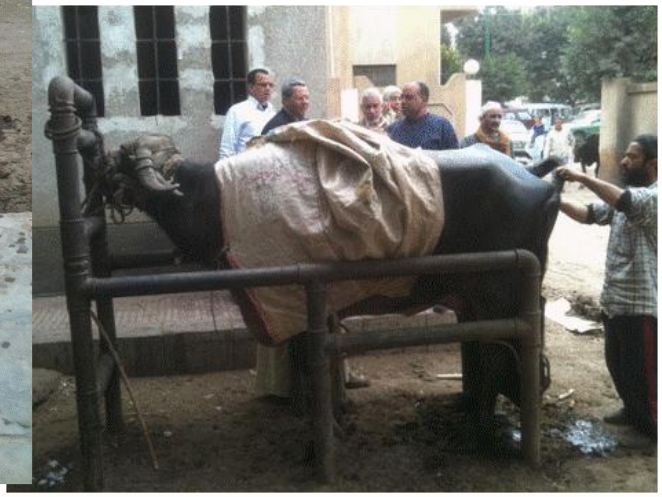
- undertake a rapid assessment of the outbreak situation
- make preliminary recommendations to the Egyptian authorities on actions to be taken, particularly those applicable in the immediate and short term, that could reduce the spread of disease
- collect baseline information to facilitate further FAO technical support.
- develop longer-term PCP-based strategy for FMD control

Biosecurity

District Veterinary Office

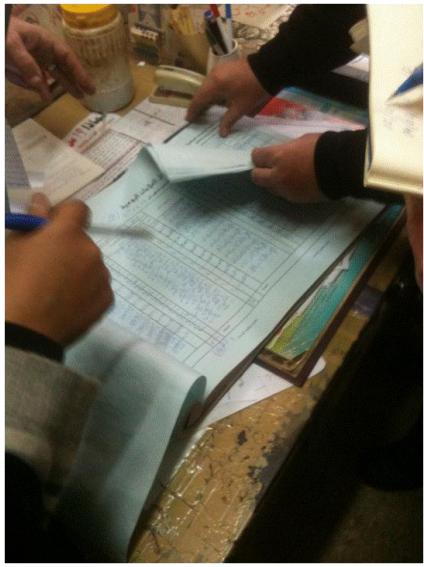
- Mixing of clinical FMD cases
- No biosecurity
- No awareness



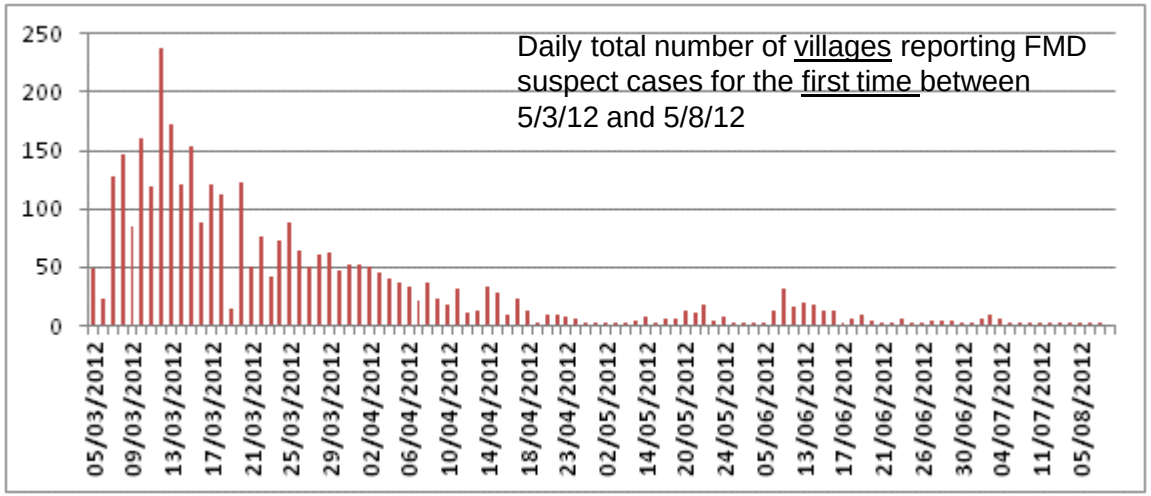


Other support activities to Egypt

- Lab training plus antigen ELISA kits supplied, with technical support afterwards
- Vaccination: support for production of SAT2 vaccine, advice on strategy and post-vacc surveillance
- Epidemiology: assistance with active surveillance, assessment of dynamic trends
- Virology: samples sent to WRL
- Coordination meeting in Cairo in May: discussion of strategy and response
- National consultants recruited, providing monthly reports
- Training on diagnostics in IZSLER for AHRI staff supported



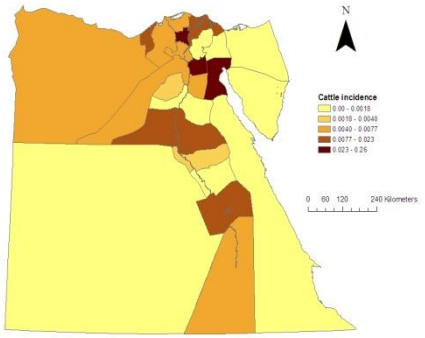
Proposed further support to Egypt



Daily total number of villages reporting FMD suspect cases for the first time between 5/3/12 and 5/8/12

Four separate sub-Saharan incursions:
- Two SAT2 lineages
- Sub-Saharan type O (Eth/Eri)
- Sub-Saharan type A

SAT2 predominant – but relatively few samples typed



Cattle incidence March 2012

- Proposal for project based on PCP support sent to EC in July 2012.
- Proposal remains valid.

Support activities to Libya

- EuFMD lab support mission in July (following request of OIE/FAO CMC-AH after their emergency mission in May)
- Provision of laboratory supplies (Ag-ELISA kit; SAT2-specific penside tests)
- Support to REMESA/UMA for regional response (Rabat workshop)
- Discussion of vaccination strategy (TAIEX meeting)
- Training of Libyan vets on real-time outbreak investigation courses in Kenya (self-funded)
- Provision of training material to Libyans for cascade training

Summary of key points

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- Support to regional FAO strategic response in region, support to African regional surveillance networks

ATELIER DE FORMATION - Le diagnostic de la fièvre aphteuse

ANSES – Laboratoire de Santé Animale de Maisons-Alfort, France

21-25 mai 2012

Paris laboratory training

- Hosted by ANSES, funded by EuFMD, coordinated with FAO Tunis and REMESA
- Very successful, organised very rapidly and efficiently by ANSES
- EuFMD supplied Ag-ELISA kits to all participants
- Follow-up regional lab activities agreed, coordinated with REMESA – report and plan on RELABSA website.
- Output: improved diagnostic capacity and identification of key actions for lab follow up

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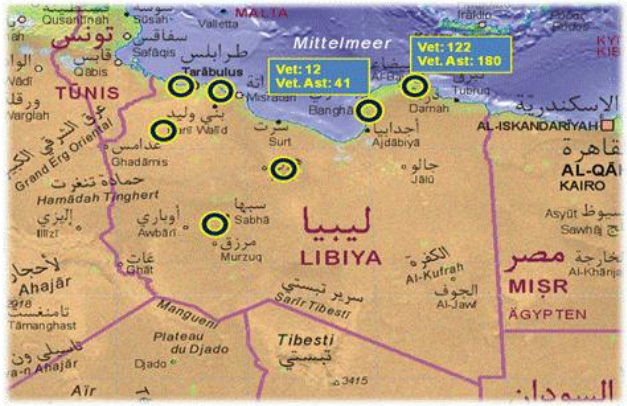
Larnaca workshop, June 2012

- Training and coordination on surveillance in high risk border zones
- Egypt, Israel, PAT (Gaza Strip), Jordan

Rabat workshop

- EC/EuFMD funded, in support of REMESA, UMA, OIE, FAO Tunis
- Addressed regional surveillance and coordination of control and management activities
- Output: Coordinated actions agreed by CVOs
- Specific heightened surveillance actions agreed in Libya/Tunisia border zone
- Further discussion and agreement at TAIEX meeting

Répartition des vétérinaires et des techniciens



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SAT2 in Gaza

- April 2012: SAT2 confirmed in samples taken from a farm in Rafah, on border with Egypt
- Only one farm reported affected; no more since detected
- Israel had already vaccinated against SAT2 along border with Egypt & Gaza
- Cattle in Gaza vaccinated against SAT2 during late April
- Sequencing showed Gaza SAT2 was very closely related to Egyptian SAT2

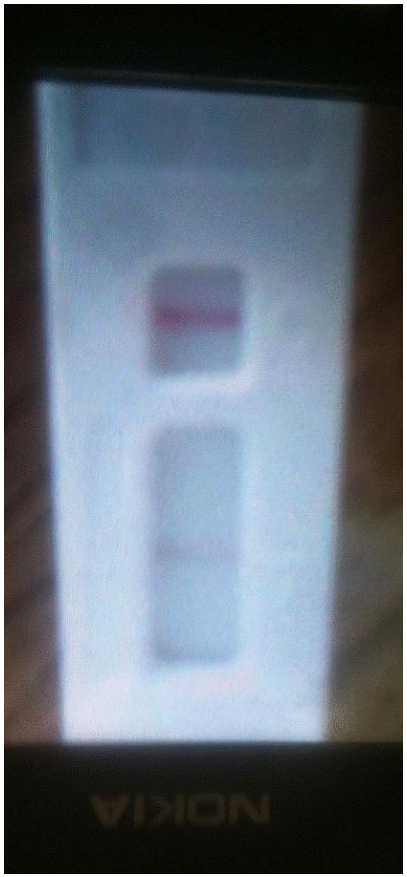
Support to PAT/Gaza in 2012

- OIE/FAO CMC-AH mission in May – EuFMD provided technical advice
- EuFMD had trained lab staff from Gaza, WB and Jordan in Cairo in March, and provided Ag-ELISA kits
- EuFMD developed active surveillance plan for Gaza to assist CMC mission
- PAT (Gaza) delegates at Larnaca surveillance workshop

Response to 2013 FMD outbreak in Gaza

- March 2013: report of FMD case in Rafah; samples taken, inconclusive results. FAO teleconference: EuFMD, EMPRES, FAO Jerusalem – request for support and mission.
- EuFMD provided guidelines on sampling, outbreak investigation, lesion ageing and biosecurity, in Arabic and English
- EuFMD provided Svanova penside FMD tests
- Second farm affected – samples taken; penside test +ve
- FAO/EuFMD joint mission to West Bank and Israel within 10 days:

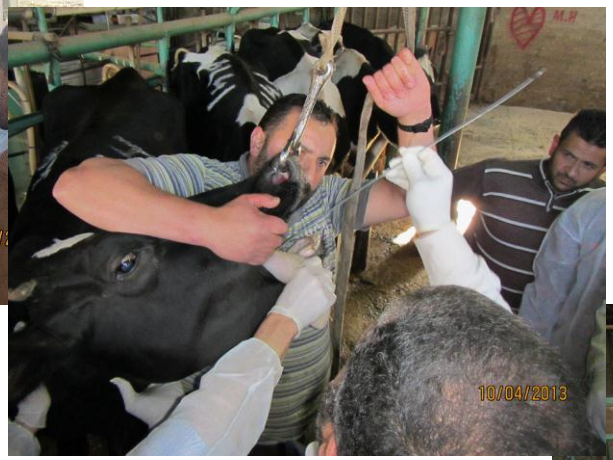
 - Training support on sampling; provision of advice
 - Coordination meeting in Tel Aviv with Israel, West Bank and Gaza Strip vets
 - Follow-up actions identified: immediate support actions and medium/long-term proposals



Rapid response mission to West Bank and Israel

Clinical investigation & sampling training in West Bank

"Train the trainers" approach



Field training outside Ramallah, West Bank, two weeks ago (10th April)

Cascade training in action in Gaza

Six days after EuFMD/EMPRES training

Provided by FAO Jerusalem project officer:
Training provided to vets and para-vets in Gaza

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Supporting FAO strategic response

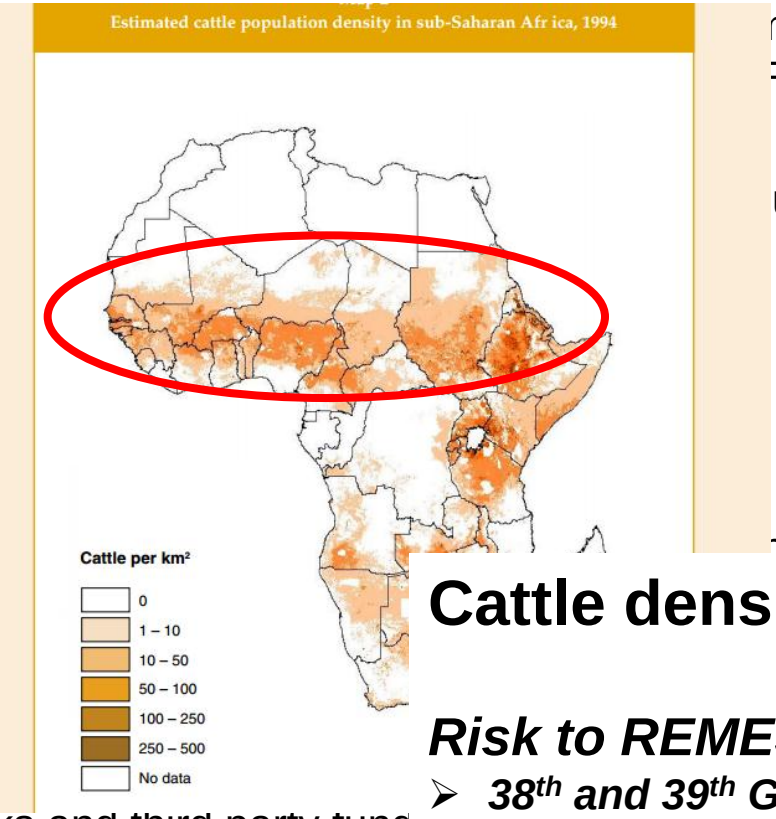
- EuFMD input into FAO regional response strategy
- Increased coordination with other units (FMD Unit, OIE/FAO CMC-AH, FAO ECTAD, FAO Tunis, REMESA, UMA, EU/TAIEX)
- EuFMD input into regional PCP workshop (Cairo, December 2012)
- EuFMD provided technical guidance on diagnostics and vaccine supply

4 year Strategy (2009-12) agreed at the 38th Session in 2009

Level	Description	Indicators	Monitoring and evaluation	Assumptions and risks
	Category 2: *Routine activities carried out to assist risk assessment of FMD entry and assessment of European vaccine bank suitability Virus observation actions;* *2.1.3 African proximity surveillance*	- West EurAsian network conducts regular teleconferences - operational FMD collection and typing hubs in 5 African "hot-spots".	Exec. Comm. Reports (every 6 months)	Funding commitments to 2-4 yrs actions not derailed by FMD emergencies Complementary actions by other donors progress as planned.

Key achievements

- Establi… …mproved surveillance and expertise under FAO-le… …RESOLAB). These did not exist before 2010.
- The sig… …ultiple virus incursions from these regions into No…
- These … …others (e.g. USAID-funded FAO Identify progra…
- Low co… …ntributes to monthly FMD report; information outputs…
- Standir… represe… networks and third party fund… agencies



Cattle density in sub-Saharan Africa

Risk to REMESA states!

- ***38th and 39th GS recommendations***

Support to RESOLAB-FMD

- Eufmd Agreement (2011)

Collated information into quarterly & annual report, widely shared

- Laboratory Training, Accra (Ghana) 2012

(Republic Of Congo, Democratic Republic Of Congo, Central African Republic, Cameroon, Nigeria, Togo, Ivory Coast, Senegal & Ghana) Organised by FAO; mainly funded by USAID/Identify with EuFMD supplying trainers & reagents

- Training In Outbreak Investigation

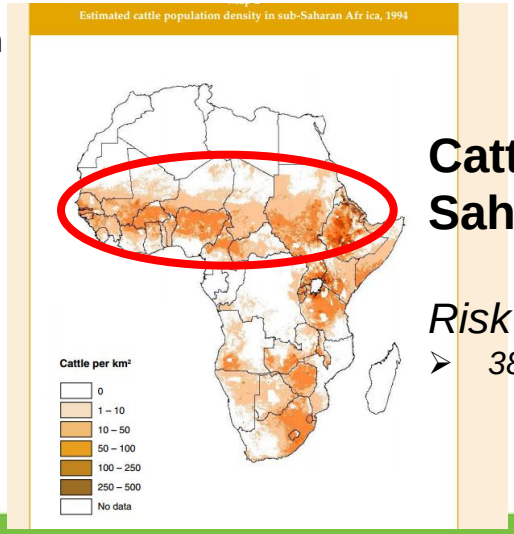
Resolab FMD Coordinator trained in outbreak investigation in Kenya (Real-time Training Course) (funded by Identify)

Support to EARLN-FMD

- 2011 – Meeting In Ethiopia

- Trainings

- Kenya, Embakasi Lab: Vaccine Matching (2 Vets Trained In Nov.2011), lab diagnostic techniques
- Nakuru Real-time training courses: many Kenyan vets trained
- Serotype-specific Primers For East African virus strains under development as part of research project



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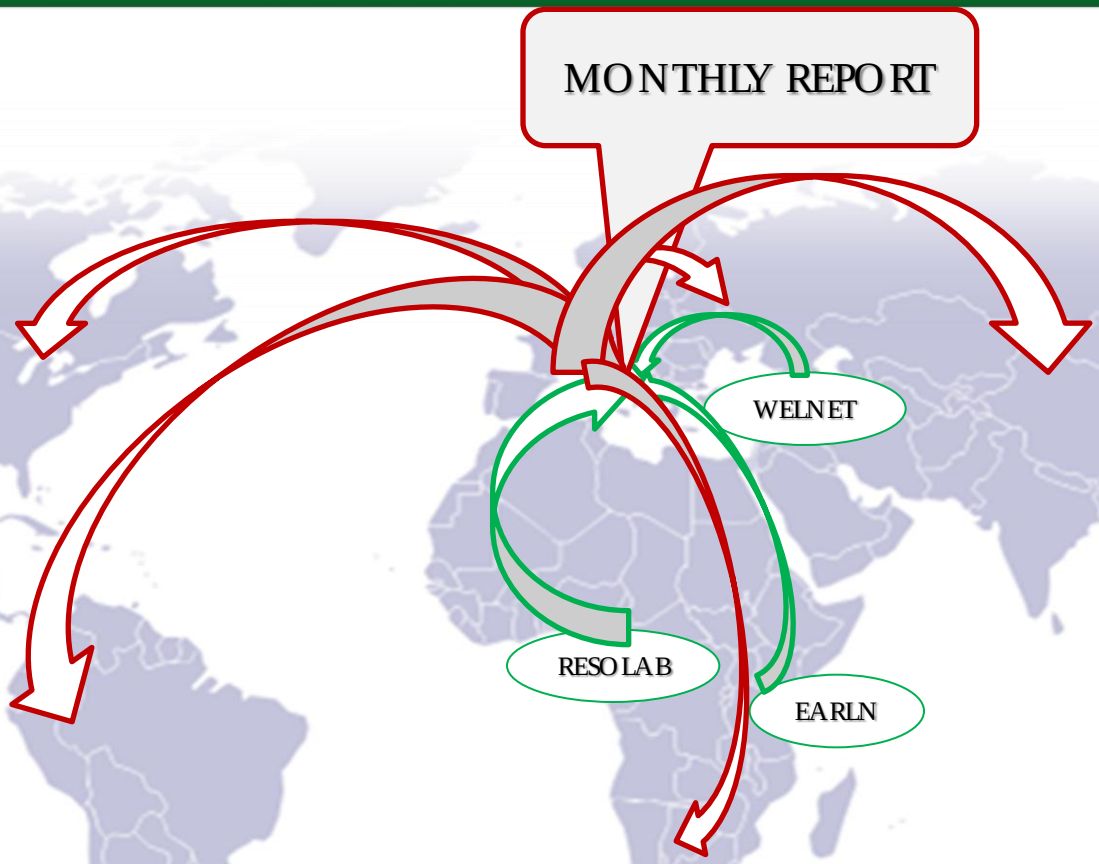
Risk to REMESA states!

- *38th and 39th GS recommendations*



CVOs LABORATORIES

Table 9: Pool 5 FMD history 2010-2012

COUNTRY	FMD HISTORY (past 2 years)	LAST OUTBREAK REPORTED/TYPE	OIE FMD STATUS
BENIN, 2011	2011 – A, O, SAT 1, SAT 2[4, 1]	DEC 2011/O, A, SAT 1, SAT 2[1]	DISEASE PRESENT
BURKINA FASO, 2011	2011, 2012 – O, A, SAT 2[4]	NO PRECISE DATA, DEC 2011[1]	DISEASE PRESENT
CAMEROON, 2011	2011 – O, A, SAT 2[4,1]	2012[4]	DISEASE PRESENT
CAPE VERDE , NO SUBM. REPORTS	NO DATA AVAILABLE		
CENTRAL AFR. REP. 2011	NO DATA AVAILABLE		DISEASE PRESENT
CHAD, NO SUBM. REPORTS	2011, 2012 – A, SAT 1[4]	2011/2012[4], NO PRECISE DATA	UNKNOWN
CONGO D. R. , 2011	2011, 2012 O, A, SAT 1[4]	DEC 2012[14]/NOT TYPED	LIMITED TO ONE OR MORE ZONES
CONGO R., NO SUBM. REPORTS	NO DATA AVAILABLE		
COTE D'ÍVOIRE, 2011	2011 – SAT 1, A[1], O, SAT 2[4]	2011[4]	LIMITED TO ONE OR MORE ZONES
EQUATORIAL GUINEA, 2011	NO DATA AVAILABLE		DISEASE SUSPECTED, NOT CONFIRMED
GABON, 2011	2011 – ABSENT[1]	NO IN 2006-2012 PERIOD[1]	NEVER REPORTED
GAMBIA, NO SUBM. REPORTS	2011, 2012 –O, A, SAT 2[9]	2011/2012[9], NO PRECISE DATA	DISEASE PRESENT
GHANA, 2011	2011 – O, A, SAT 1, SAT 2[4, 1]	DEC 2011[1]	DISEASE PRESENT
GUINEA BISS., 2011, ½ 2012	2011, 2012 – ABSENT[1]	NO IN 2009-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD
GUINEA, 2011, ½ 2012	2011, 2012 – ABSENT[1]	NO IN 2007-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD
LIBERIA, NO SUBM. REPORTS	2011, 2012 – A, SAT 2[4]	2011/2012[4], NO PRECISE DATA	UNKNOWN
MALI, 2011	2011/2012 – O, A, SAT 1, SAT 2[4,1]	2011/2012[4], NO PRECISE DATA	LIMITED TO ONE OR MORE ZONES
MAURITANIA, 2011	2011, 2012 – ABSENT[1]	NO IN 2007-2012 PERIOD[1]	NOT REPORTED IN THIS PERIOD
NIGER, 2011	2011/2012 – O, A, SAT 1, SAT 2[4,1]	NO PRECISE DATA, OCT 2011[1]	LIMITED TO ONE OR MORE ZONES
NIGERIA , 2011, ½ 2012	2011/2012 – O, A[4,1]	OCT/NOV 2012/A, O[4]	DISEASE PRESENT
SAO TOME PRINCIPE, NO SUBM. REPORTS	NO DATA AVAILABLE		
SENEGAL, 2011	2011/2012 – O, A, SAT 2[4,1]	NO PRECISE DATA, DEC 2011[1]	DISEASE PRESENT
SIERRA LEONE, 2011	2011, 2012 – ABSENT[1]	OCT 1958[1]	NOT REPORTED IN THIS PERIOD
TOGO, 2011	2011, 2012 – O, SAT 1[1,4,1]	FEB 2012[4]	DISEASE PRESENT

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Outlook to West Eurasia Roadmap for FMD Control

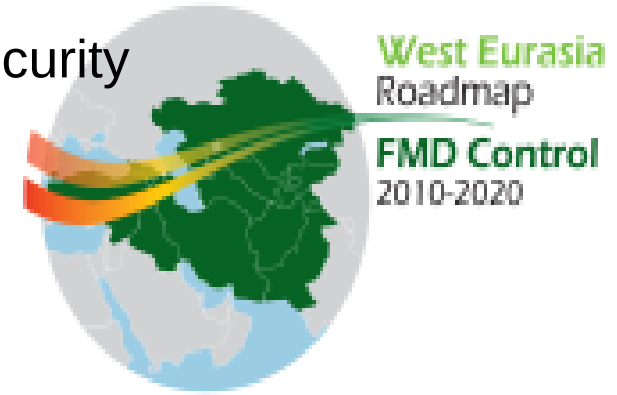
Prof.Dr. Irfan Erol

Director General

General Directorate of Food and Control, MFAL, Ankara,Turkey

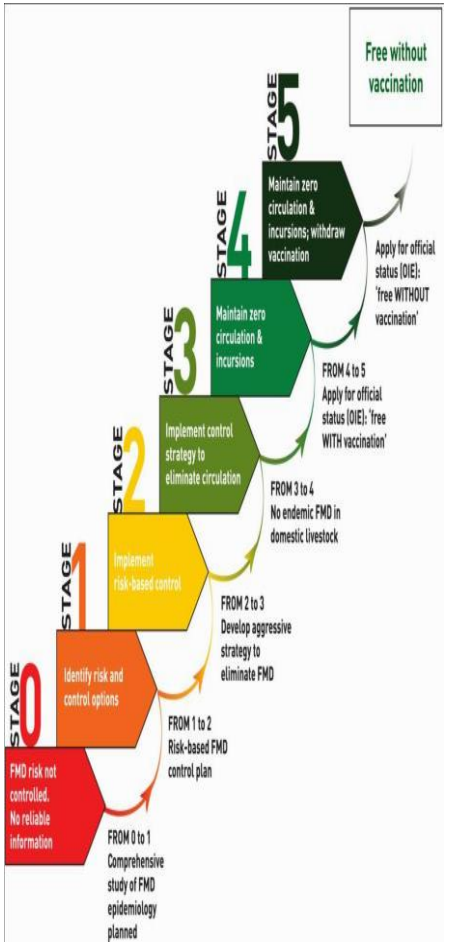
Vision for the Roadmap

- Regional cooperation among Eurasian countries is fundamental;
  - for the progressive control of FMD
  - regional economic development and food security



Developments

- West Eurasia Roadmap has made good progress, since accepting the concept first time in 2008 in Shiraz, Iran.
  - better awareness of the FMD risks
  - identifying "new epidemic events" at an earlier point
  - training for capacity building for diagnosis and epidemiology,
  - many project and support carried out by EUFMD
  - developing the Guidelines for assesment of Stages in the PCP and review the progress along the last two years
  - countries increasingly use PCP as tool in identification of gaps and for FMD control



Outlook for gaps on FMD Control

- The West Eurasia Roadmap has made good progress along the four years, however there are some gaps;
  - Virus circulation at regional level has been formulated large epidemics despite vaccinations in all countries
  - Gaps in preventive measures,
  - Insufficient dynamic control strategies
  - Limited control of international animal movements
  - Insufficient outbreak investigation
  - FMD has been still treating the population and causing economic lose

Establishment Early Detection System

- Turkey is concerned that virus typing is not fast enough in the region to identify upcoming treat.
- Several incursions from neighboring countries have been detected in Turkey every year
  - formulated new epidemic
  - became a high risk for Europe
- It is needed to promote better communication, improvement early detection, diagnostic capacity and performance of laboratories.
- WE countries are all at under the same risk, from FMD
- The region needs WELNET to function better.
- ŞAP Institute provided some advanced facilities, but this is not enough for entire region; it needs an international support
- So WELNET must be supported in the next two years in order to identify the treat as early as possible.

Capacity Building on Epidemiology Skill in the region

- The regional epidemiology studies should be supported for implementation effectively the disease control measures in the region.
- West Eurasia needs all countries to have trained epidemiologist
- Turkey is glad to host the PEPc training course
  - Course was on "*Epidemiology Approach*":
    - Theoretical epidemiology
    - Surveillance; Data collection, Data entry/validation
    - Data analysis (transforming data to information)
    - Outbreak investigation including field study
    - Analysis disease socio-economic impact
    - Risk assessment and Gap analysis including write a useful report
- This activity should be continued in the region

Enhance the collaboration and coordination

- The West Eurasia needs a support centre

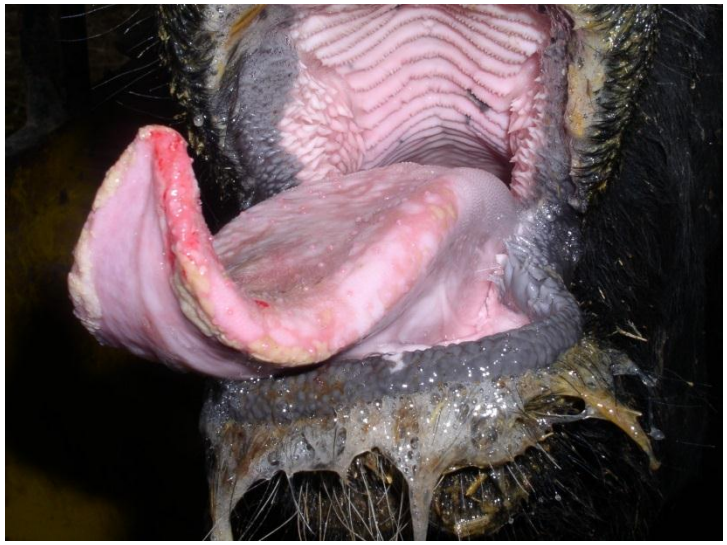
- Objective will be:
  - to manage the disease well-coordinated,
  - utilize available expertise,
  - enhance the communication within the framework of the West Eurasia Road Map

- Turkey supports the establishment a FMD support centre in Turkey

Role of International Support

- International support to the region has played a vital role in promoting reviews of national strategies.
- At the regional level, it should be continued support for the national FMD projects.
- Follow up principle of Bangkok Workshop for more financial support is important.

FMD in Israel



Nadav Galon, CVO

Veterinary Services and Animal Health, Israel

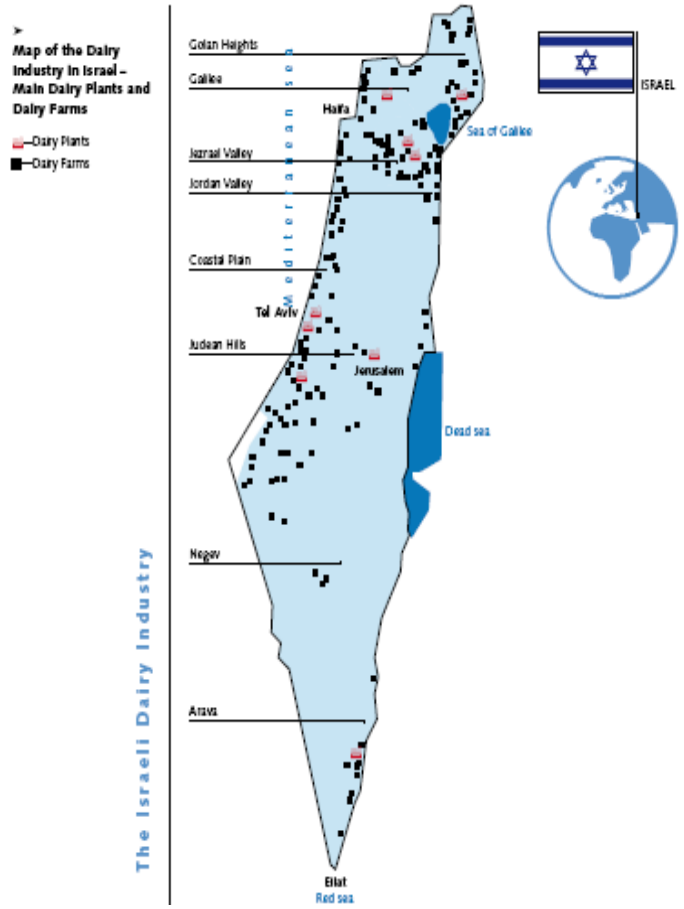
Susceptible Livestock Population

- Dairy Cattle – 120,000 (milking cows)
- Beef- Pasture – 35,000 (cows)
- Beef – Feedlot – 200,000 (steers)
- Sheep – 450,000 (ewes)
- Goats – 100,000 (does)
- Pigs - 15,000 (sows)

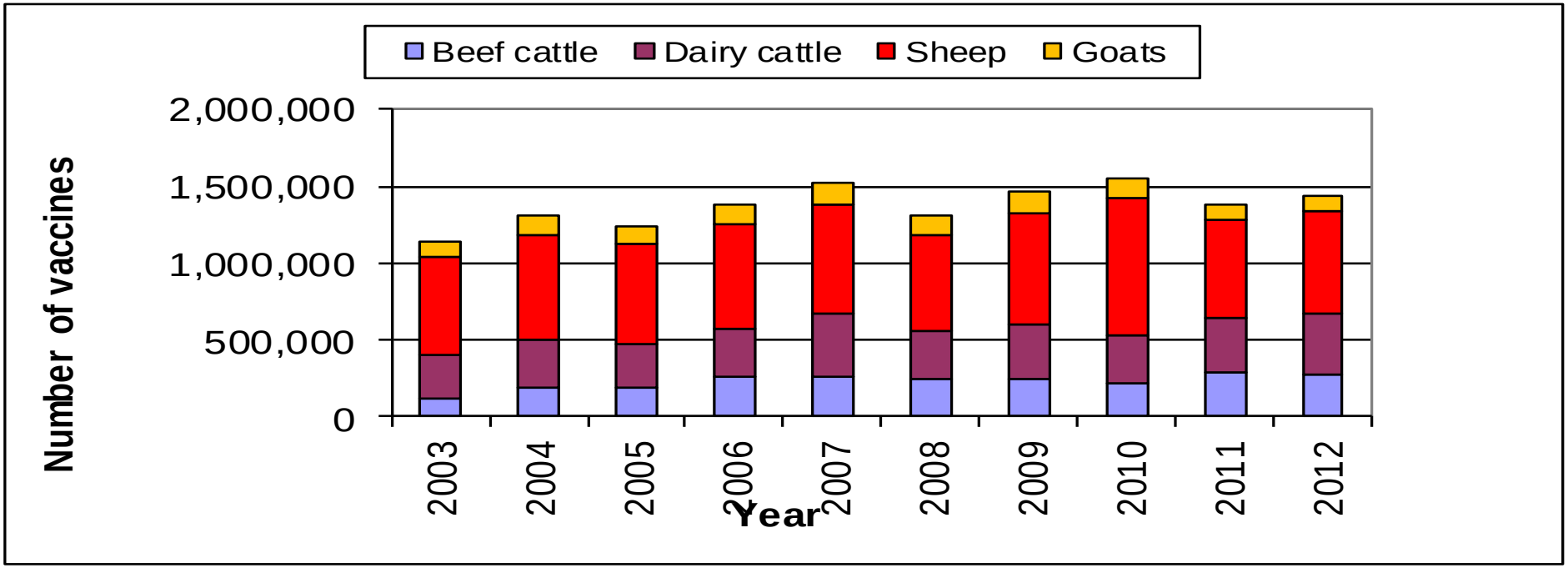
Ruminants farms distribution

Sheep & goats

dairy



Mandatory Vaccination- Variable Compliance

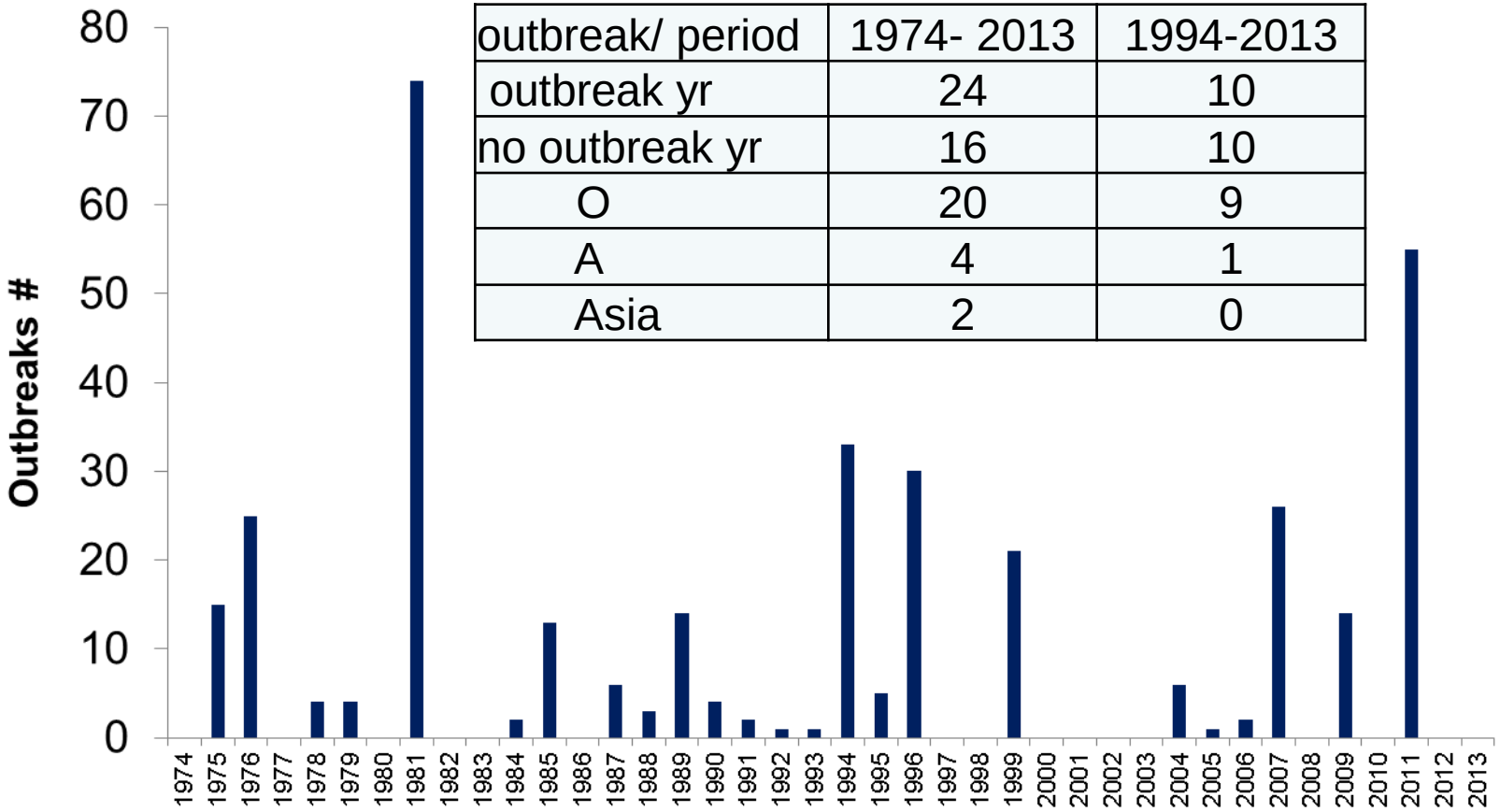


Trivalent O, A, Asia

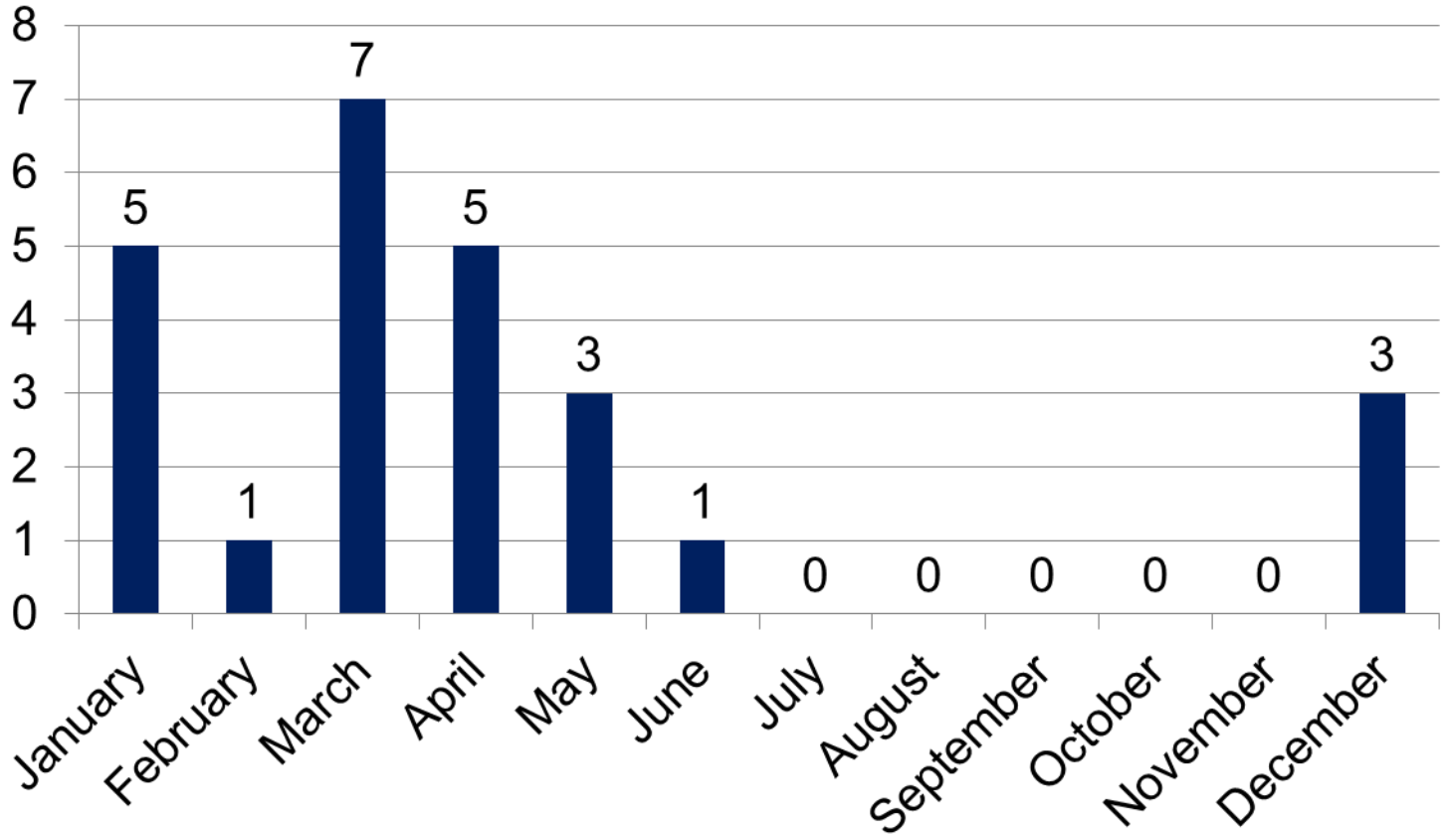
Protocol: 2-3X in first year/ annual booster /outbreak booster

Annual # of outbreaks (1974-2013)

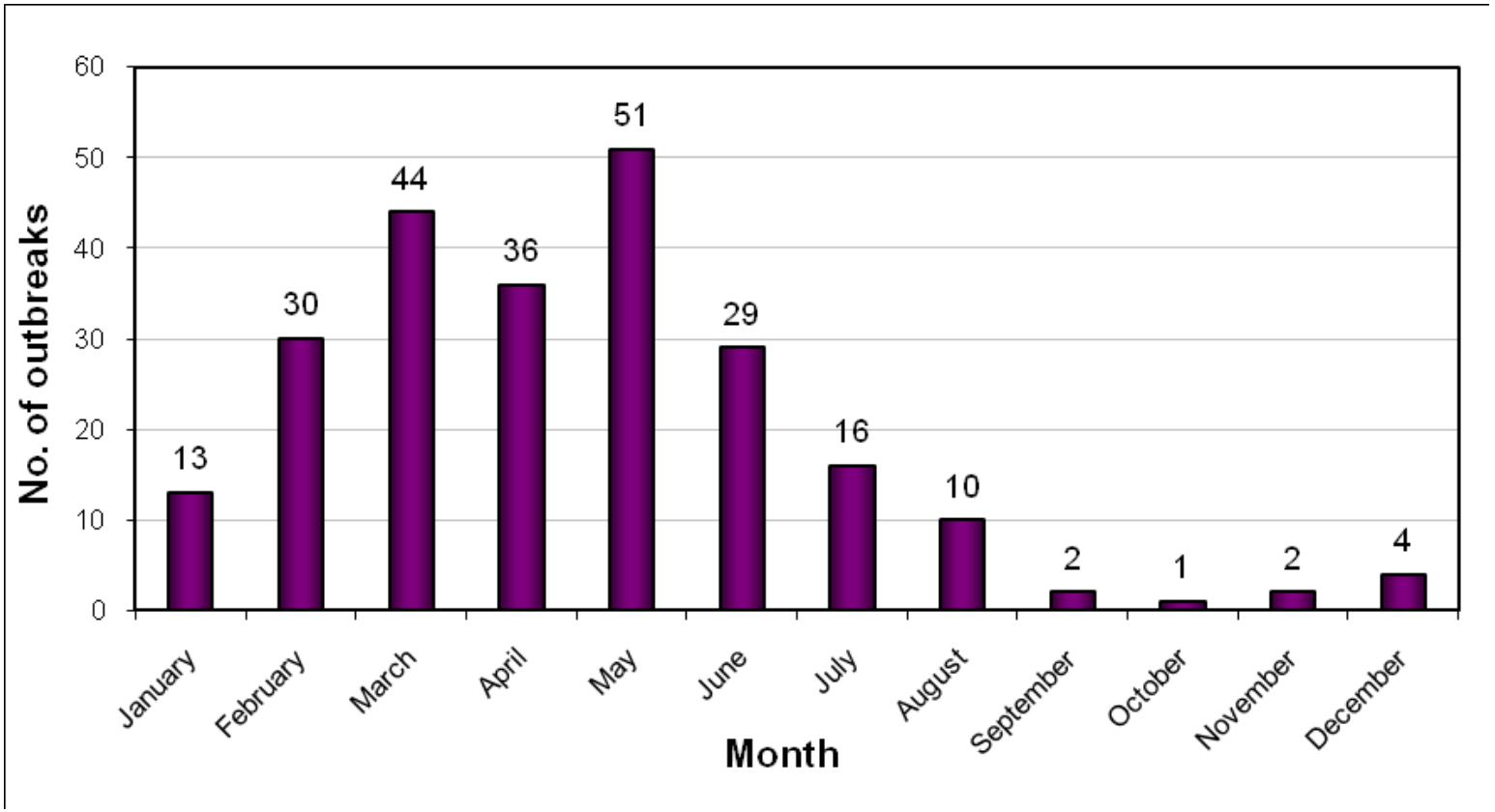
outbreak/ period	1974- 2013	1994-2013
outbreak yr	24	10
no outbreak yr	16	10
O	20	9
A	4	1
Asia	2	0



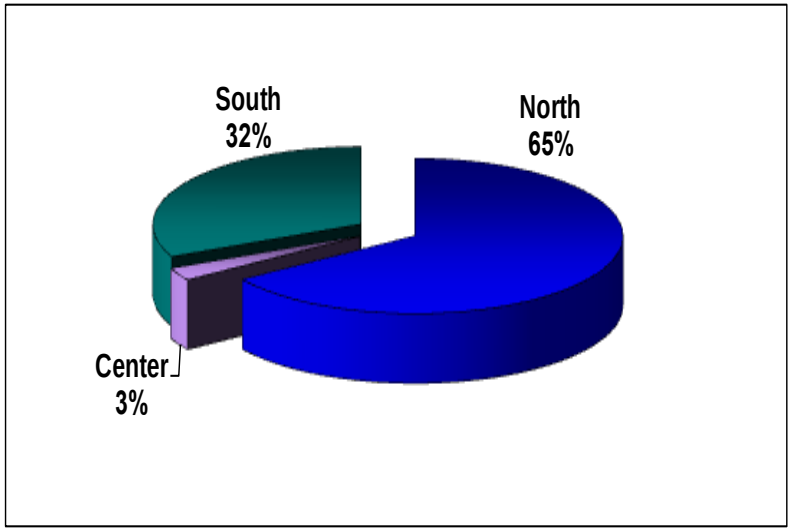
Month of Index Case (1974-2013)



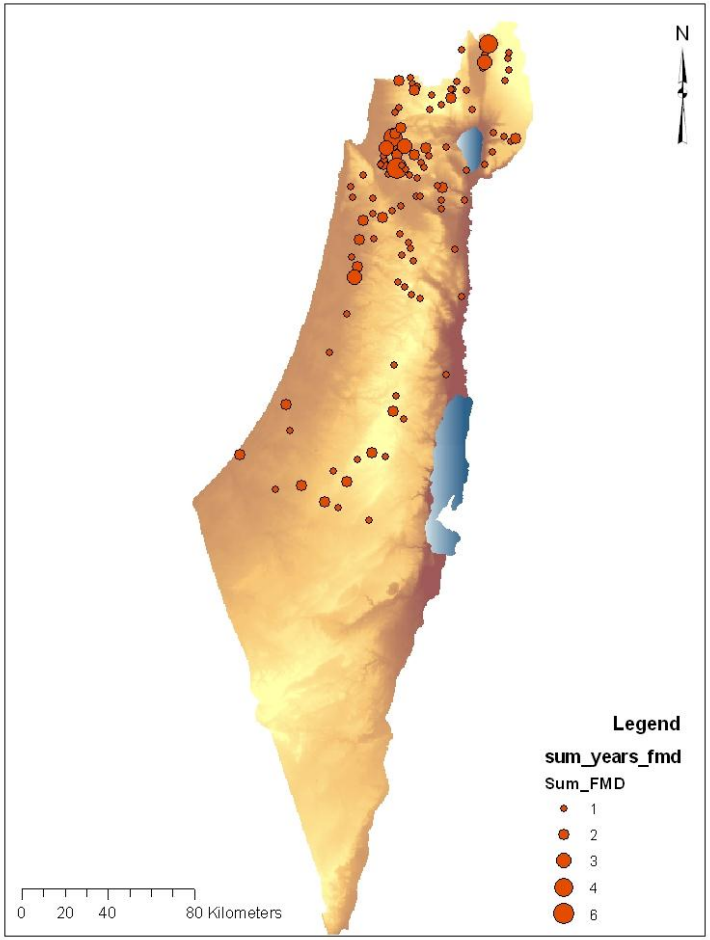
Outbreaks per month (1974-2013)



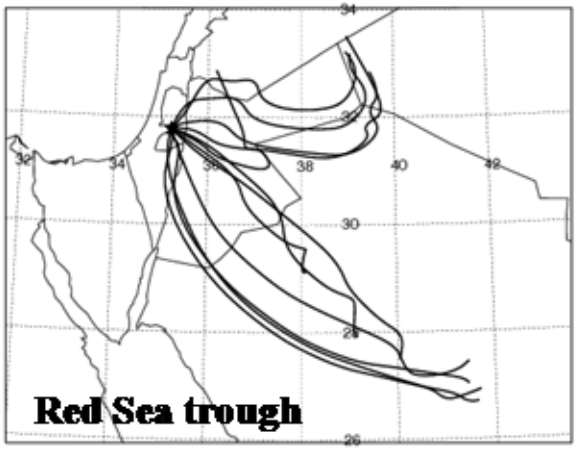
Geographical Distribution of Outbreaks

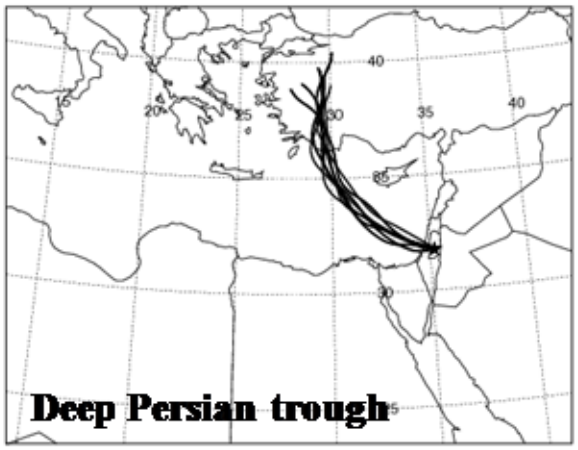


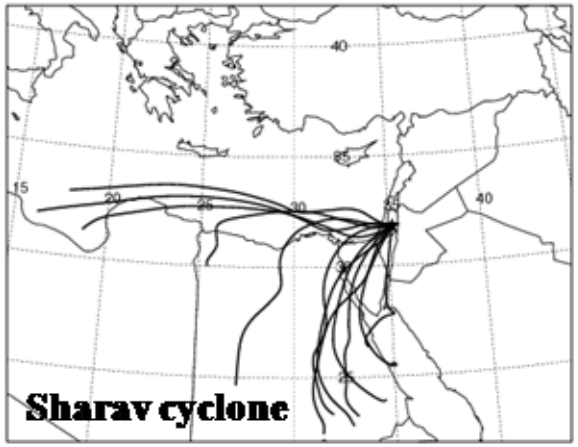
Most index cases are near intl. border

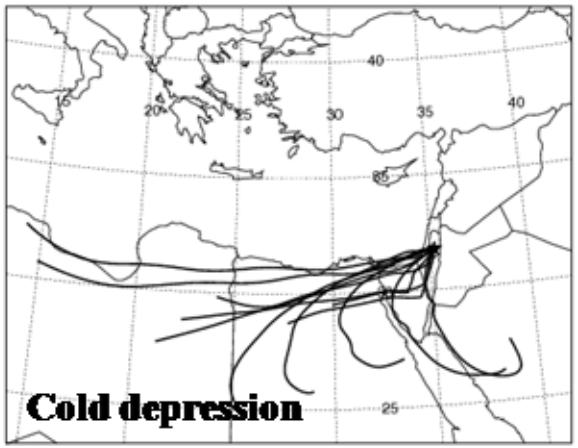


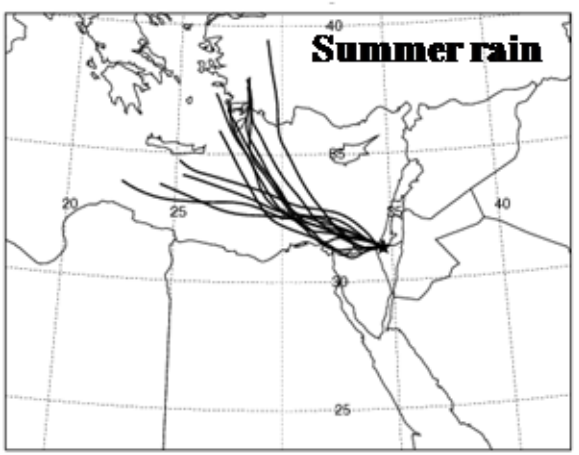
Endemic, Epidemic or Both ?

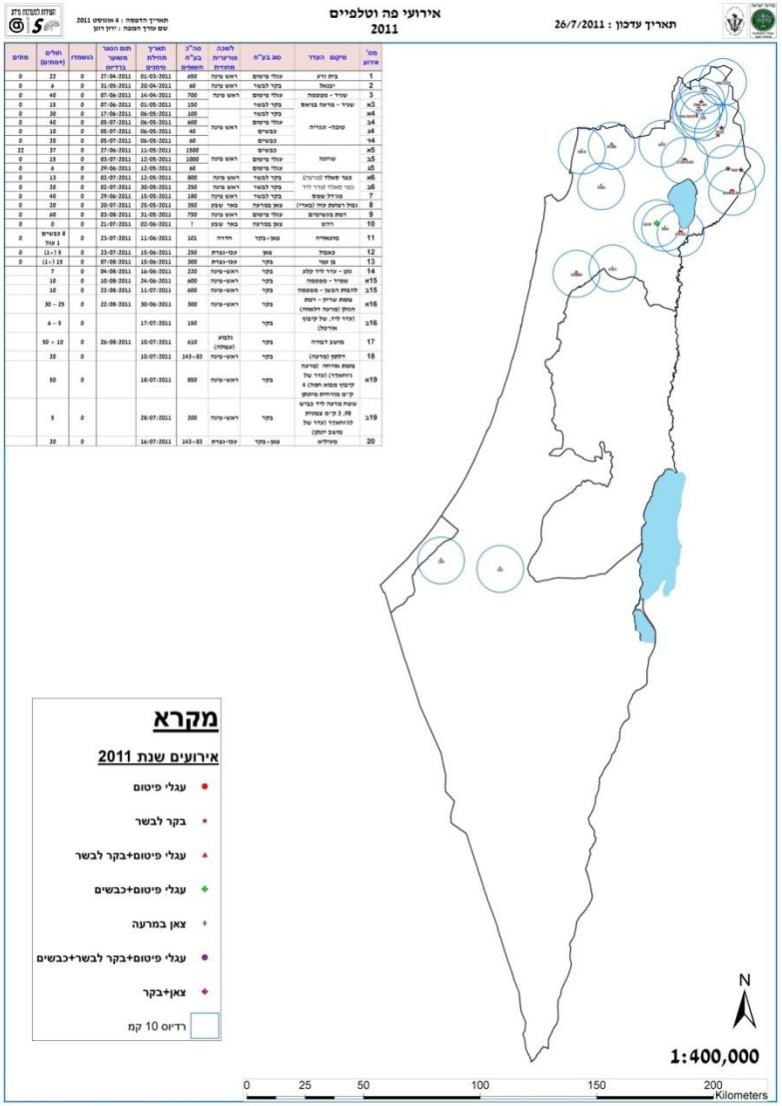






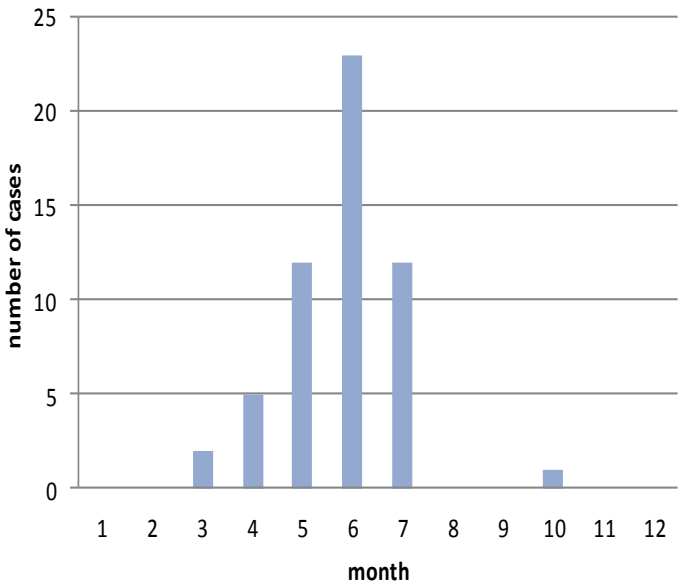


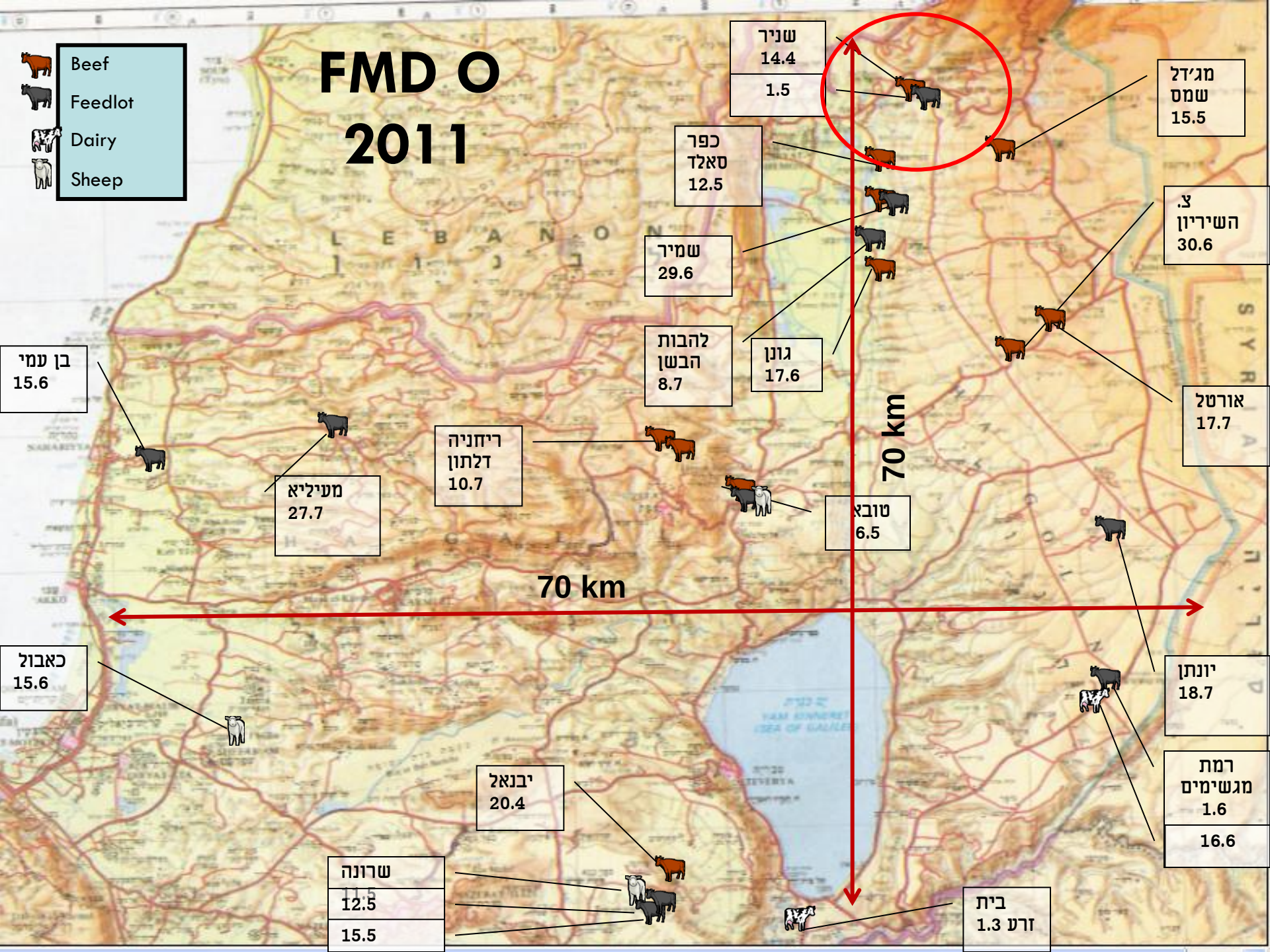




2011- type O

Herds - 55
Dairy - 4
Beef - 30
Feedlots - 11
Sheep - 8




Beef
Feedlot
Dairy
Sheep
FMD O
2011
שניר
14.4
1.5
מג'דל
שמס
15.5
כפר
סאלד
12.5
צ.
השיריון
30.6
שמיר
29.6
להבות
הבשן
8.7
גונן
17.6
בן עמי
15.6
אורטל
17.7
ריחניה
דלתון
10.7
מעיליא
27.7
טובא
6.5
70 km
70 km
כאבול
15.6
יונתן
18.7
יבנאל
20.4
רמת
מגשימים
1.6
16.6
שרונה
12.5
15.5
בית
זרע 1.3

Why so many outbreaks in a vaccinated population?

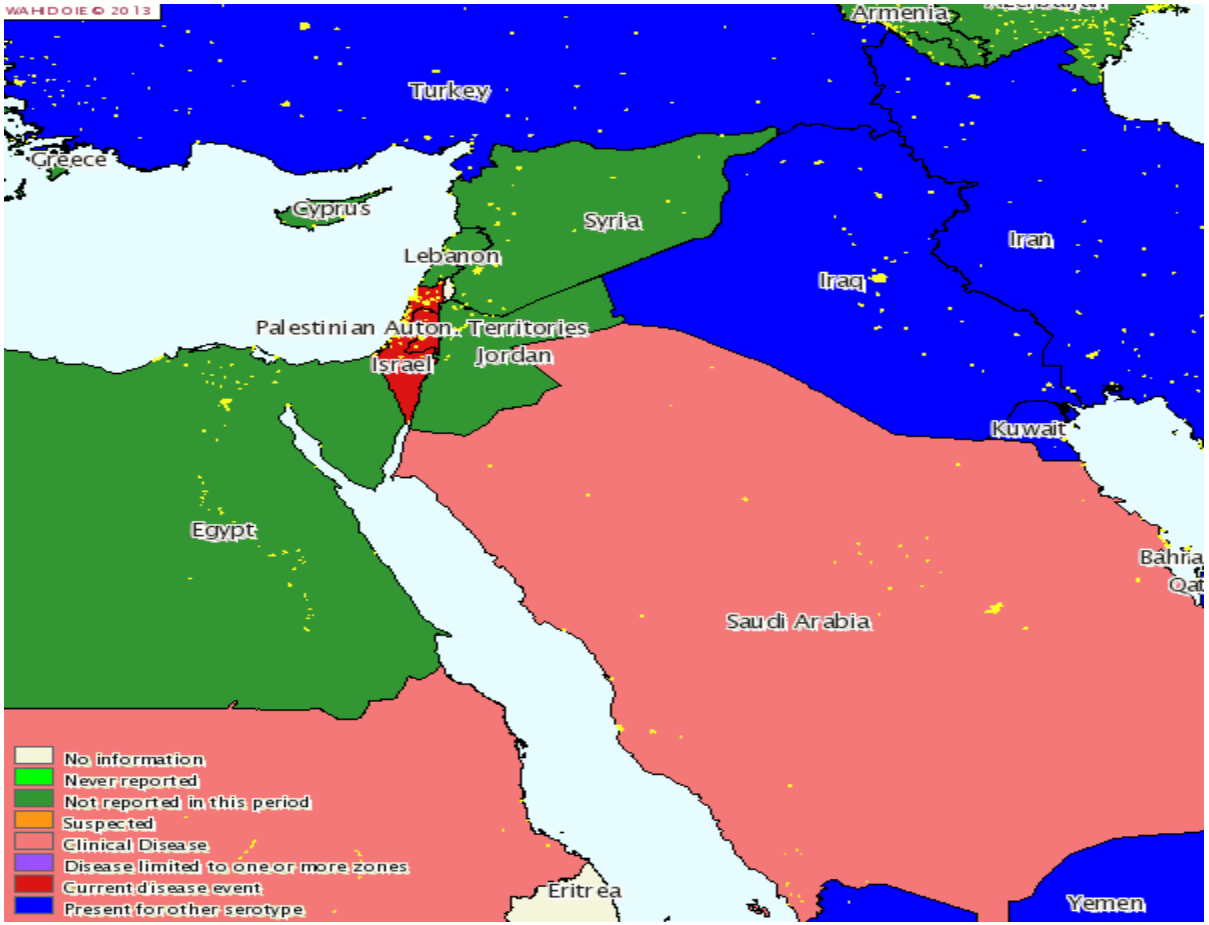
- Vaccination compliance
- Vaccine matching (r1 value for O1-4625 = 0.37 Klement)

Report no:		VNT			
Vaccine / Field Isolate:		O 4625	O Campos	O Manisa	O Tur 5/09
O Isr 11/2011	Mean	0.83	0.18	0.28	0.46
O Isr 26/2011	Mean	0.74	0.26	0.45	0.60

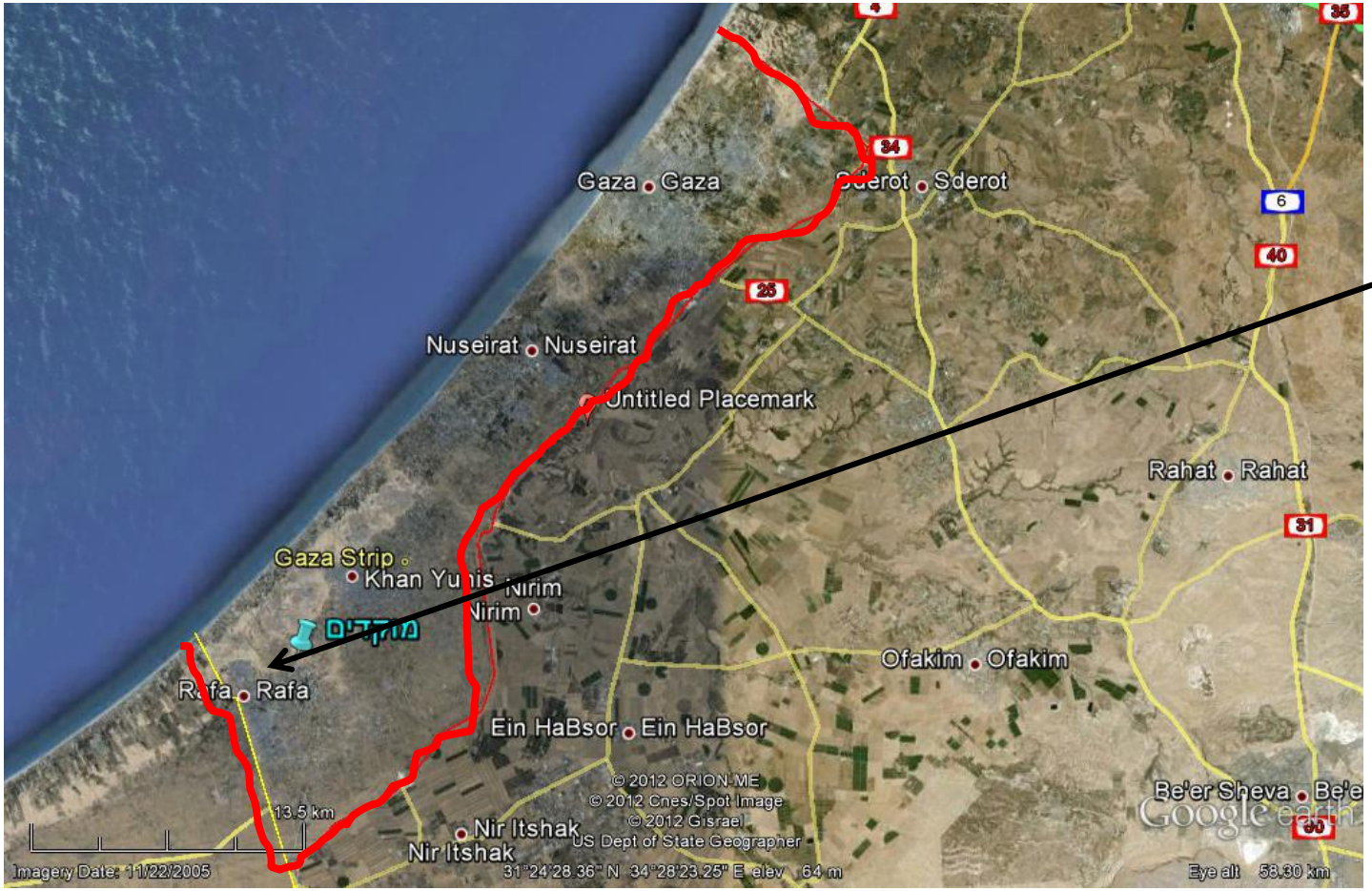
Pirbright

- Vaccination protocol
- Awareness and reporting - ID of index case
- Control measures enforcement

OIE Report January – June 2011



FMD in Gaza Strip 2012-2013



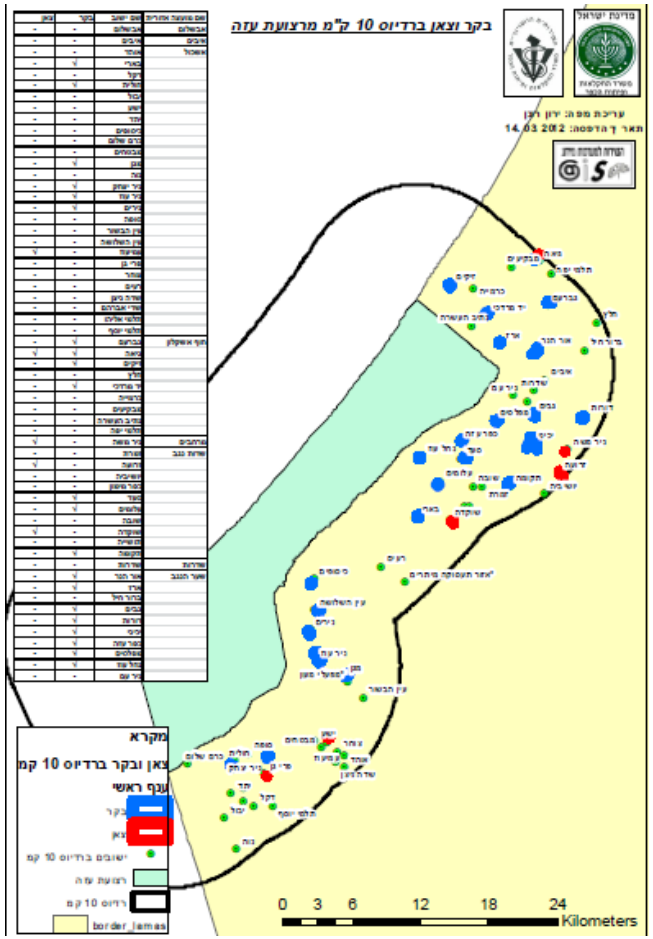
Rafah

04-2012 SAT2
3/120 steers
5/350 steers

03-2013 A
20/92 steers
5 /50 steers

Egypt – Gaza Border

Israel – Gaza Border



2012-2013
SAT2
Vaccination
zone

SAT2 2012 Rafah - Vaccine Matching

FMD Vaccine Matching Strain Differentiation Report

Lab Reference WRL Batch Number: WRLFMD/2012/00017

Sender Details: Dr Boris Gelman, Kimron Veterinary Institute, P. O. Box 12, 50250 Beit-Dagan, Israel. PHONE: (972) 03-9688910, MOBILE: 0544-308206, FAX: (972) 03-9688970 EMAIL: gelmanb@int.gov.il

Date Received: 21st April 2012

Country of Origin: PALESTINIAN AUTONOMOUS TERRITORIES

Date Reported: 8th May 2012

Report no:	**2dmVNT**		
Vaccine:	2dmVNT		
Field Isolate:	test ref:	Sat2 Eri	Sat2 Zim
Sat2 PAT 1/2012	mean	0.82	0.44

Challenges

- Suitable vaccine & available vaccine reservoir
- Improve vaccination compliance & protocol
- Active surveillance & regional collaboration
- Upgrade local Lab; subtype diagnosis
- Maintain & expend export; dairy products & bull semen

We seek collaboration

- On site training – Israel, PAT, neighboring countries
  - Clinical signs and sampling
  - Lab skills
  - Active surveillance
    - risk based
    - “hot spots” - Rafah , northern border
- Increased efficiency by 3rd party involvement
- Communication & bridging political difficulties
- Vaccine reservoirs & funding

Thank you

Acknowledgment

Dr. Michel Bellaiche
Prof. Eyal Klement
Dr. Boris Gelman
Prof. Arnon Shimshony
KVI & VS workers

MINISTRY OF AGRICULTURE OF AZERBAIJAN REPUBLIC
STATE VETERINARY SERVICE

40th GENERAL SESSION OF THE EUROPEAN COMMISSION FOR THE CONTROL OF FMD (EuFMD)

VIEW POINTS ON FUTURE PRIORITIES AND ACTIONS IN PILLAR 2

22-24 April 2013,
Rome, Italy

PILLAR 2: activities aim to reduce the risk of FMD incursions, working with and through international partnership

Main risks for FMD transmission

Regional situation is characterized by :

- **FMD SAT 2 outbreaks in the Middle East. Given the intensive trade connections between the TCC and Middle East countries, SAT 2 could be introduced into the TCC any time and spread rapidly.**
- **Large scale outbreaks (FMD A, O and Asia 1) continue to occur in neighbouring Iran and Turkey. Most cases appear in areas adjacent to the TCC: eastern and NE Anatolia, and NW Iran.**
- **FMD O Panasia-2 outbreak have occured in South Ossetia in August 2011.**
- **Low protection of the Asia 1 - Shamir vaccine against the circulating virus**
- **Animal movements and contacts had largely increased, especially in spring-autumn seasons and in religious holidays. There are large scale national and cross-border ruminant movements due to official and informal international trade**
- **According to national serosurveillance investigations (2010-2012) FMD virus is circulating in the LR and SR**

- **According to PCP: Azerbaijan - 2 stage**

In previous years FMD national strategy was based on the vaccination of susceptible animals with focus in buffer zones

- **Now National Strategy is based on the risk analysis, vaccination (twice per year and on time, short period – 1-2 months), monitoring of vaccination campaign, seromonitoring campaign and follow-up investigation after results of seromonitoring**
- **Aim: Intensive strengthening FMD surveillance and control for progression on the West Eurasia FMD Progressive Control Pathway**

Achievements :

EC/EuFMD has supported to the TCC countries since 2000

Regional cooperation under the EuFMD Project (2010-2012)

- **Very good level of regional cooperation**
- **Sharing information between neighboring countries**
- **Monthly reporting to EuFMD (FMD situation, control measures and project activities)**
- **Using of regional database**
- **Different types of trainings for both laboratory and epidemiology specialists (including PEPc trainings)**
- **Regional simulation exercise on FMD (2009, 2012)**

Achievements : national level

- National FMD Contingency Plan has been updated last time in 2012
- FMD Control Strategy was updated according to PCP
- Implementation of EU Project of animal identification is started
- National Information Reporting System (AzVET) is implemented
- For improving of risk analysis Critical Control Points were determined
- FMD awareness on political and all technical levels were increased
- Quality and increased sustainability of FMD control, surveillance and diagnosis are improved
- Value chain analysis for milk productions was conducted

Achievements : Vaccination and serosurvey

- **Risk assessments are regularly used for vaccination strategies**
- **Vaccination of LR – all population twice per year (spring and autumn) and SR once per year – all population in risk zones (borders, around live animal markets and migration ways), in last spring we vaccinated 46% of SR population in country.**
- **Monitoring and evaluation of vaccination campaign: vaccine coverage, SP level and duration of immunity of naïve animals**
- **Evaluation of cool chain during vaccination campaign (distribution, transportation, storage, using) was conducted**
- **Able to conduct large scale field surveys with epidemiological assistance from EuFMD**
- **Annually seromonitoring campaigns (SP and NSP ab) and follow-up investigation of NSP+ clasters, including probangs and swab sampling**

Achievements : Movement control

- **For improvement of control of animal movement, winter and summer migrating routes (maps) were identified**
- **Working schedule of live animal markets and estimated approximately number of animals at each market were identified (maps of animal movement from market to market)**
- **Serosurvey in live animal markets was carried out**
- **Control measures on movement of animals during religious holidays (Kurban bayram, Ramazan bayram, Nouruz Bayram) and veterinary-sanitary measures for slaughtering were strengthened**
- **FMD awareness and biosecurity measures at times of increased ruminant trade around major holidays were improved**

Achievements : Laboratory

- The diagnostic capabilities of the national laboratories have been improved. Currently they has been equipped with all necessary equipment for conducting necessary diagnostic investigations
- A mobile unit, equipped with specialized mobile laboratory equipment and transport has been set up, who can perform the diagnostic studies in the field, immediately in the outbreak of infection, if necessary.
- Very good coordination have been established between laboratory and epidemiological department of SVS
- NSP and SP testing in RVL (last year all necessary diagnostic kits were available)
- Laboratories can handle large amounts of sera and data
- Participation in WRL proficiency tests 2009-10-11-12
- SOPs for collection, storage, transportation and shipment of samples for FMD diagnostics were prepared

Main gaps

- **Limited resources for revaccination of young LR and vaccination of all population of SR**
- **Insufficient funds for serosurvey (diagnostic kits, reagents, etc.)**
- **A considerable quantity of very small farms (1-2 animals), a small amount of well organized farms, where to carry out the control is more easier (biosecurity measures).**
- **Insufficient awareness work with farmers**
- **Lack of an economic estimation of a damage from FMD at the state level**

Plans related to FMD surveillance and control

- **To continue strategy of vaccination and subsequent seromonitoring as unique possibility to reach progress in liquidation FMD in country.**
- **Vaccination of LR – all population twice per year (spring and autumn) and revaccination of calves each 3 months.**
- **Vaccination of SR – all population in risk zones (borders, around live animal markets and migration ways), and in case of enough funds – all SR population in country at least once per year (in spring).**
- **Improvement of animal movement control**
- **Improvement of collaboration with Customs Committee**
- **Strengthening quarantine measures on borders**
- **Periodically carrying out serosurveys, including markets**
- **Strengthening control during religious holidays**

Plans related to FMD surveillance and control

- **Improving provision of funds for veterinary services (OIE Gaps Analysis Mission) and FMD control. National authorities should be very interested in developing of SVS and in control of diseases (international supporting is needed)**
- **Legislation regarding compensation, penalty should be improved**
- **Continuing of cooperation with WELNET and EpiNet**
- **Progression on the West Eurasia Roadmap**
- **Azerbaijan plans to become member of EuFMD**

Needs

- **Continuing of sharing information between neighboring countries (using regional database)**
- **Continuing of reporting to EuFMD and integrating to EMPRES-i**
- **Financial support for FMD surveillance (field survey and diagnostic equipment, reagents)**
- **Assistance in planning and data analysis of FMD serological and virological surveillance**
- **Assistance in the development and implementation of national and regional risk-based FMD control strategies**
- **Assistance in vaccine selection**
- **Regional simulation exercises**
- **Assistance for socio-economical impact analysis**
- **Trainings for improvement of professional skill both for laboratory specialists, and for epidemiologists (PEPc)**

Needs

- **Regional approach for FMD control is really important for TCC countries, harmonization of control measures, close coordination and cooperation are key points for progress, without supervising and supporting from EC/EuFMD regional project achievements could be lost, including for political support.**

THANK YOU …

Appendix 24

STRATEGIC PLAN FOR 2013-2017

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

OVERALL OBJECTIVES

The overall objectives consist of **three strategic goals** as follows:

1. To Improve readiness for FMD crisis management by Members;
2. To Reduce risk to Members from the FMD situation in the European neighbourhood (progressive control in neighbouring regions);
3. To Promote the global strategy of progressive control of FMD;

The operational objective of maintaining a mechanism for emergency response to an FMD crisis in the European neighbourhood will underpin the first two objectives.

BENEFICIARIES

In general, beneficiaries will be the 36 countries which are members of the European Commission for the Control of Foot-and-Mouth Disease (EuFMD)[1], hereinafter called "Members", and other neighbouring countries where the situation of foot-and-mouth disease (FMD) creates a direct or indirect threat of introduction of the disease into one or more of the member countries of EuFMD.

[1] Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, The Netherlands, Turkey, the United Kingdom.

STRATEGIC GOAL 1 -IMPROVE READINESS FOR FMD CRISIS MANAGEMENT BY MEMBERS

Progress towards the Strategic Goal may also be assisted by joint activities with non-member states of EuFMD where there is a mutual advantage recognised by the EuFMD Executive Committee.

Outputs and Activities

1.1. Develop a cadre of European experts in FMD crisis management - recognition and response training.

This includes conducting training on clinical disease recognition, sampling for diagnosis, local area epidemiological investigations, risk factor analysis, practical application of biosecurity principles, and other aspects of FMD crisis management.

1.2. Support contingency planning of Members and at European level – Developing decision support tools for managers.

This includes conducting training and providing support for Members to use disease simulation models and decision support tools to assist contingency planning, and engaging with researchers on FMD modelling to facilitate technology transfer of appropriately developed tools to assist Members.

1.3. Thrace region: programme for early warning surveillance in Greece/Bulgaria/Turkey.

This includes collation and analysis of existing surveillance data, development of risk-based surveillance methods, tripartite coordination of activities, integration of decision support tools and risk analysis into policy evaluation and development, and management of support to surveillance activities.

1.4. Improved emergency management capacity for FMD in the Balkan region

A programme of support to MS in the Balkan region to improve the quality of contingency planning, to improve awareness of FMD risks and the economic consequences of emergencies, and give attention to the issues affecting national reference laboratory capacity for FMD confirmation and surveillance.

1.5. Research activities relevant to resolve policy issues.

This includes support for research projects which have been endorsed by the standing technical committee of the EuFMD as being of benefit to EuFMD objectives; activities to translate research into tools, actions or activities which are of benefit to EuFMD activities; and actions to integrate research outcomes with policy.

1.6. Support provided to member states through emergency technical response to FMD outbreaks in the member state or the European neighbourhood.

This includes the maintenance of a capacity to provide advice, technical support and assistance to EuFMD member states and countries in the European neighbourhood in the event of an FMD outbreak, including laboratory and epidemiological support. This baseline activity is also serviced by several of the activities listed above, as these will also act to maintain a degree of organisational readiness to respond to an FMD crisis. This also includes assisting and supporting Members with vaccine procurement and supply, through the provision of technical input, advice on selection of vaccine strains, risk based evaluation of vaccination strategies and other related activities.

STRATEGIC GOAL 2: REDUCE RISK TO MEMBERS FROM THE EUROPEAN NEIGHBOURHOOD[2] (PROGRESSIVE CONTROL IN NEIGHBOURING REGIONS)

Outputs and Activities

2.1 South-East Europe: promote better management in Turkey and neighbours.

This includes supporting the collation, analysis and application of epidemiological data, including spatial data, from the area; providing training in the practical application of epidemiology to control FMD and advance along the FAO/OIE progressive control pathway (PCP); engaging with national veterinary services to support them in the detection, management, and control of FMD; and identification of circulating viruses. This also includes secretarial and coordination support for the West Eurasia roadmap for progressive control of FMD, in coordination with other stakeholder bodies, as regards the European neighbourhood.
This component also includes developing specific country projects in line with the PCP designed to improve national capacity to manage and control FMD and assist progress in cooperation with regionally coordinated GF-TADs programs and roadmaps.

2.2 South-East Mediterranean: support better management in the neighbourhood of Cyprus and Israel.

This includes holding workshops and training sessions for neighbour countries of Cyprus and Israel to support laboratory diagnosis, contingency planning, and vaccination strategy development; support to develop laboratory capacity in those countries; regional coordination of FMD control strategies.
This component also includes developing specific country projects in line with the PCP designed to improve national capacity to manage and control FMD and assist progress in cooperation with regionally coordinated GF-TADs programs and roadmaps.

2.3 North Africa: technical support to REMESA[3] actions.

This includes, at the request of those Members participating in REMESA, actions to support activities carried out by France, Spain, Italy and Portugal aiming at strengthening and regionally coordinating laboratory diagnosis, contingency planning, vaccination strategy development, risk based surveillance and other associated actions in Mediterranean countries of North Africa which pose a risk of FMD virus incursion into the REMESA area.

---

2 The neighbourhood of the current 36 Members is here defined as follows:

i. European Member Countries of the World Organisation for Animal Health (OIE) and member of the OIE Regional Commission for Europe which are eligible for membership in EuFMD;
ii. the countries and territories adjacent to Members.
iii. The countries in North Africa cooperating with Members in the framework of REMESA

3 **RE**seau **ME**diterranéen de **S**anté **A**nimale – REMESA: http://www.remesanetwork.org/

2.4 Supporting surveillance networks to provide information needed by risk managers in the European neighbourhood.

This includes support for existing FAO or joint FAO/OIE surveillance networks (RESOLAB in West Africa, EARLN in East Africa, WELNET in West Eurasia, and those under REMESA), where such actions provide information to support analysis of the risk of FMD incursions into the European neighbourhood. The modes of support may include assisting with regional coordination or network meetings, actions to identify circulating virus strains, and actions to characterise the risk of FMD incursions due to factors which may be changing or subject to temporal or spatial dynamics. These actions may be taken in coordination with other stakeholder bodies.

STRATEGIC GOAL 3 - PROMOTE THE GLOBAL STRATEGY OF PROGRESSIVE CONTROL OF FMD

Outputs and Activities

3.1 Support FAO FMD Unit in collating information for review of progress of regional programmes on FMD control.

This includes collation, analysis and dissemination of relevant information on regional FMD control programmes worldwide; support for workshops to coordinate this process; and other associated actions.

3.2 Technical support to develop the OIE/FAO FMD progressive control pathway (PCP) methods and guidelines.

This includes engaging with the on-going development of the PCP, providing training in the application of the PCP at national level, regional level, and to international agencies; supporting the development of associated tools and activities to integrate relevant fields with PCP applications; and support for the development of regional PCP roadmaps.

3.3 Support the global system for improved FMD reference lab services (World Reference Laboratory Contract, supporting FAO/OIE Strategy and Gf-TADs).

This includes supporting the FAO FMD World Reference Laboratory to provide services to the European neighbourhood and globally, including diagnostic service, vaccine matching, molecular epidemiological analysis of worldwide and regional FMD patterns, and provision of laboratory proficiency test (PTS) ring trials to FMD laboratories in non-EU states[4] and internationally.

RESPONSIBILITIES FOR IMPLEMENTATION

The Secretariat of the European Commission for the Control of Foot-and-Mouth Disease hosted by the Agriculture Department of the Food and Agriculture Organization of the United Nations is responsible for the implementation of the Project.

[4] EU Member States are included in the PTS funded under the EU-CRL activities.

40th Session

DRAFT

Outline of the

24 MONTH WORKPLAN

EUFMD COMMISSION

A draft Work plan has been developed on the basis of the budget provision that is equal to the previous funding agreement with the EC and all activities to be covered by the EC Financing Agreement or from EuFMD Administrative Funds, with the exception of those indicated (the pre-agreed , Joint Activities conducted on full costs recovery basis with DAFF, Australia. The activities with the latter are shown under the relevant Strategic Objective (Pillar), for completeness.

Additional activities to be added to the Work plan support these Strategic Goals will be decided upon by the Executive Committee after preparation by the Secretariat and proposals from MS and financing partners.

The Draft Work plan is prepared for the 40th General Session for approval.

The activities are considered to be in line with the relevant GfTADS Regional and Global Strategies. After review by FAO Once adopted by the 40th Session , the Work plan for Pillar 2-3 sent through the FAO/OIE mechanisms for entry into the appropriate Regional or Global GfTADS Calendar.

Strategic Goal (Pillar) I :: Table of activities 2013-2015

People moved by the EuFMD in each activity

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

The below Gantt table shows when the activities will take place, but NOT the time used to implement /prepare the activities

I PILLAR			*total*	total	2013								2014												2015			
					M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
					MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
I	TRAINING	RealTime training-Kenya	10	KEN			**				**				**						**					**		
I	TRAINING	E-learning (online platform)	1	ONLINE		****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
I	TRAINING	Decision Support (wkshop/training)	6	TBD					*			*					*				*			*				*
I	TRAINING	Epi. Exp. Con Pomts (meeting)	1	TBD							***											***						
I	TRAINING	Tailored courses - training	6	TBD						*						*		*					*		*		*	
I	DAFF	KTC - (Australian funds)	9	NEP		***			***																			
I	DAFF	Feasability study - (Australian funds)	9	TBD							*																	
I	THRACE	Surveillance activities	1	THR	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I	THRACE	Training + Contract (wkshop/training)	4	THR					*					*							*					*		
I	THRACE	Coordination activities	8	EU	*				*	*				*		*					*	*				*		
I	BALKAN	CVO meeting	2	BLK	**																					**		
I	BALKAN	LAB TRAINING	2	BLK							**									**								
I	BALKAN	PTS	2	BLK										*								*						
I	BALKAN	REAGENTS/EQUIPMENT	2	BLK					*												*							
I	BALKAN	PEPc (epi, modeling, cont....)	1	BLK	**			**					**						**				**					
I	BALKAN	SIMULATION EXERCISE	1	BLK												**												
I	RESEARCH	Identify priorities	0	NA	*	*																						
I	RESEARCH	Invite proposals	0	NA			*			*					*	*			*			*			*			
I	RESEARCH	Evaluate/select	0	NA					*			*			*			*			*			*				
I	RESEARCH	Implement	0	NA					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
I	RESEARCH	*Issue* contracts	0	NA					*	*		*	*		*	*		*			*			*				
I	RESEARCH	Collate progress, M&E	0	NA					*			*			*			*			*			*				
I	RESEARCH	Closed SC meeting	0	EU						**											**							
I	RESEARCH	Open STC and SC meeting	0	EU																	*****							
I	RESEARCH	STC Res Fund meeting	0	EU					**						**						**						**	
I	EMERGENCIES	Emergencies		NA																								
I	L Proficiency Test Serv	*IAH CONTRACT 150K*	0	EU	*																							

Strategic Goal (Pillar) II :: Table of activities 2013-2015

People moved by the EuFMD in each activity

	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

The below Gantt table shows when the activities will take place, but NOT the time used to implement /prepare the activities

II PILAR			total		YEAR 1												YEAR 2											
					2013								2014												2015			
					M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
					MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
II	WEURASIA	COORDINATION OF ALL THE ACTIVITIES		NA																								
II	WEURASIA	Value chain (Kick off)	1	WEA					*																			
II	WEURASIA	Roadmap meetings	2	WEA												**												**
II	WEURASIA	VACCINE strategy workshop	2	WEA						*												*						
II	WEURASIA	Contigency planning workshop	1	WEA														*										
II	WEURASIA	WELNET network meeting	2	WEA								**									**							
II	WEURASIA	Workshop (tbd)	4	WEA																				*				
II	WEURASIA	Participatory epidemiology	2	WEA							*																	
II	WEURASIA	PEP-c 2	4	WEA									*	*	*	*												
II	WEURASIA	Mission OTHER	6	WEA							*			*			*					*			*			*
II	WEURASIA	Mission TURKEY	6	TUR					*			*			*			*				*				*		
II	WEURASIA	Mission TCC	6	TCC						*			*			*						*		*			*	
II	SE Med CYP ISR	Annual Co-ordination Meeting (Cyprus)	2	CYP					*												*							
II	SE Med CYP ISR	PEPc Course - develop (arabic)	3	NA					*	*	*																	
II	SE Med CYP ISR	PEPc Course - deliver course	6	CYP						*		*		*		*		*										
II	SE Med CYP ISR	Real-Time Training - (in Turkey)	1	TUR												*												
II	SE Med CYP ISR	FreeSurv workshop	1	CYP							*																	
II	SE Med CYP ISR	Free Surv follow-up support, for lab testing	15	CYP								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
II	SE Med CYP ISR	Free Surv progress review/WS	1	CYP																							*	
II	SE Med CYP ISR	Egypt - National PCP progress	0	EGY																								
II	SE Med CYP ISR	Egypt - identification of support needed	1	NA			*																					
II	SE Med CYP ISR	Egypt -missions	6	EGY			*				*				*				*				*			*		
II	SE Med CYP ISR	FMDV intelligence gathering	24	CYP	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
II	SE Med CYP ISR	EARLN-FMD support (request from FAO) meeting	2	TBD							*												*					
II	NAfrica: REMESA	RealTime training course	5	NAFR			*				*				*						*					*		
II	NAfrica: REMESA	RBS - Risk based surveillance	2	NAFR									*												*			
II	NAfrica: REMESA	Epi network	2	NAFR							*												*					
II	NAfrica: REMESA	Lab network	2	NAFR							*												*					
II	NAfrica: REMESA	Surveillance NC	2	NAFR					*												*							
II	NAfrica: REMESA	PEPc	1	NAFR					*																			
II	NAfrica: REMESA	Free-surveillance training	1	NAFR							*																	
II	NAfrica: REMESA	Procesing lab sample	1	NAFR		*																						
II	NAfrica: REMESA	Contingency	1	NAFR																					*			
II	NAfrica: REMESA	E-learning	24	ONLINE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
II	FAO-GTADS FMD	pport sample submisison from neighbourhood risk regi	0	TBD	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Strategic Goal (Pillar) III :: Table of activities 2013-2015

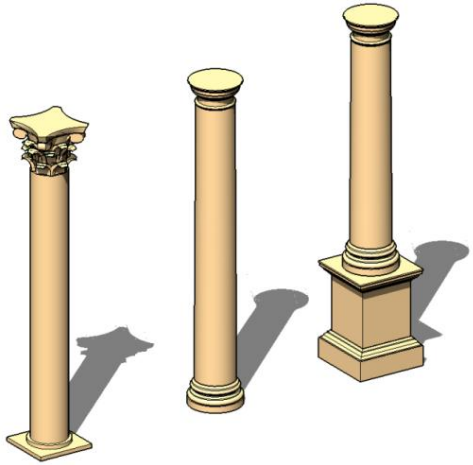
People moved by the EuFMD in each activity

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

The below Gantt table shows when the activities will take place, but NOT the time used to implement /prepare the activities

III PILAR			total		2013								2014												2015			
					M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
					MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
III	SUPPORT FAO	STP and FMD WG SUPPORT	9	EU	*		*			*			*			*			*			*			*			*
III	SUPPORT FAO	WORKSHOPS	2	EU						*												*						
III	support PCP	PCP expert consultation meetings	1	EU		*																						
III	support PCP	Training	1	TBD		*																						
III	support WRLC	CONTRACT IAH	1	TBD					*	*							*					*						
III	support WRLC	Meetings	4	TBD	*					*							*						*					

Pillar 1: Improve Readiness for FMD Crisis Management by Member States



Proposed Work Programme. 2013-2015

Pillar I. Proposals for 2013-2015

- **1.1 Training**
  - RT training Kenya, Nepal
  - E-Learning (RVC London)
  - Disease Modeling
  - Disease Surveillance
  - Tailored courses
- **1.2 Contingency planning and Decision Support**
  - RBS tool
  - Spread model
  - Training
- **1.3 Thrace Region**
  - RBS T.H.R.A.C.E.
  - Training
- **1.4 Balkans Region**
  - Epidemiology network
  - Laboratory network
  - Training
  - CVO meeting
- **1.5 Research**
  - Identify Priorities
  - Proposal and evaluation
  - Implementation and progress

1.6 Support FMD emergency response

Proposed Work Plan. 2013-2015

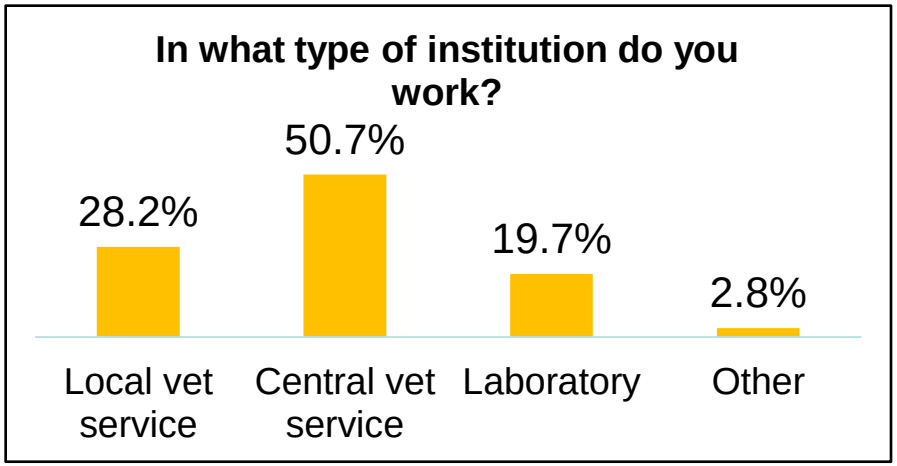
1.1 Training Menu

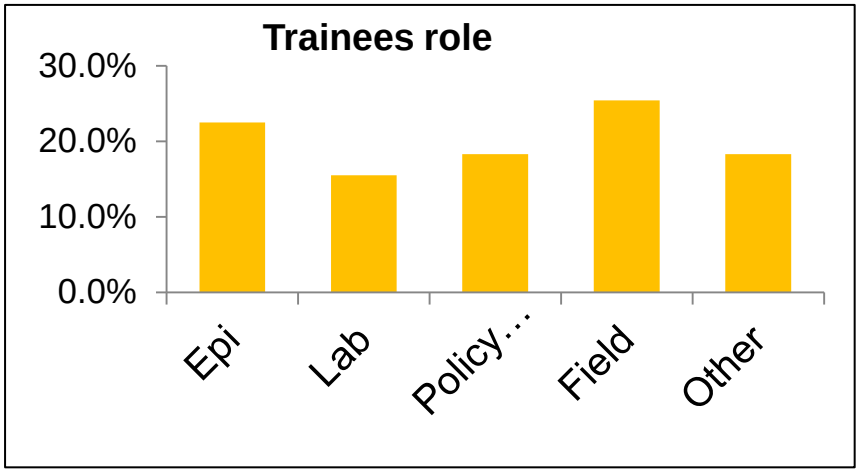
- RT training
- E-Learning
- Risk based Surveillance
- Disease Modeling
- Tailored courses/Other activities (MS demand)

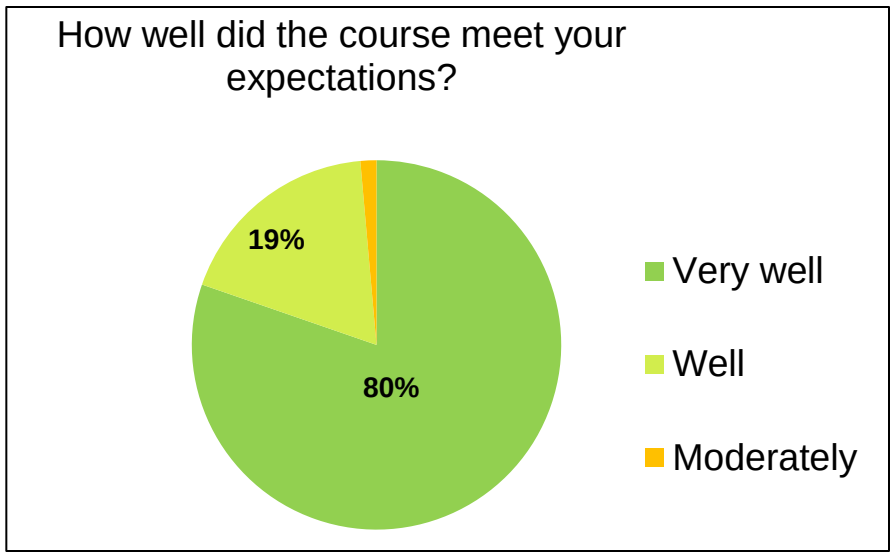
Training Programme Concerns

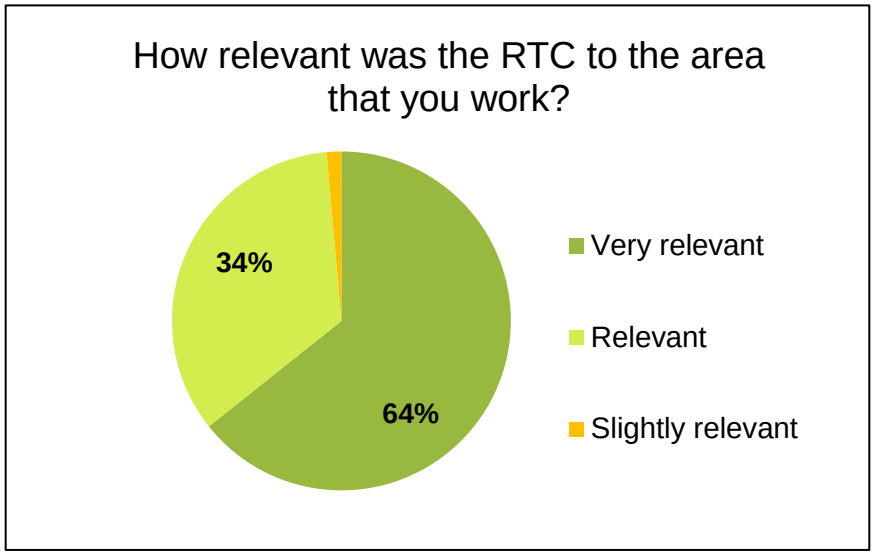
- Are the courses targeting the right people?
- Are the courses covering the right themes without overlapping other training initiatives (i.e. BTSF)?
- Should neighboring countries (North Africa, Russian Federation, etc.) actively participate in the training?
- Would it be possible to encourage knowledge transfer in order to allow broader benefits to MS?

Survey to RT Trainees. (Resp. rate 70% (n=103)





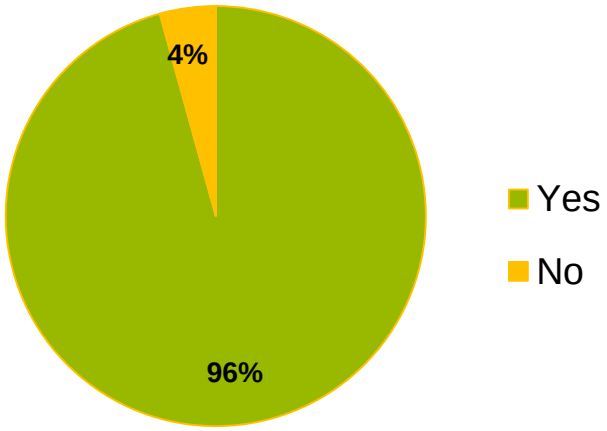




Demand Driven

Until now

If an FMD outbreak occured in your country, would you feel more confident now than before the course in raising a suspicion based on clinical grounds?

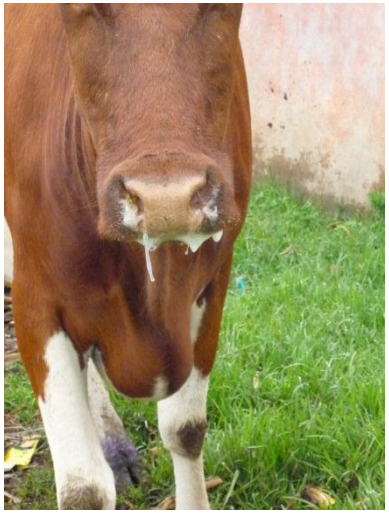


2013-2015

Aspects that might need some training support

Theme of course	Ranking of interest
Contingency planning	1st
Surveillance	2nd
Basic epidemiology	3rd
Disease modelling	4th
Sampling	5th
Socio-economical studies	6th
Laboratory diagnosis	7th

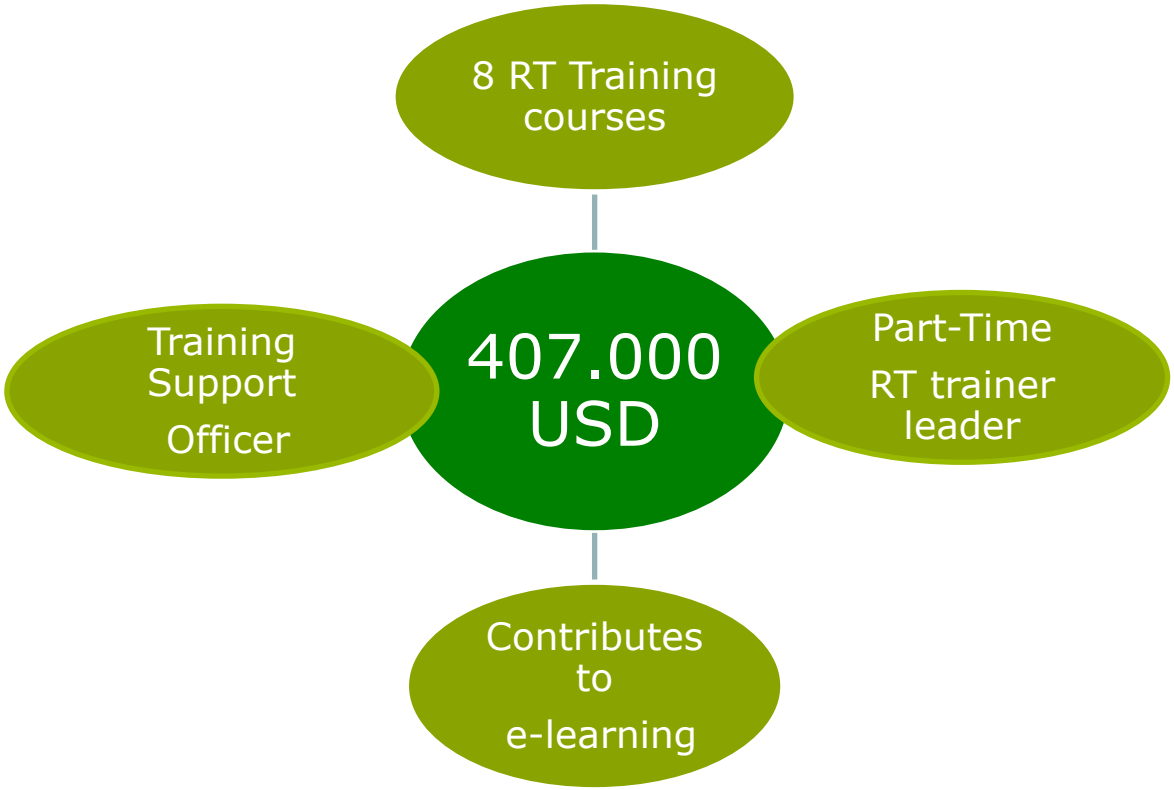
Real Time Courses



- Day 1:FMD lectures
- Day 2: Field Investigation
- Day 3: Risk factor
- Day 4: Report
- Day 5: Unexpected

Train the Trainer

Real Time Training (Nepal)
Australian (DAFF) Contribution to EuFMD



RVC E-learning capacitating program

Royal Veterinary College University of London

- RVC is an FAO epidemiology reference centre
- Broad experience on veterinary distance-learning
- Start with Real-Time Training, then move to others
- Possibility of linking EuFMD courses with short modules in epidemiology/disease control

New Distance Learning Initiative

- Induction course
  - FMD epidemiology
  - Clinical Recognition
  - Laboratory investigation
  - Biosecurity
- Follow up (8 weeks after)
  - Case scenario
- Course Assessment:
  - Before induction course
  - After induction course
  - After Follow up course

Easy to be translated

Field inspector course in case FMD outbreak in MS

Accredited qualification (cert level)?

eufmd e-learning

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Preparing a presentation for your colleagues

EuFMD resources

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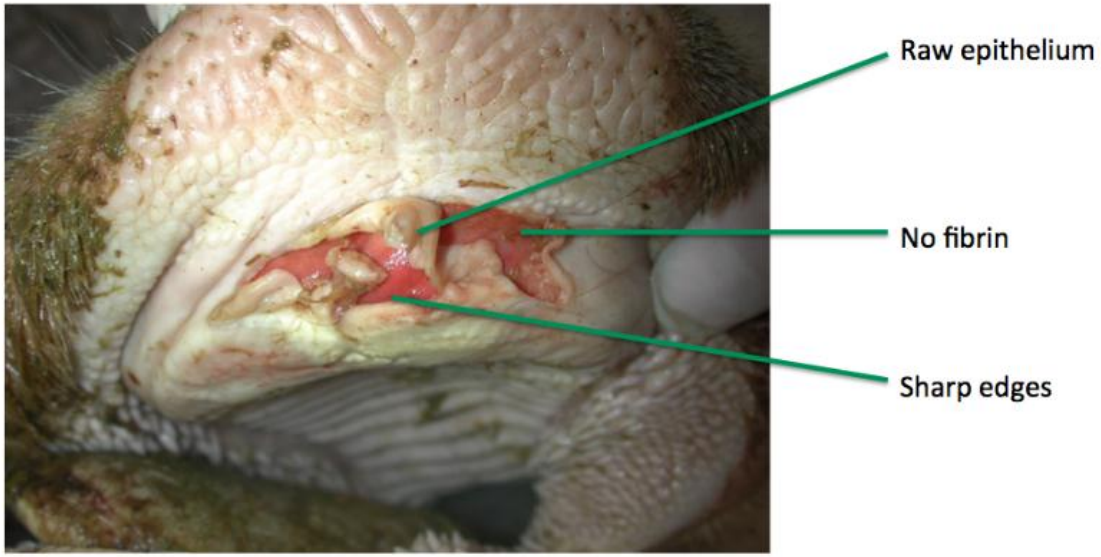
An introduction to lesion ageing

Cattle: day two lesion

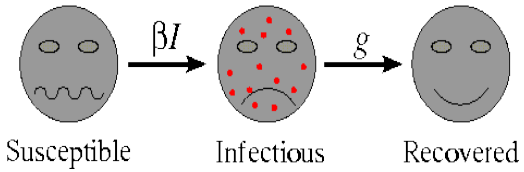


Risk-Based Surveillance (RBS)

- Risk-based surveillance workshop (Istanbul, September 2012, for G/B/T)
- Add hoc tool (Excel). Available to MS
- Based on increased confidence in freedom from disease

Goal: Implement RBS in the other regions

Modeling/Decision Support Tools for FMD



- Viena Workshop. 2012
- Introduction to disease modelling and simulation (NAADSM software)
- Model to support contingency plan and policy maker decision
- MS demand (2013-2015)

Dichotomy between those engaged in modeling and those unable to

Options for follow-up

Option	Advantages	Disadvantages
Ask MS to **make specific requests for training**, stating how any training output will be sustainable after the training	Only committed MS will engage; improves efficiency of training by only engaging with countries already committed	Does not really fulfill 39th GS recommendation; leaves the countries which are least prepared out. Probably weighted towards wealthy MS.
Hold a "**beginners class**" workshop for MS with little current capacity	Fulfills 39th GS rec; builds capacity where most needed; crossover benefits with other supports for those MS	If no serious commitment by MS to engage with modeling after workshop, risk of being unsustainable.
Continue with **regional format**	Fulfills 39th GS rec; improves regional links; use regional leader to coordinate; crossover benefits to other supports to MS, especially in East/South East Europe	Trainees from different levels; some may be committed, others beginners with perhaps limited commitment from CVO. Risk of being unsustainable in some participating countries.
Offer **in-country expert** training provided by consultant to address specific gaps/needs	In-depth training and capacity development given to recipient; tailored to specific needs; more likely to be sustainable	Not practical for large numbers of countries; offer may not be taken up by countries which might benefit.

Tailored courses

- Training programme adapted to needs
- MS Demand
- FMD Expert trainers
  - Surveillance
  - Epidemiologist regular meeting
  - Contingency plan
  - Simulations Exercises
  - Socio-economical impact
  - Epidemiology Expert Meeting
  - Others…

Proposed Work Plan. 2013-2015

1.2 Contingency planning/decision support

- RBS tool
- Disease simulation model
- Training

Support MS to use disease simulation models and decision support tools to assist contingency plan

Gantt Chart. Training activities

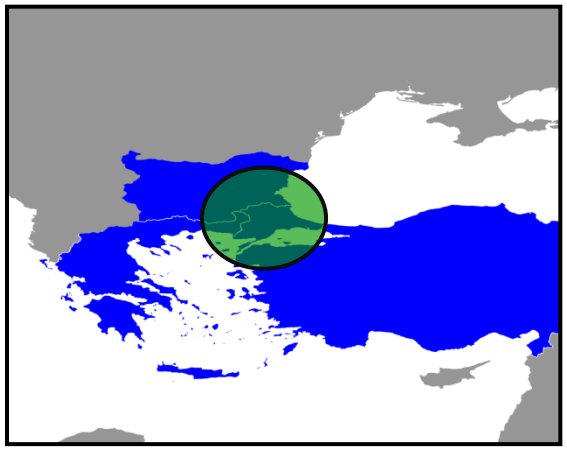
		2013							2014												2015			
RealTime training- Kenya	10		**				**				**						**					**		
E-learning (online platform)	1	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Decision Support (workshop/training)	6				*			*					*					*			*				*
Epi. Exp. Con Pomts (meeting)	1						***													***					
Tailored courses - training	6					*						*		*					*			*		

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

Training Menu

- After the GS EuFMD will request MS to identify their training needs
- The training programme will be updated to budget and MS requests
- Cascade training will be encourage to increase the impact of the training programme. Train the trainer

Pillar I. Proposals for 2013-2015



1.3 Risk Based Surveillance

- T.H.R.A.C.E.

T.H.R.A.C.E. (Bulgaria, Greece, Turkey)

Transboundary High Risk Area Coordinated Epidemio-surveillance

Risk based surveillance programme to increase the level of confidence that the region is free from disease

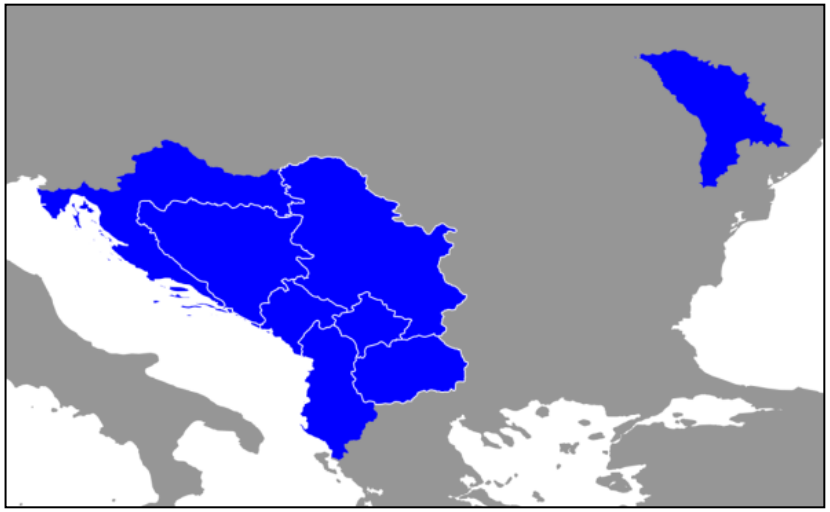
Step 1 (Feb-Mar 2013)	• Agree Programme's basic components and prepare implementation
Step 2 (Apr-Dec 2013)	• Implementation, establishment of baseline programme.
Step 3 (Jan 2014 - onwards)	• Further development – additional activities

Gantt Chart. THRACE activities

		2013								2014												2015			
Surveillance activities	**1**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Training + Contract	**4**					*					*							*					*		
Coordination activities	**8**	*				*	*				*		*					*	*				*		

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

Pillar I. Proposals for 2013-2015



1.4 Balkan Region

- CVO meeting
- Epidemiology subnetwork
- Laboratory subnetwork
- Training

West Balkan FMD Emergency Preparedness Network

- Network covering West Balkans, Moldova
- Epidemiology support (network, training)
- Laboratory support (network, reagents, equipment, training)
- Coordinated with EC-funded (IPA rabies/CSF West Balkan project (same personnel than involves in FMD)
- CVO

Pillar I. Proposals for 2013-2015

1.5 FMD Research

- Identify Priorities
- Proposal and evaluation
- Implementation and progress

Research support

Standing Technical Committee

- Identify Priorities
- Invite Proposal
- Evaluate /Selection
- Implementation and follow up
  LoA and contract

Gantt Chart. Research Activities

	2013								2014											2015			
Identify priorities	*	*																					
Invite proposals			*			*			*			*			*			*				*			
Evaluate/select					*			*			*			*			*				*			
Implement					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
***Issue* contracts**					*	*		*	*		*	*		*			*				*			
Collate progress, M&E					*			*			*			*			*				*			
Closed SC meeting						**											**							
Open STC and SC meeting																	*****							
STC Res Fund meeting				**						**							**					**		

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

Pillar I. Proposals for 2013-2015

1.6 Support FMD emergency response

- Epi and lab advice
- Technical support on emergency vaccination
- Procurement of vaccines
- Laboratory Support
- Training

Thanks

Pillar I. Proposals for 2013-2015

- **1.1 Training**
  - RT training Kenya, Nepal
  - E-Learning (RVC London)
  - Disease Modeling
  - Disease Surveillance
  - Tailored courses
- **1.2 Contingency planning and Decision Support**
  - RBS tool
  - Spreading model
  - Training
- **1.3 Thrace Region**
  - RBS T.H.R.A.C.E.
  - Training
- **1.4 Balkans Region**
  - Epidemiology network
  - Laboratory network
  - Training
  - CVO meeting
- **1.5 Research**
  - Identify Priorities
  - Proposal and evaluation
  - Implementation and progress

1.6 Support FMD emergency response

Pillar 2
Proposed activities

Reduce risk to members from the European neighbourhood
(progressive control in neighbouring regions)

Outline

Strategic Plan and 24 month Workplan – Item 8.1

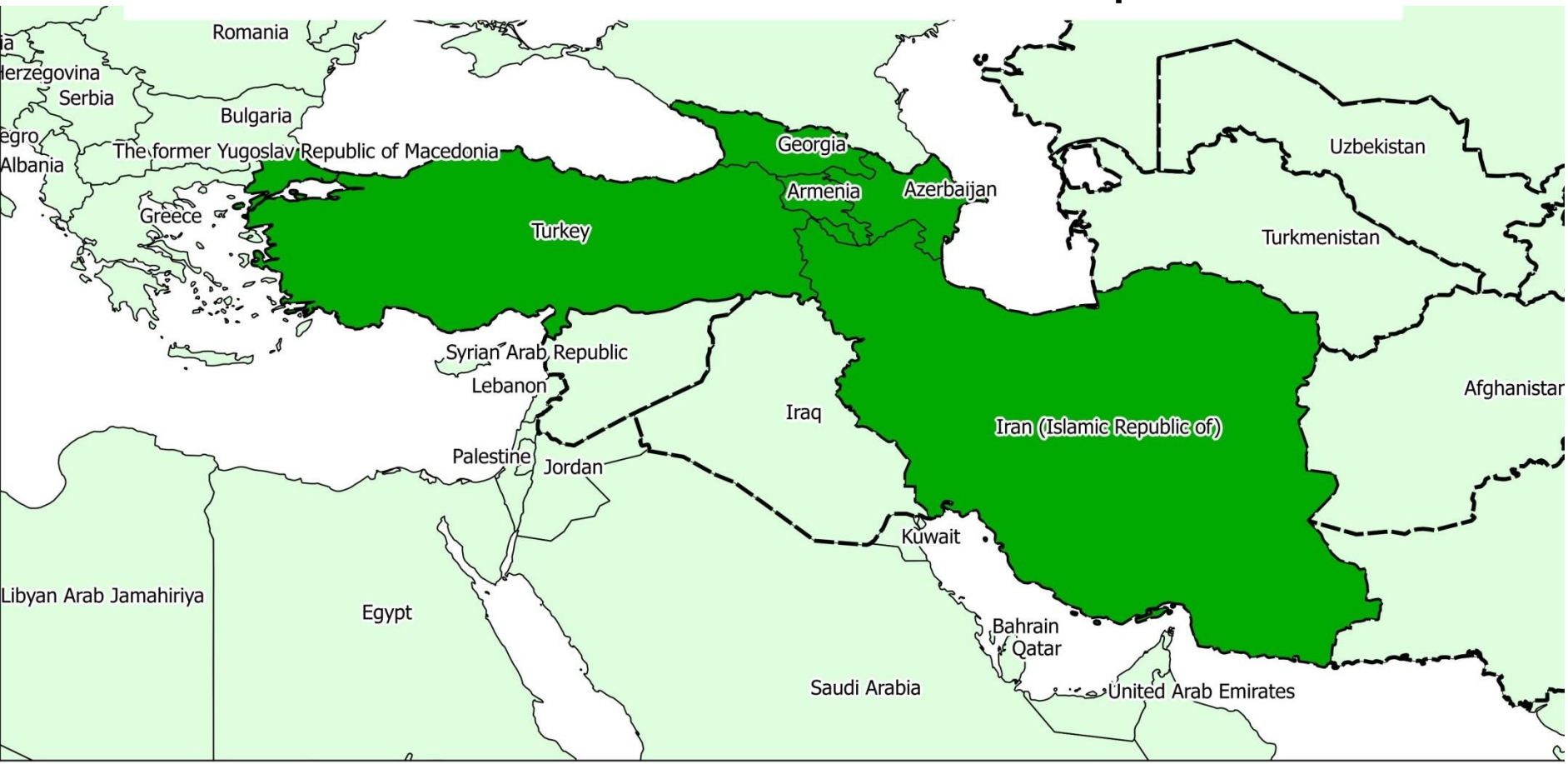
1. South-East Europe (West Eurasia)
2. South-East Mediterranean
3. North Africa (REMESA)
4. Surveillance in support

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work:

- Support Turkey (and TCC new members) in relation to FMD situation in their neighborhood
- Co-ordination – West Eurasia Roadmap Secretariat (GfTADs)
- Collation of information for risk management – Vaccination database, virus circulation, PCP activities
- Neighborhood of Turkey (*part of coordinated GF-TADs programs*)
  - Training in practical application of epidemiology to advance along PCP
  - Engage with VS in detection, management & control of FMD
  - Develop country-specific *PCP action plans* designed to improve national capacity to manage and control FMD

European Neighbourhood countries within the West Eurasia roadmap



2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Secretarial and coordination support for European Neighbourhood countries within the W. Eurasia roadmap

(*part of GF-TADs programs)*

- Annual Roadmap Meetings:
  - Regional risk assessment, information sharing
  - Roadmap Review
  - Coordination of prevention measures
  - Platform for reviewing international assistance needs

Countries participating in the W. Eurasia Roadmap

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Collation, analysis and application of epidemiological data

- Critical for ongoing monitoring and evaluation within PCP Stage 2
  - Implementation and impact indicators
- Currently (2013) national level data provided to EuFMD monthly – 5 countries
- Activities will improve the tools available to national focal points to analyse their own programmes
  - West Eurasia database as tool for managers
- Develop modelling for optimising control measures
  - Critical for regionalisation and moving to PCP Stage 3 – FMD elimination
  - Assist options analysis - in national strategy development

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Training in practical application of epidemiology to advance along PCP

- Recognised shortage of capacity in epidemiology in VS: breadth and depth

1. 2nd PEP-C course (early 2014) - then review
2. Continue to engage graduates of 1st PEP-C course: depth
    1. Training in participatory epidemiology
        - Requested by 1st PEP-C cohort as very valuable skill set to work with and collect useful data from stakeholders
    2. Working on targeted projects with international experts (missions)

Strategy: GANTT Chart

Training in practical application of epidemiology to advance along PCP

	YEAR 1								YEAR 2															
	2013								2014												2015			
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
COORDINATION OF ACTIVITIES																								
Value chain (Kick off)					*																			
Roadmap meetings												**												**
VACCINE strategy wkshop						*												*						
Contingency planning wkshop														*										
WELNET network meeting								**									**							
Workshop (tbd)																				*				
Participatory epidemiology							*																	
PEP-c 2									*	*	*	*												
Mission OTHER							*			*			*					*			*			*
Mission TURKEY					*			*			*			*			*					*		
Mission TCC						*			*			*						*		*			*	

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Engage with VS in detection, management & control of FMD (I)

- Build on: WELNET laboratory network
- Support WELNET annual workplan – greater role for Turkish national reference laboratory
- Co-ordinate:
  - system for use of Epi-, Lab data and national focal points to achieve submission/strains:
  - Alert national focal points to events that need activity
  - Ensure vaccine matching and other results are communicated to risk managers
  - Support for greater within region phylogenetic analysis and vaccine matching

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Engage with VS in detection, management & control of FMD (II)

2. Management & control of FMD
   - Address technical needs of national PCP activities
     - Evidence-based control: based on surveillance data (training, missions)
     - Value chain analysis: basis of control strategy in stages 1-3: overview of animals movements and key stakeholders, socio-economic incentives – who benefits and who should pay? (workshop)
     - How implement and monitor 'risk-based' vaccination? (workshop)
     - Rapid response to incursions of new serotypes/strains to minimize impact (Contingency planning workshop)

Strategy: GANTT Chart

Engage with VS in detection, management & control of FMD

	YEAR 1								YEAR 2													
	2013								2014										2015			
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
COORDINATION OF ACTIVITIES																								
Value chain (Kick off)					*																			
Roadmap meetings												**												**
VACCINE strategy wkshop						*												*						
Contingency planning wkshop														*										
WELNET network meeting								**									**							
Workshop (tbd)																				*				
Participatory epidemiology							*																	
PEP-c 2									*	*	*	*												
Mission OTHER							*			*			*					*			*			*
Mission TURKEY					*			*			*			*			*					*		
Mission TCC						*			*			*						*		*			*	

2.1: South-East Europe: promote better management in Turkey and neighbours

Proposed areas of work: Develop country specific *PCP action plans* designed to improve national capacity to manage and control FMD

(as part of coordinated GF-TADs)

- The gaps have been identified (Roadmap 2013)
- National actions plans are a national responsibility but may need technical guidance and support
  - Economic benefits of control options (requested often!!)
  - Optimising programs - risk management in each production system
  - Cost-effectiveness of control options in PCP Stage 2 & 3
- Learn by doing:
  - For VS to apply knowledge gained by training
  - Build up regional capacity /experts to apply PCP principles

Strategy: GANTT Chart

Develop country specific *PCP action plans* designed to improve national capacity to manage and control FMD

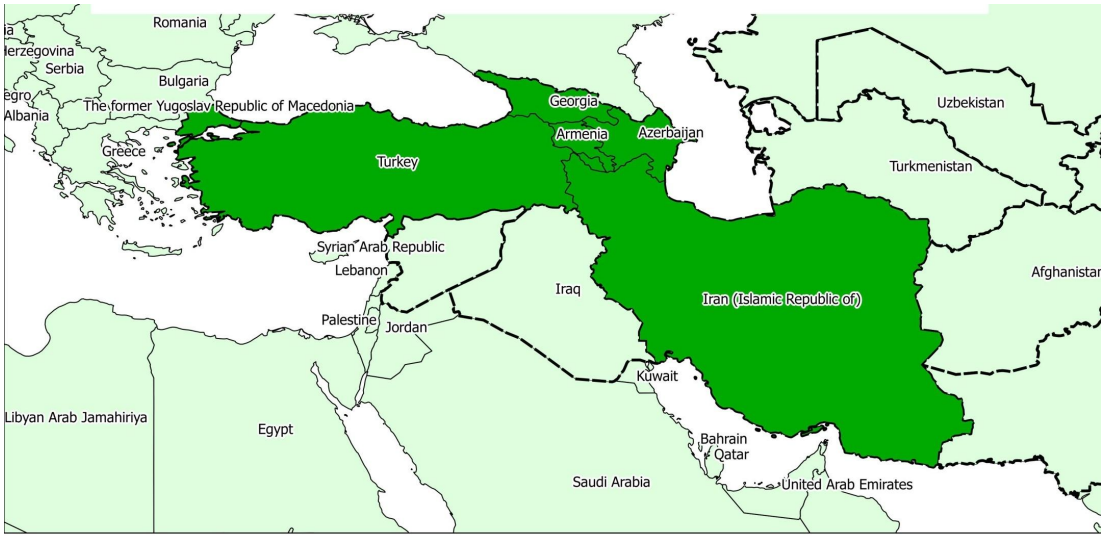
	YEAR 1												YEAR 2											
	2013								2014												2015			
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
COORDINATION OF ACTIVITIES																								
Value chain (Kick off)					*																			
Roadmap meetings												**												**
VACCINE strategy wkshop						*												*						
Contingency planning wkshop														*										
WELNET network meeting								**									**							
Workshop (tbd)																				*				
Participatory epidemiology							*																	
PEP-c 2									*	*	*	*												
Mission OTHER							*			*			*					*			*			*
Mission TURKEY					*			*			*			*			*					*		
Mission TCC						*			*			*						*		*			*	

Proposed structure of work: pool of expertise to support FMD management

A decentralised facility to provide technical and management support to FMD control and PCP progression

Participating countries:

- EuFMD member states Turkey
- Georgia, Azerbaijan, Armenia – potential MS
- Other countries in region – to be decided, funding and GfTADS basis



West Eurasia FMD management support

Supporting managers in decision making – using the network of trained national experts and strategic use of international experts

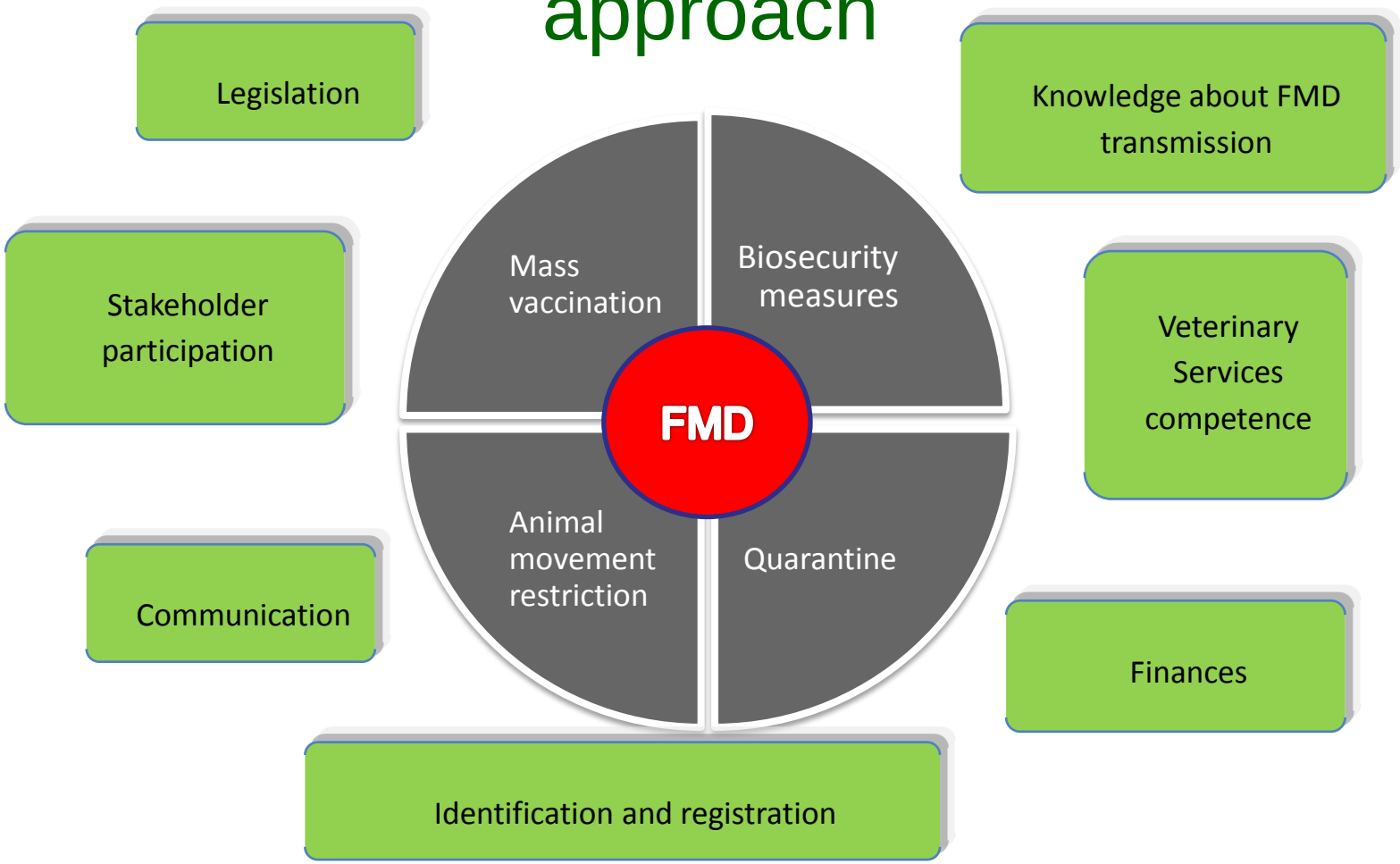
National expertise:

- National focal points (PEP-C graduates)
- WelNet members
- Roadmap Advisory group (currently elected members from: Turkey, Azerbaijan, Iran, Pakistan)

International backstopping:

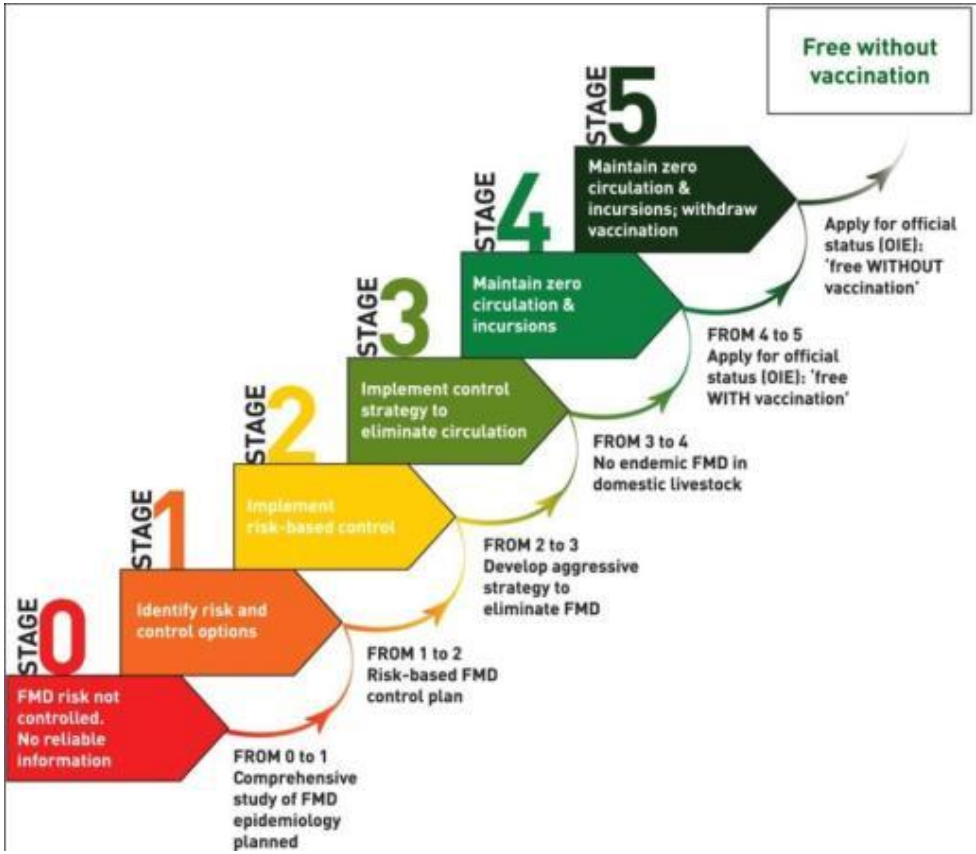
- EuFMD staff and consultants
- Pillar II Special Committee members (for reviewing reports and specific technical proposals)
- GfTADS FMD Secretariat Working group in FAO/OIE

FMD control requires a comprehensive approach



West Eurasia –

The challenge of management continues to teach us lessons of wider importance in using the PCP



South-East Mediterranean: support better FMD management in the neighborhood of Cyprus and Israel

Significant FMD threats from TWO virus pools :-

1- From West Eurasia:

- Sweeping epidemics of huge intra-regional impact
- Frequency and speed of spread increasing:
  - Overspill to middle-east and north Africa (Libya)
  - Four regional epidemics in 4 years (2009-12)
    - Two (A, O) reached Libya
    - One reached Bulgaria (Type O)
    - Asia1 Sindh-08 strain

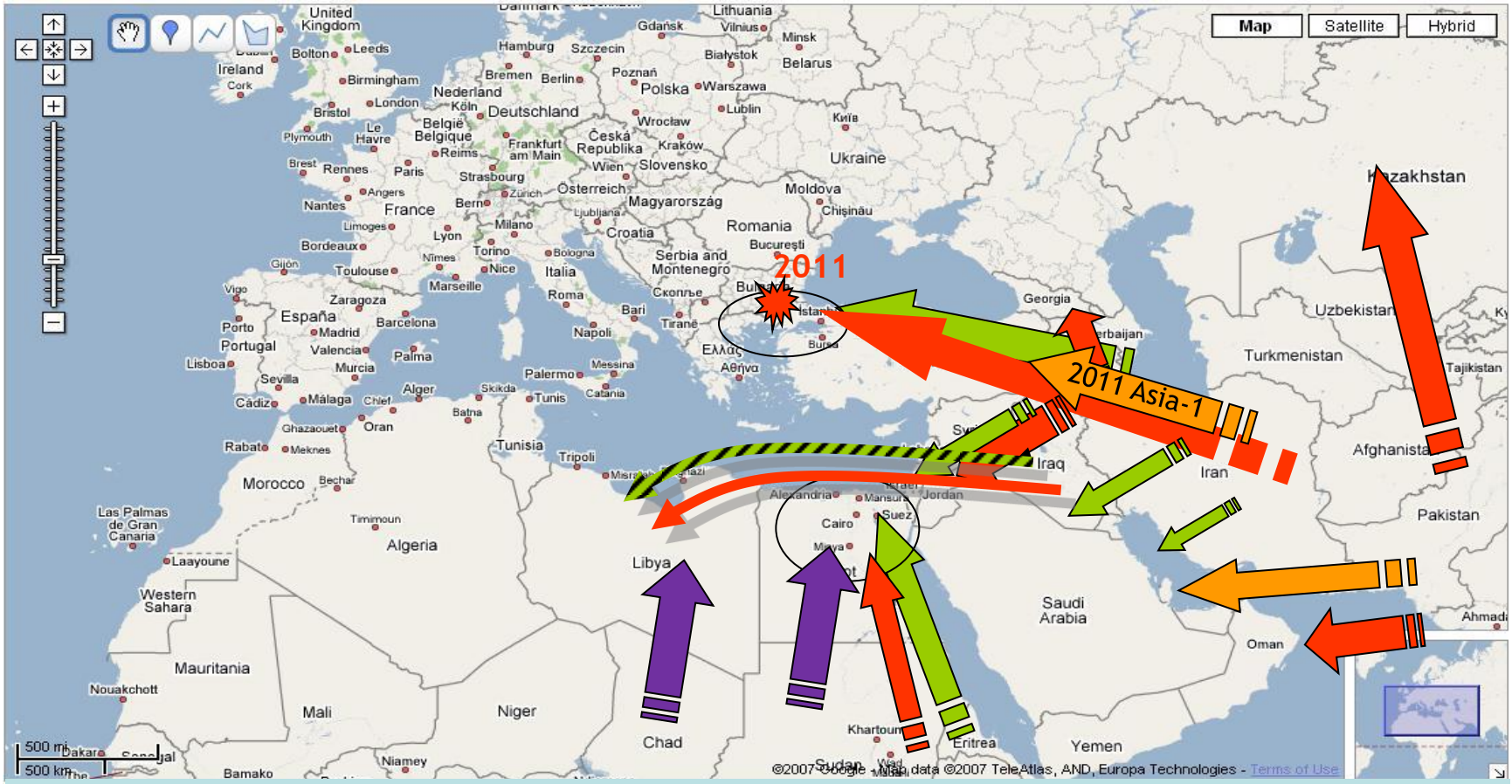
2- From sub-Saharan Africa into Egypt and Libya in 2012:

- African type A (A/Africa/G-IV)
- African type O (O/EA3) – same lineage detected in Egypt and Libya
- SAT2 (Libya and Egypt, different lineages)
- Ongoing risk of further sub-Saharan virus incursions

➢ **Need for forum for countries & international organizations to discuss issues and identify practical solutions**

FMD incursions into the Middle East and North Africa 2008-13

Risk to Israel and its neighbours



Type O, Type A, Type Asia-1, Type SAT2

Workplan Proposal

Under GfTADS:

- EuFMD to organise **regular regional coordination meeting for FMD managers** to be held approximately every 9-12 months
  - May include other TADS e.g. Lumpy skin disease, etc (GfTADS decision and lead)
- Location: Cyprus
- Countries/territories: Israel, West Bank, Gaza Strip, Jordan, Egypt, Lebanon, Syria
- Organisations: EuFMD, FAO, OIE, EU
- CVO level

Purpose & Objectives

- Based on successful TRIPARTITE coordination meetings: Turkey, Greece, Bulgaria
  - organised by EuFMD with FAO, OIE and EC
- Share information (recent and planned surveillance, vaccination, control activities)
- Build relationships
- Identify areas for common work - and national specific actions
- Assist regional coordination between countries, and inter-regionally (EuFMD/FAO/OIE/EC)

Format

To be agreed in consultation with all parties (such as inclusion of other TADS)

Tentative format of three days:

Day 1: FMD	Day 2: Other TADs	Day 3: Workshops
Country situation reports - Surveillance activities - Vaccination and control actions Regional situation (EuFMD) Regional FMD control activities (FAO/OIE)	Country reports: - PPR - Lumpyskin - SGP FAO/OIE reports: - Regional activities - Coordination of support	Workshops: - FMD vaccination strategy development and coordination - Risk-based surveillance for FMD and TADs - Coordination of surveillance data (EMPRES-i system)

Proposal discussed with CVOs of Israel, West Bank, Gaza Strip
Also with FAO and OIE
Suggested first meeting: late June/early July 2013

SE Mediterranean countries - Technical support workplan

- **GANTT chart - tentative workplan**
- Annual Co-ordination Meeting
- Training needs identified based on annual meeting and national action plans – and funding
  - PEPc course - FMD management
  - FreeSurv Training – on confidence in detection of FMD
- National PCP action plan support –
  - Identification mission, technical backstopping
  - FAO request for support to Egypt

2.3 North Africa: technical support to REMESA actions

- The requests from the Members States participating in REMESA (France, Spain, Italy and Portugal) will be considered and evaluated.
- The work proposal will be presented in the next Executive Committee for approval.
- EuFMD work plan for 2013-2014 as provided in Strategic Plan will be modified according to Ex. Com decision.

2.4 Supporting Surveillance to provide information for risk managers in European neighborhood

- WELNET: laboratory network action plan - for risk management in Turkey and neighbours
- EARLN-FMD: network of NRLs in Eastern Africa (FAO)
  - FAO pipeline request for continued support
  - Currently provides MONTHLY information –most relevant to **North Africa and Mid-East**
- RESOLAB-FMD: network of NRLs in West Africa (FAO)
  - FAO pipeline request for continued support
  - Works with ANSES (France), IZSLER and Pirbright
  - Currently provides MONTHLY information –most relevant to **REMESA/neighborhood**
- The requests will be considered and evaluated by the ExCom.
- GfTADS - Lab Networks (and support) are expected to be included in GfTADS

Pillar II – Role of the Special Committee

- Special Committee expertise
  - to assist review of regular (6 monthly) reports
  - Comment upon significant issues arising - for the Standing Committee and ExCom
  - Better linkage to reference centres
  - Added Technical expertise – advisory

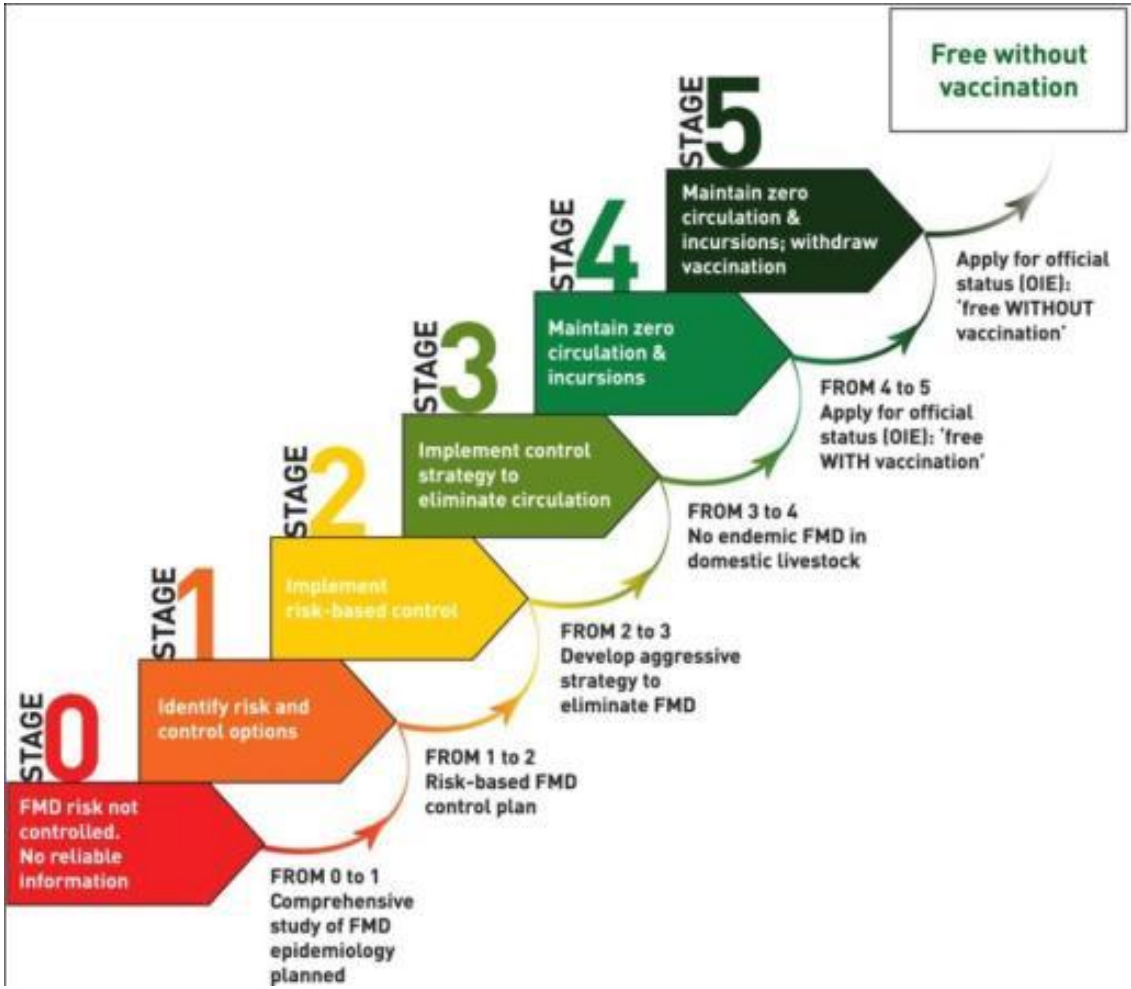
- 5 experts to follow Pillar II
  - (+ experts from Pirbright, VAR, IZSLER - FAO FMD Reference Centres)

Proposal

- To **endorse** the Pillar II workplan for the biennium

- To initiate those parts of the activities that involve the member states as soon as funding is agreed
- That other activities are initiated on the agreement of the Executive Committee, following agreed processes relating to GfTADS

Thank You!


STAGE 0
FMD risk not controlled. No reliable information
FROM 0 to 1
Comprehensive study of FMD epidemiology planned
STAGE 1
Identify risk and control options
FROM 1 to 2
Risk-based FMD control plan
STAGE 2
Implement risk-based control
FROM 2 to 3
Develop aggressive strategy to eliminate FMD
STAGE 3
Implement control strategy to eliminate circulation
FROM 3 to 4
No endemic FMD in domestic livestock
STAGE 4
Maintain zero circulation & incursions
FROM 4 to 5
Apply for official status (OIE): 'free WITH vaccination'
STAGE 5
Maintain zero circulation & incursions; withdraw vaccination
Apply for official status (OIE): 'free WITHOUT vaccination'
Free without vaccination

Pillar III: PROMOTE THE GLOBAL STRATEGY OF PROGRESSIVE CONTROL OF FMD

Assisting PCP development, dissemination and support to application
Supporting FMD Reference Centre services

EuFMD PCP-team
Chris Bartels
Melissa McLaws
Eoin Ryan
Keith Sumption

Item 8.1
Strategic Plan+
Workplan 24 months

STRATEGIC GOAL 3 - PROMOTE THE GLOBAL STRATEGY OF PROGRESSIVE CONTROL OF FMD

- *Outputs and Activities*
- **3.1 Support FAO FMD Unit in collating information for review of progress of regional programmes on FMD control.**
- This includes collation, analysis and dissemination of relevant information on regional FMD control programmes worldwide; support for workshops to coordinate this process; and other associated actions.
- **3.2 Technical support to develop the EuFMD/OIE/FAO FMD progressive control pathway (PCP) methods and guidelines.**
- This includes engaging with the on-going development of the PCP, providing training in the application of the PCP at national level, regional level, and to international agencies; supporting the development of associated tools and activities to integrate relevant fields with PCP applications; and support for the development of regional PCP roadmaps.
- **3.3 Support the global system for improved FMD reference lab services (World Reference Laboratory Contract, supporting FAO/OIE Strategy and Gf-TADs).**
- This includes supporting the FAO FMD World Reference Laboratory; to provide services to the European neighbourhood and globally, including diagnostic service, vaccine matching, molecular epidemiological analysis of worldwide and regional FMD patterns (and PTS)

Strategic Goal (Pillar) III :: Table of activities – 24 months

People moved by the EuFMD in each activity

*	< 15 participants
**	< 30 participants
***	30-50 participants
****	50-100 participants
*****	100 participants (Open Session >200)

The below Gantt table shows when the activities will take place, but NOT the time used to implement /prepare the activities

III PILAR			total		2013								2014												2015			
					M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24
					MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
III	SUPPORT FAO	STP and FMD WG SUPPORT	9	EU	*		*			*			*			*			*			*			*			*
III	SUPPORT FAO	WORKSHOPS	2	EU						*												*						
III	support PCP	PCP expert consultation meetings	1	EU		*																						
III	support PCP	Training	1	TBD		*																						
III	support WRLC	CONTRACT IAH	1	TBD					*	*							*					*						
III	support WRLC	Meetings	4	TBD	*					*							*						*						

Table only indicates approximate timing of missions or workshops
Most activities are office based – or as Contracts (Reference Centres)

3.1 Support FAO FMD Unit in collating information for review of progress of regional programmes on FMD control

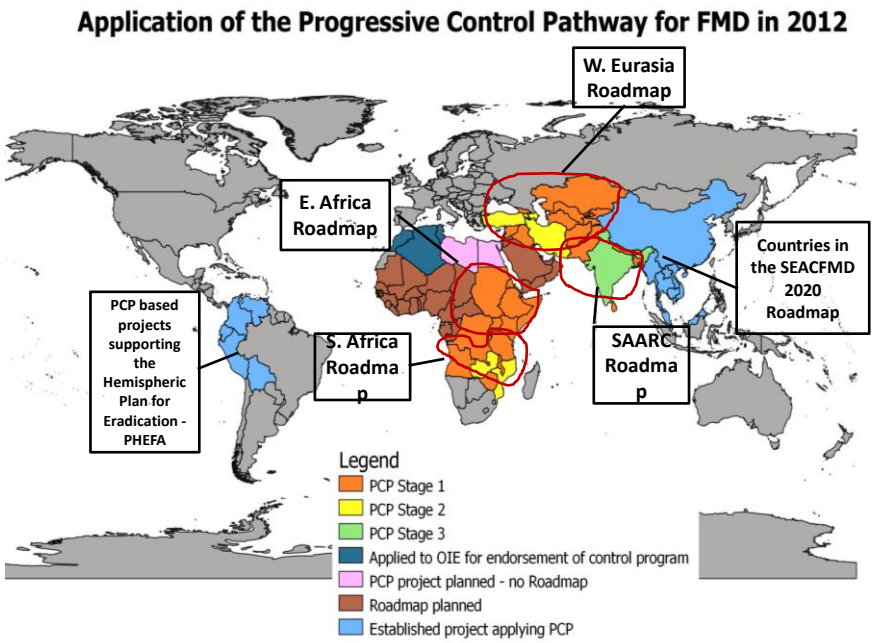
- In response to an FAO (or GfTADS WG Secretariat) request for assistance, and after decision of the ExCom
- Assist monitoring of the regional and national FMD control activities
- Activities:
  - collate, analyze and present information on the progress of FMD control programmes
  - improve communication flow and programming of joint activities – EuFMD with FAO and GfTADS
  - assist in development and use of the PCP tools, guidelines and indicators
  - ensure good communication flow with EuFMD Special Committee experts
- If parties agree, assist the GfTADS FMD Working Group Secretariat

- *Modality: FT veterinarian through the STP programme of the EuFMD*

3.2 Technical support to develop the EuFMD/OIE/FAO FMD progressive control pathway (PCP) methods and guidelines.

The PCP-FMD was first internationally published by the EuFMD in 2009 (38th Session) and updated 2011 (39th Session)

- Developed – EuFMD/FAO in 2008
- Joint Tool with OIE - 2011
- Principle tool in the Global Strategy
- Priorities for further development – FAO/OIE FMD WG and EuFMD
- EuFMD experts – develop, review and test in European region



PCP-FMD priorities and planning

3.2 Technical support to develop the EuFMD/OIE/FAO FMD progressive control pathway (PCP) methods and guidelines.

Priorities for PCP-FMD development

- ✓in wide use – by EuFMD, FAO and OIE
- ✓ also directly taken up by countries – national targets
- ✓Important for our region (>20 countries in neighbourhood PCP1-3)
- ✓The concept is known but the full potential not yet realised

Actions needed to support better uptake – and assist harmonised application, and achieve more rapid impact

Priorities

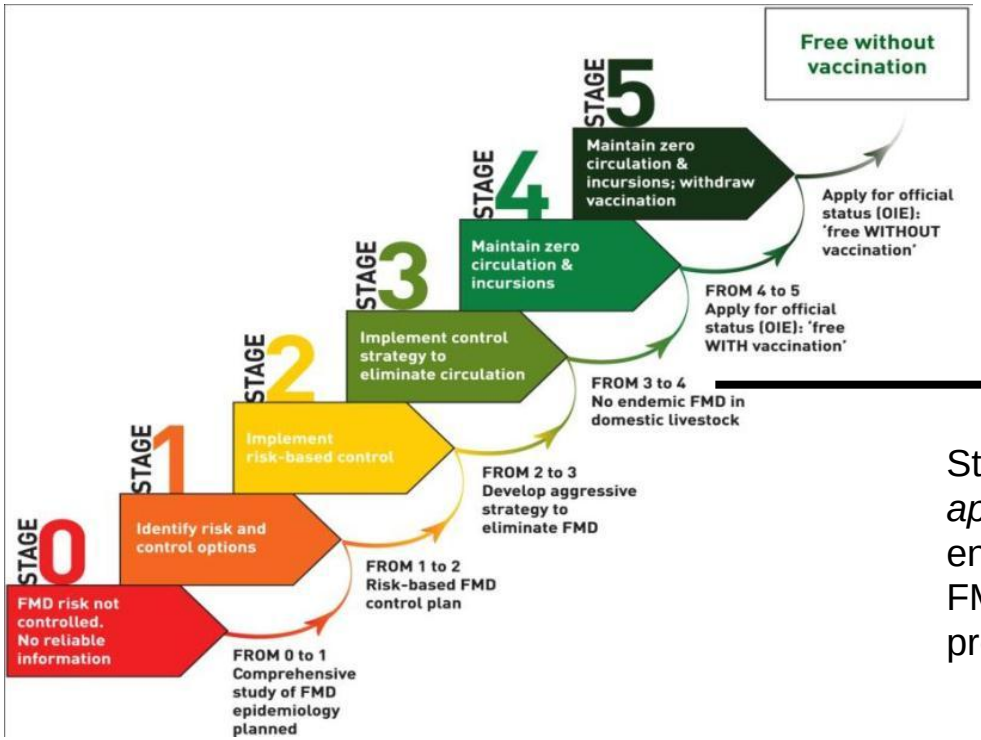
1. "Spreading the word" Dissemination of the PCP-FMD message
2. "Building bricks" tools and training to apply PCP-FMD

2011: One Framework – from endemic to free without vaccination.

In achievable Stages.

Getting started:

Policy ,
Strategy,
Implementation
Monitoring
Evaluation



OIE recognition and endorsement options

Stage 3: *option to apply for* OIE endorsed National FMD Control programme

Activity Plan for 24 months to focus on :

1. "Spreading the word" Dissemination of the PCP-FMD message
   a. Train FAO/OIE staff on PCP-FMD approach
   b. Develop format for National Workshops and Regional Roadmap meetings
   c. Presentations, publications, newsletters, internet-based library on FMD

2. "Building bricks" tools and training to apply PCP-FMD
   a. Guidelines as supporting documents
   b. Training on application and peer-learning
   c. Data sharing, information exchang

1a – Provide trainers/training – our expertise in support of The Global Strategy implementation

- EuFMD to supply experts for short training courses
  - Concept of PCP-FMD
  - Application in gap analysis and PCP based project formulation
  - PCP based National FMD control strategy development processes
  - Monitoring and evaluation of control programmes
  - Assessment tool – use at national level, regional meetings
  - Managing PCP processes – at workshops/meetings
- Objective: to assist build up of regional expertise (PCP capacity) to support application of the PCP-FMD concept

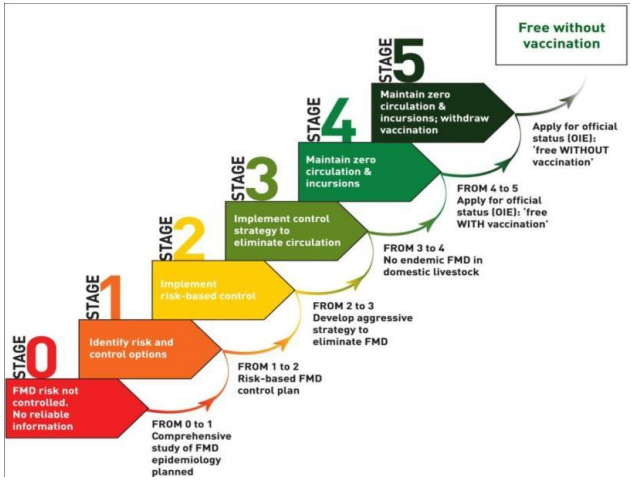
1b - Developing formats for National & Regional PCP Roadmap workshops

- Based on expereince in West Eurasia,
- Develop supporting guidance for Roadmap workshops,
  - ❖ Assess actual FMD control status
  - ❖ Identify gaps and needs to progressively control FMD
  - ❖ Define objectives and expected outcomes for 3-5 years (mid-term) progress
  - ❖ Define workplan (activities, roles and responsibilities) for next 12 months

Objective: to motivate national veterinary services to effectively control FMD – within their framework of capacity, budget and means

1c – Communication for continually learning on the PCP in action

- In agreement with FAO FMD unit/ FMD WG Secretariat
  - Communication action plan
  - Advocacy documents
    - For international use - presentations/presence in meetings, online
  - Publishing peer-reviewed supporting documents
    - Priorities agreed with FMD WG
    - Our EuFMD priorities (Europe)
  - Online resources and 365 days a year expertise for PCP advice



PCP think tank - experts in Special Committee Pillar 3

PCP-FMD priorities and planning

2 – Tools and training

- Stage 1: comprehensive understanding of control options

➢ Towards end of Stage 1
  – Guidelines for Developing a risk-based FMD control strategy

PEPC

- Stage 2: Organisation of FMD control
  – enhancing enabling environment (PVS tool)
  – Monitoring and evaluation of progress with emphasis on indicators and target setting, data validation and reporting

PEPC advanced

1 – Action Plan on Dissemination

Activities	Subject	q1	q2	q3	q4	q5	q6	q7	q8	who
		jul-sep 13	oct-dec 13	jan-mar 14	apr-jun 14	jul-sep 14	oct-dec 14	jan-mar 15	apr-jun 15	
Training PCP approach	regional FAO/OIE	1	2	2	1					EuFMD Experts
Format for workshops/ meetings	Development	x								through EuFMD
	upon request by countries		2	2	2	2	2	2	2	EuFMD experts maximum 2 per quarter
Newsletters, publications, presentations	Throughout	x	x	x	x	x	x	x	x	Under STP – pillar III

2 – Action Plan on Supporting Guidance

To be agreed with FMD WG

	Subject	q1	q2	q3	q4	q5	q6	q7	q8
		jul-sep 13	oct-dec 13	jan-mar 14	apr-jun 14	jul-sep 14	oct-dec 14	jan-mar 15	apr-jun 15
Stage 1	risk based control strategy	X							
	sero-survey	X							
	outbreak investigation		X						
	socio-economic impact		X						
	value-chain analysis			X					
Stage 2	logframe approach, including M&E, indicators and targets			X					
	cost-benefit analysis on options for FMD control				X				

Training Course development

PCP Stage	Course	Developed?	Proposed action	When
I	PEPc	Yes - English	Develop e-learning	2013
2	PEPc *ADVANCED*	No	Develop Course	2014
3	PEPC *ThreePlus*	No	Identify Needs	2015

3.3 Support the global system for improved FMD reference lab services (World Reference Laboratory Contract, supporting FAO/OIE Strategy and Gf-TADs).

- Statutory basis - Article IV.6 EuFMD Constitution
  - General functions of the Commission include:
  - "to **ensure the availability** of an international laboratory (World Reference Laboratory) with facilities for rapid characterisation of virus by appropriate methods""
- Until 2010, Contract from EuFMD Administrative Fund and FAO
- 2011-12: Contract from EuFMD (EC Trust Fund; 39th Session)
- 2013: one year extension (ExCom 85th)
- **Action Plan**:
  - ExCom (86th) : to decide upon Contract for 2014-2015
  - Consider - Global Reference Laboratory Network Proposal
  - Note:
    - Proficiency Test Service – under Pillar I
    - Surveillance Network support – Pillar II

Pillar III – Role of the Special Committee

- Special Committee expertise
  - to assist review of reports and action plans (6 monthly)
  - peer review – if needed
  - comment upon significant issues arising - for the Standing Committee and ExCom
  - International width and depth of expertise
  - New expertise in socio-economics and evaluating progress

- 5 experts to follow Pillar III
  - (+ experts from Pirbright, VAR, IZSLER - FAO FMD Reference Centres)

Proposal

- To **endorse** the Pillar III workplan for the biennium

- To initiate those parts of the activities that involve the member states as soon as funding is agreed
- That other activities are initiated on the agreement of the Executive Committee, following agreed processes relating to GfTADS

Readily-available stocks of formulated FMD vaccine and/or inactivated antigen for emergency use in EUFMD member countries

Results of a questionnaire survey ran by the EuFMD (Function IV, 7)

Responses

Sent out to EuFMD
& neighbouring countries (47)

31 replies received
(25 EuFMD member states)

Summary of questionnaire

- National arrangements for supply of Antigen/Formulated vaccine: 9 (6 EuFMD members)
- 8 National banks held in a vaccine producing company
- 2 banks held in a national vaccine bank
- Mostly inactivated FMD antigens, but also some formulated vaccine

Summary of questionnaire

3 EuFMD (non EU) member countries don't have any arrangement for supply of vaccine/Ag

1 EuFMD neighbouring country does not have any arrangement for supply of vaccine/Ag

Agreement with IGVB: 27 (all EUVB) plus Norway + Croatia

National inactivated FMD Ag stocks

- 9 countries reported to have own NVB *
- All high priority strains identified by WRL covered
- Few medium priority strains are included
- Even less low priority and/or other strains

(*1 EuFMD member state has stopped keeping a NVB, responses pending from another 2 EuFMD MS , who keep NVBs)

WRL high priority strains

(at least one in each bank, in most cases more than 3)

Serotype	O Manisa	O Panasia 2	O BFS or Campos	A-Iran-05*	A24 Cruzeiro	A22 Iraq	Asia 1 Shamir	SAT 2 Saudi Arabia (*or equivalent*)
Nb banks	7	3	1	7	1	3	8	5

Total: **51,52 million doses**, excluding the EUVB

Majority >2,5 million doses

Few < 1 million

Last survey (2011), Total : **72,75 million doses**, excluding the EUVB

Note: replies pending from 2 countries that previously reported vaccine banks (≃ 13.5 million additional doses in the last survey)

Vaccine/antigen availability per FMDV pool

(Note: some strains are present in more than one pool)

FMDV Pool	% of doses, from all vaccine or antigen banks collectively, that could be used (theoretically) for strains within the same pool
1 (Central /East Asia)	20,54 %
2 (South Asia)	20,54 %
3 (West Eurasia & Middle East)	79,21 %
4 (Eastern Africa)	0,00 %
5 (West/Central Africa)	4,43 %
6 (Southern Africa)	4,95 %
7 (South America)	7,18 %

Issues

Mechanisms to sell:

- **To EuFMD?**
- **To others?**

EuFMD has 150.000 doses (trivalent vaccine)

Relation of European vaccine bank managers to each – other and to the international vaccine bank network (Pilar 1 ?)

In 2012 EuFMD contacted the European Vaccine Bank holders, following the Egypt crisis and one was willing to sell vaccine stock if needed.

THANKS FOR YOUR ATTENTION !!!

TRUST FUND No. 9042.00 - MTF/INT/011/MUL -
Inter-Regional - European Commission for the Control of Foot-and-Mouth Disease

Status of Contributions as at 31 March 2013
(expressed in USD)

ORACLE CODE: TF-AGADD-TFAA97AA89122

Member Governments	Outstanding 31/03/2012	Contribution due for 2013	Received up to 31/03/2013	Outstanding 31/03/2013
ALBANIA	12,400.00	4,170.00		16,570.00
AUSTRIA	0.00	12,786.00		12,786.00
BELGIUM	0.00	21,260.00		21,260.00
BOSNIA	4,170.00	4,170.00		8,340.00
BULGARIA	25,572.00	12,786.00		38,358.00
CYPRUS	0.00	4,170.00		4,170.00
CROATIA	2,600.00	4,170.00		6,770.00
CZECH REPUBLIC	9.00	12,786.00		12,795.00
DENMARK	0.00	21,260.00	21,260.00	0.00
ESTONIA	0.00	4,170.00	4,170.00	0.00
FINLAND	27.00	12,786.00		12,813.00
FRANCE	2,032.72	42,374.00	44,406.72	0.00
GERMANY	3.77	42,374.00		42,377.77
GREECE	12,786.00	12,786.00		25,572.00
HUNGARY	12,786.00	12,786.00	12,786.00	12,786.00
IRELAND	12,811.00	12,786.00		25,597.00
ISRAEL	8,340.00	4,170.00		12,510.00
ITALY	-1,610.17	42,374.00		40,763.83
LATVIA	8,340.00	4,170.00		12,510.00
LITHUANIA	0.00	4,170.00		4,170.00
LUXEMBOURG	0.00	4,170.00	4,170.00	0.00
FYR of MACEDONIA	12,510.00	4,170.00		16,680.00
MALTA	4,198.00	4,170.00	4,170.00	4,198.00
NETHERLANDS	0.00	21,260.00		21,260.00
NORWAY	0.00	12,786.00		12,786.00
POLAND	21,260.00	21,260.00	21,260.00	21,260.00
PORTUGAL	12,786.00	12,786.00		25,572.00
ROMANIA	0.00	21,260.00		21,260.00
SERBIA	38,358.00	12,786.00	38,358.00	12,786.00
SLOVAK REPUBLIC	-2,990.00	12,786.00		9,796.00
SLOVENIA	22.00	4,170.00		4,192.00
SPAIN	0.00	21,260.00		21,260.00
SWEDEN	0.00	21,260.00		21,260.00
SWITZERLAND	21,260.00	21,260.00	42,520.00	0.00
TURKEY	0.00	21,260.00	21,260.00	0.00
UNITED KINGDOM	0.00	42,374.00		42,374.00
TOTALS	207,671.32	551,522.00	214,360.72	544,832.60

ICELAND no longer a member as per Rumich email of 13.03.12

*** As at 20 April 2013 Norway, Czech Republic, Austria, Germany, Lithuania, Slovenia, Sweden and Romania have contributed for a total amount of USD 131,565, which will be reflected on the next report**

ACTUALS ONLY

STATEMENT 2

MTF/INT/011/MUL - TF number 904200

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Financial Report from 1st January to 31 March 2013

	USD	USD	Eur	Eur
Balance as at 1 January 2013		532,505		400,976
				0
				0
Interest received	0			0
Contributions from member countries and instititute	214,361		161,414	0
Project Income Earned (Child)	12,675	227,035	9,544	170,958
Expenditure				
Salaries	135,999		102,407	
			0	
Consultant	2,421		1,823	
Contracts	(35,263)		(26,553)	
Duty Travel	26,770		20,158	
Training	(313)		(236)	
General Operating Expenses	(237)		(178)	
Expendable Equipment	(1,297)		(977)	
Non-Expendable Equipment	(447)		(337)	
Total Expenditure		127,633		96,107
Balance as at 31 March 2013		**631,908**		475,827

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2013.The average monthly UN Operational Exchange Rate applicable for the period to 31 March 2013 is USD 1: EUR 0.753.
The UN Operational Exchange rate at 31 March is USD 1: EUR .0.773

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FIAT PANIS

ACTUALS ONLY

STATEMENT 3

MTF/INT/003/EEC - TF number 911100

FOOT AND MOUTH DISEASE

Financial Report from 1st January to 31 March 2013

	USD	USD	Eur	Eur
Balance as at 1 January 2013		(57,489)		(43,289)
Interest received	0		0	
Contribution received	0	0	0	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	(4,921)		(3,706)	
Contracts	(12,842)		(9,670)	
Duty Travel	0		0	
Training	0		0	
General Operating Expenses	(4,897)		(3,688)	
Expendable Equipment	0		0	
Non-Expendable Equipment	0		0	
Support Costs 6% (on all items except expendable equipment)	(1,058)		(797)	
Less: Total Expenditure		(23,719)		(17,861)
Balance as at 31 March 2013		(33,769)		(25,428)
Balance restated at UN Exchange rate of 31 March 2013				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2013.The average monthly UN Operational Exchange Rate applicable for the period to 31 March 2013 is USD 1: EUR 0.753. The UN Operational Exchange rate at 31 March is USD 1: EUR .0.773

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FIAT PANIS

ACTUALS ONLY

STATEMENT 5

MTF/INT/003/EEC - TF number 608868

EC Funded Activities (200902013) carried out by the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD) - (Follow-up Phase MTF/INT/003/EEC)

Financial Report from 1st January to 31 March 2013

	USD	USD	Eur	Eur
Balance as at 1 January 2013		(723,655)		(544,912)
Interest received	0		0	
Contribution received	0		0	
Total funds received		0		
Expenditure				
Salaries Professional	35,639		26,836	
Salaries General Service	18,999		14,306	
Consultancy	76,279		57,438	
Contracts	(304,036)		(228,939)	
Locally Contracted Labour	108			
Duty Travel	53,710		40,444	
Training	24,554		18,489	
General Operating Expenses	155		117	
Expendable Equipment	13,949		10,503	
Non-Expendable Equipment	7,566		5,697	
Support Costs 7%	(5,115)		(3,852)	
Less: Total Expenditure		(78,193)		(58,879)
Balance as at 31 March 2013		(645,462)		(486,033)
Balance restated at UN Exchange rate of 31March 2013				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2013.The average monthly UN Operational Exchange Rate applicable for the period to 31 March 2013 is USD 1: EUR 0.753. The UN Operational Exchange rate at 31 March is USD 1: EUR .0.773

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FAO FIAT PANIS

ACTUALS ONLY

STATEMENT 4

MTF/INT/004/MUL - TF number 909700

FOOT AND MOUTH DISEASE - EMERGENCY AID PROGRAMME

Financial Report from 1st January to 31March 2013

	USD	USD	Eur	Eur
Balance as at 1st January 2013		189,908		143,001
Interest received	0		0	
Contribution received	155,535	155,535	117,118	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	7,509		5,654	
Contracts	0		0	
Duty Travel	(4,558)		(3,432)	
Training	17,939		13,508	
General Operating Expenses	5,199		3,915	
Expendable Equipment	2,620		1,973	
Non-Expendable Equipment	(1,542)		(1,161)	
Support Costs 6% (on all items except expendable equipment)	1,630		1,227	
Less: Total Expenditure		28,797		21,684
Balance as at 31 March 2013		**316,646**		238,434
Balance restated at UN Exchange rate of 31 March 2013				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2013.The average monthly UN Operational Exchange Rate applicable for the period to 31 March 2013 is USD 1: EUR 0.753. The UN Operational Exchange rate at 31 March is USD 1: EUR .0.773

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FIAT PANIS

2013 UNITED NATIONS OPERATIONAL RATES OF EXCHANGE

Currency Name	Code	01-Jan-13	01-Feb-13	01-Mar-13	01-Apr-13	01-May-13	01-Jun-13
Euro	EUR	**0.754**	**0.737**	**0.764** **0.773**			

Currency Name	Code	01-Jul-13	01-Aug-13	01-Sep-13	01-Oct-13	02-Nov-13	01-Dec-13
							31-Dec-13

0.754 01-Jan-13
0.737 01-Feb-13
0.7685 March rate

March rate

0.764
0.773

1.537

0.7685

2.2595 Total
0.753 Av ROE

TRUST FUND No. 9042.00 - MTF/INT/011/MUL -
Inter-Regional - European Commission for the Control of Foot-and-Mouth Disease

Status of Contributions as at 31 December 2011
(expressed in USD)

ORACLE CODE: TF-AGADD-TFAA97AA89122

Member Governments		Outstanding 31/12/2010	Contribution due for 2011	Received up to 31/12/2011	Outstanding 31/12/2011	
ALBANIA		8,230.00	4,170.00		12,400.00	
AUSTRIA		0.00	12,786.00	12,786.00	0.00	
BELGIUM		261.41	21,260.00	21,521.41	0.00	
BULGARIA		0.00	12,786.00		12,786.00	
CYPRUS		0.00	4,170.00	4,170.00	0.00	
CROATIA		2,609.00	4,170.00	4,179.00	2,600.00	
CZECH REPUBLIC		0.00	12,786.00	12,777.00	9.00	
DENMARK		0.00	21,260.00	21,260.00	0.00	
ESTONIA		26.80	4,170.00	4,143.20	53.60	
FINLAND		54.00	12,786.00	12,759.00	27.00	final balance reduced by $54 bank charges
FRANCE		-695.51	42,374.00	40,974.99	703.50	
GERMANY		0.00	42,374.00	42,374.00	3.77	final balance includes $3.77 adjustment
GREECE		12,786.00	12,786.00	25,572.00	0.00	
HUNGARY		0.00	12,786.00		12,786.00	
ICELAND**		20,090.00	0.00	20,090.00	0.00	
IRELAND		0.00	12,786.00	12,761.00	25.00	
ISRAEL		4,170.00	4,170.00	4,170.00	4,170.00	
ITALY*		71,290.23	42,374.00	119,996.15	-6,331.92	
LATVIA		0.00	4,170.00		4,170.00	
LITHUANIA		4,170.00	4,170.00	8,340.00	0.00	
LUXEMBOURG		0.00	4,170.00	4,170.00	0.00	
FYR of MACEDONIA		4,170.00	4,170.00		8,340.00	
MALTA		28.00	4,170.00	4,170.00	28.00	
NETHERLANDS		0.00	21,260.00	21,260.00	0.00	
NORWAY		0.00	12,786.00		12,786.00	
POLAND		21,260.00	21,260.00	21,260.00	21,260.00	
PORTUGAL		0.00	12,786.00	12,786.00	0.00	
ROMANIA		-5.44	21,260.00	21,260.00	-5.44	
SERBIA		25,236.00	12,786.00		38,022.00	
SLOVAK REPUBLIC		-15,776.00	12,786.00	12,786.00	-15,776.00	
SLOVENIA		22.00	4,170.00	4,170.00	22.00	
SPAIN		-2,579.69	21,260.00	18,680.31	0.00	
SWEDEN		0.00	21,260.00	21,260.00	0.00	
SWITZERLAND	337930	27.00	21,260.00	21,260.00	0.00	final balance reduced by $27 bank charges
TURKEY		0.00	21,260.00	21,260.00	0.00	
UNITED KINGDOM		0.00	42,374.00	42,374.00	0.00	
	TOTALS	155,373.80	547,352.00	594,570.06	108,078.51	final balance includes adjustments as per above

JVn.965958 2010 global bank charges adjustment **157.50**

TOTAL **594,727.56**

ICELAND no longer a member as per Rumich email of 13.03.12

Slovak Republic contribution paid on 27 Dec 2010 for the year 2011

STATEMENT 2

MTF/INT/011/MUL - TF number 904200

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Financial Report from 1st January to December 2011

	USD	USD	Eur	Eur
Balance as at 1 January 2011		446,781		321,682
				0
				0
Interest received	548			0
Contributions from member countries and instititute	594,728		428,204	0
Project Income Earned (Child)	0	595,276	0	428,599
Expenditure				
Salaries	277,378		199,712	
Consultant	9,950		7,164	
Contracts	957		689	
Locally Contracted Labour	0			
Duty Travel	86,973		62,621	
Training	0		0	
General Operating Expenses	37,303		26,858	
Expendable Equipment	3,383		2,436	
Non-Expendable Equipment	323		233	
Total Expenditure		416,267		299,712
Balance as at 31 December 2011		625,790		450,569

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FIAT PANIS

STATEMENT 3

MTF/INT/003/EEC - TF number 911100

FOOT AND MOUTH DISEASE

Financial Report from 1st January to 31 December 2011

	USD	USD	Eur	Eur
Balance as at 1 January 2011		(64,084)		(46,140)
Interest received	0		0	
Contribution received	0	0	0	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	26		19	
Contracts	0		0	
Duty Travel	0		0	
Training	0		0	
General Operating Expenses	(50)		(36)	
Expendable Equipment	0		0	
Non-Expendable Equipment			0	
Support Costs 6% (on all items except expendable equipment)	(1)		(1)	
Less: Total Expenditure		(24)		(17)
Balance as at 31 December 2011		(64,060)		(46,123)
Balance restated at UN Exchange rate of 31 December 2011				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2011. The average UN Operational Exchange Rate applicable for calendar year 2011 is USD 1: EUR 0.720

STATEMENT 5

MTF/INT/003/EEC - TF number 608868

EC Funded Activities (200902013) carried out by the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD) - (Follow-up Phase MTF/INT/003/EEC)

Financial Report from 1st January to 31 December 2011

	USD	USD	Eur	Eur
Balance as at 1 January 2011		(359,505)		(258,844)
Interest received	1,058		762	
Contribution received	2,543,437		1,831,275	
Total funds received		2,544,496		
Expenditure				
Salaries Professional	131,764		94,870	
Salaries General Service	93,187		67,095	
Consultancy	266,852		192,133	
Contracts	122,047		87,874	
Locally Contracted Labour	(1,950)			
Duty Travel	306,415		220,619	
Training	59,620		42,927	
General Operating Expenses	134,019		96,494	
Expendable Equipment	1,758,000		1,265,760	
Non-Expendable Equipment	9,460		6,811	
Support Costs 7%	201,559		145,122	
Less: Total Expenditure		3,080,973		2,218,301
Balance as at 31 December 2011		(895,983)		(645,108)
Balance restated at UN Exchange rate of 31December 2011				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2011. The average UN Operational Exchange Rate applicable for calendar year 2011 is USD 1: EUR 0.720

STATEMENT 4

MTF/INT/004/MUL - TF number 909700

FOOT AND MOUTH DISEASE - EMERGENCY AID PROGRAMME

Financial Report from 1st January to 31December 2011

	USD	USD	Eur	Eur
Balance as at 1st January 2011		46,012		33,129
Interest received	44		0	
Contribution received	0	44	31	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	0		0	
Contracts	0		0	
Duty Travel	20,185		14,533	
Training	0		0	
General Operating Expenses	0		0	
Expendable Equipment	0		0	
Non-Expendable Equipment	0		0	
Support Costs 6% (on all items except expendable equipment)	1,211		872	
Less: Total Expenditure		21,396		15,405
Balance as at 31 December 2011		**24,659**		17,755
Balance restated at UN Exchange rate of 31 December 2011				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2011. The average UN Operational Exchange Rate applicable for calendar year 2011 is USD 1: EUR 0.720

2011 UNITED NATIONS OPERATIONAL RATES OF EXCHANGE

Currency Name	Code	01-Jan-11	01-Feb-11	01-Mar-11	01-Apr-11	01-May-11	01-Jun-11
Euro	EUR	0.761	0.734	0.728	0.71	0.675	0.702
						0.699	
						1.374	
						0.687	

Currency Name	Code	01-Jul-11	01-Aug-11	01-Sep-11	01-Oct-11	01-Nov-11	01-Dec-11
		0.699	0.7	0.688	0.733	0.707	0.75
			0.701	0.729		0.731	
			1.401	1.417		1.438	31-Dec-11
			0.7005	**0.7085**		**0.719**	**0.774**

0.761	01-Jan-11	December rate
0.734	01-Feb-11	
0.728	01-Mar-11	0.75
0.71	01-Apr-11	0.774
0.687	01-May-11	1.524
0.702	01-Jun-11	
0.699	01-Jul-11	**0.762**
0.7005	01-Aug-11	
0.7085	01-Sep-11	
0.733	01-Oct-11	
0.719	01-Nov-11	
0.762	01-Dec-11	
8.644	Total	
0.720	**Av ROE**	

TRUST FUND No. 9042.00 - MTF/INT/011/MUL -
Inter-Regional - European Commission for the Control of Foot-and-Mouth Disease

Status of Contributions as at 31 December 2012
(expressed in USD)

ORACLE CODE: TF-AGADD-TFAA97AA89122

Member Governments	Outstanding 31/12/2011	Contribution due for 2012	Received up to 31/12/2012	Outstanding 31/12/2012
ALBANIA	12,400.00	4,170.00	4,170.00	12,400.00
AUSTRIA	0.00	12,786.00	12,786.00	0.00
BELGIUM	0.00	21,260.00	21,260.00	0.00
BOSNIA	0.00	4,170.00		4,170.00
BULGARIA	12,786.00	12,786.00		25,572.00
CYPRUS	0.00	4,170.00	4,170.00	0.00
CROATIA	2,600.00	4,170.00	4,170.00	2,600.00
CZECH REPUBLIC	9.00	12,786.00	12,786.00	9.00
DENMARK	0.00	21,260.00	21,260.00	0.00
ESTONIA	53.60	4,170.00	4,223.60	0.00
FINLAND	27.00	12,786.00	12,786.00	27.00
FRANCE	703.50	42,374.00	41,044.78	2,032.72
GERMANY	3.77	42,374.00	42,374.00	3.77
GREECE	0.00	12,786.00		12,786.00
HUNGARY	12,786.00	12,786.00	12,786.00	12,786.00
IRELAND	25.00	12,786.00		12,811.00
ISRAEL	4,170.00	4,170.00		8,340.00
ITALY	-6,331.92	42,374.00	37,652.25	-1,610.17
LATVIA	4,170.00	4,170.00		8,340.00
LITHUANIA	0.00	4,170.00	4,170.00	0.00
LUXEMBOURG	0.00	4,170.00	4,170.00	0.00
FYR of MACEDONIA	8,340.00	4,170.00		12,510.00
MALTA	28.00	4,170.00		4,198.00
NETHERLANDS	0.00	21,260.00	21,260.00	0.00
NORWAY	12,786.00	12,786.00	25,572.00	0.00
POLAND	21,260.00	21,260.00	21,260.00	21,260.00
PORTUGAL	0.00	12,786.00		12,786.00
ROMANIA	-5.44	21,260.00	21,254.56	0.00
SERBIA	38,022.00	12,786.00	12,450.00	38,358.00
SLOVAK REPUBLIC	-15,776.00	12,786.00		-2,990.00
SLOVENIA	22.00	4,170.00	4,170.00	22.00
SPAIN	0.00	21,260.00	21,260.00	0.00
SWEDEN	0.00	21,260.00	21,260.00	0.00
SWITZERLAND	0.00	21,260.00		21,260.00
TURKEY	0.00	21,260.00	21,260.00	0.00
UNITED KINGDOM	0.00	42,374.00	42,374.00	0.00
TOTALS	108,078.51	551,522.00	451,929.19	207,671.32

ICELAND no longer a member as per Rumich email of 13.03.12

ACTUALS ONLY

STATEMENT 2

MTF/INT/011/MUL - TF number 904200

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Financial Report from 1st January to December 2012

	USD	USD	Eur	Eur
Balance as at 1 January 2012		625,790		486,239
				0
				0
Interest received	772			0
Contributions from member countries and instititute	451,929		351,149	0
Project Income Earned (Child)	0	452,701	0	351,749
Expenditure				
Salaries	425,835		330,874	
			0	
Consultant	18,882		14,671	
Contracts	0		0	
Locally Contracted Labour	204		158	
Duty Travel	76,197		59,205	
Training	9,176		7,130	
General Operating Expenses	14,658		11,389	
Expendable Equipment	1,026		798	
Non-Expendable Equipment	9		7	
Total Expenditure		545,986		424,231
Balance as at 31 December 2012		**532,505**		413,756

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2012.The average monthly UN Operational Exchange Rate applicable for the calemndar year 2012 is USD 1: EUR 0.777

ACTUALS ONLY

STATEMENT 3

MTF/INT/003/EEC - TF number 911100

FOOT AND MOUTH DISEASE

Financial Report from 1st January to 31 December 2012

	USD	USD	Eur	Eur
Balance as at 1 January 2012		(64,060)		(49,775)
Interest received	0		0	
Contribution received	0	0	0	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	405		315	
Contracts	0		0	
Duty Travel	0		0	
Training	0		0	
General Operating Expenses	311		242	
Expendable Equipment	(5,912)		(4,594)	
Non-Expendable Equipment	(1,375)		(1,068)	
Support Costs 6% (on all items except expendable equipment)			0	
Less: Total Expenditure		(6,571)		(5,106)
Balance as at 31 December 2012		(57,489)		(44,669)
Balance restated at UN Exchange rate of 31 December 2012				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2012.The average monthly UN Operational Exchange Rate applicable for the calemndar year 2012 is USD 1: EUR 0.777

ACTUALS ONLY

STATEMENT 5

MTF/INT/003/EEC - TF number 608868

EC Funded Activities (200902013) carried out by the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD) - (Follow-up Phase MTF/INT/003/EEC)

Financial Report from 1st January to 31 December 2012

	USD	USD	Eur	Eur
Balance as at 1 January 2013		(895,983)		(696,179)
Interest received	0		0	
Contribution received	2,529,484		1,965,409	
Total funds received		2,529,484		
Expenditure				
Salaries Professional	144,714		112,443	
Salaries General Service	73,627		57,208	
Consultancy	476,898		370,550	
Contracts	417,589		324,467	
Locally Contracted Labour	10,407			
Duty Travel	578,547		449,531	
Training	89,831		69,799	
General Operating Expenses	137,119		106,541	
Expendable Equipment	217,397		168,917	
Non-Expendable Equipment	56,821		44,150	
Support Costs 7%	154,206		119,818	
Less: Total Expenditure		2,357,156		1,831,510
Balance as at 31 December 2012		(723,655)		(562,280)
Balance restated at UN Exchange rate of 31December 2012				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2012.The average monthly UN Operational Exchange Rate applicable for the calemndar year 2012 is USD 1: EUR 0.777

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS * CENTRAL ACCOUNTING SERVICE * FINANCE DIVISION * FIAT PANIS

ACTUALS ONLY

STATEMENT 4

MTF/INT/004/MUL - TF number 909700

FOOT AND MOUTH DISEASE - EMERGENCY AID PROGRAMME

Financial Report from 1st January to 31December 2012

	USD	USD	Eur	Eur
Balance as at 1st January 2012		24,659		19,160
Interest received	257		0	
Contribution received	250,927	251,184	195,170	
				0
Expenditure				
Salaries Professional	0		0	
Consultancy	9,470		7,358	
Contracts	0		0	
Duty Travel	41,490		32,237	
Training	12,973		10,080	
General Operating Expenses	1,803		1,401	
Expendable Equipment	9,891		7,685	
Non-Expendable Equipment	5,445		4,230	
Support Costs 6% (on all items except expendable equipment)	4,864		3,780	
Less: Total Expenditure		85,935		66,771
Balance as at 31 December 2012		**189,908**		147,559
Balance restated at UN Exchange rate of 31 December 2012				

The Financial Statements of the Commission are maintained in US Dollars in accordance with the accounting policies and administrative systems of FAO. The amounts stated in Euros, including the opening balance, have been converted from US Dollars at the average monthly UN Operational Exchange Rates for 2012.The average monthly UN Operational Exchange Rate applicable for the calemndar year 2012 is USD 1: EUR 0.777

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
CENTRAL ACCOUNTING SERVICE
FIAT PANIS
FINANCE DIVISION

2012 UNITED NATIONS OPERATIONAL RATES OF EXCHANGE

Currency Name	Code	01-Jan-12	01-Feb-12	01-Mar-12	01-Apr-12	01-May-12	01-Jun-12
Euro	EUR	0.774	0.763	0.746	0.753	0.755	0.805

Currency Name	Code	01-Jul-12	01-Aug-12	01-Sep-12	01-Oct-12	02-Nov-12	01-Dec-12
		0.804	0.816	0.797	0.777	0.772	0.77

31-Dec-12
0.754

0.774 01-Jan-12
0.763 01-Feb-12
0.746 01-Mar-12
0.753 01-Apr-12
0.755 01-May-12
0.805 01-Jun-12
0.804 01-Jul-12
0.816 01-Aug-12
0.797 01-Sep-12
0.777 01-Oct-12
0.772 01-Nov-12
0.762 December rate

9.324 Total
0.777 Av ROE

December rate
0.77
0.754
1.524
0.762

Appendix 30

Enc: Annex 1 : Financial Statements for Year Ending 12/2012.

PAPER ON THE FINANCIAL POSITION AND BUDGET FOR TRUST FUND No. 904200 - MTF/INT/011/MUL FOR BIENNIUM 2014-15

2014 and 2015 budgets (US$) for approval by the 40th Session

For decision

1. On the proposal for the budget contributions by the member states to remain unchanged in the biennium 2014-15.

2. If new member states could be exempted from requests for contributions in their first calendar year of member ship, which given the delays in the processing of acceptance, which is *de facto* already the case.

3. If the Session wishes to recommend a review by the Executive of the categories for contributions, and an increase in the overall total of contributions at the 41st Session in 2015.

4. If the Executive should be encouraged to seek other funding sources for cost-sharing of activities, while ensuring at all time the aim of maintaining and increasing the value of the services to the member states.

5. Following the FAO Finance Committee review of Article XIV bodies, if the Commission should seek recognition by FAO as an Article XIV body eligible for greater autonomy in the administration of its programme while remaining in the framework of FAO.

From the Executive Committee

Conclusions (36-42) of the 85th Session of the Executive Committee, held 14-15th February 2013:

36. No change will be proposed in the budget contributions of member states for 2014 and 2015; but an agreement in principle reached at the 40th Session to propose an increase at the 41st Session.

37. The expenditure in 2013 and subsequent years should achieve savings, including immediate action relating to the full time General Service staff position from the budget of MTF/INT/011/MUL.

38. The Commission should look into further possibilities for cost-sharing, for example where services are provided to FAO or countries, such as training.

39. The Secretariat should proceed with the STP scheme in 2013 which has provided training to mid-level officers from the MS and additional professional expertise to the Commission, but keep the number supported under review.

40. Approval was not given to the appointment to the vacant G4 Clerk position, and it was considered that the procedure of FAO in this case was unacceptable.

41. Given the budgetary situation with MTF/INT/011/MUL, the G4 Clerk position should be abolished and immediate savings achieved.

42. The Secretariat should begin discussions with the FAO Corporate services on developing a procedure for independent recruitment, as suggested for article XIV bodies to solve similar issues that have arisen for other Commissions, by the CCLM (Committee on Constitutional and Legal Matters to the FAO Council).

Background

1. The funding of the administrative activities of the Secretariat of the EuFMD Commission, and of the mandated activities required under the Constitution and for which no other sources of funding are available, is derived from the annual contributions of member countries to Trust Fund MTF/INT/011/MUL.

2. The administration of the Commission is wholly supported from the members contributions from MTF/INT/011/MUL. FAO provides office space, lighting and heating, which in the past were a contribution to the Commission but are now charged to the Commission budget.

3. In addition, under a separate financial agreement between FAO and the EC, activities on FMD control are financially supported through an 8 m€ agreement (current agreement for 48 months from September 2005) which is handled through Trust Fund MTF/INT/003/EEC. A third TF, for additional contributions by member states for specific actions, is maintained and has been used in 2012 for the funding of training programme contribution from Australia. This TF could be useful should MS or non-members wish to support certain actions, parallel to the situation of activities supported by the EC.

4. The 39th General Session in April 2011:

    - Agreed the annual budget for MTF/INT/011/MUL in 2012 and 2013 to be **US$ 547,352,** including the expected contribution from Bosnia, a new member state.

    - Keep the level of contributions unchanged from that agreed at the 38th Session in 2009, and therefore unchanged for the 4 year period 2010-2014.

5. The balance in the TF, at 31/12/2012, was **USD 528,732**, with an expenditure in 2012 **of USD 549,233.** The balance was circa USD 90,000 higher than predicted at the 39th Session, reflecting the enforced savings made during the time to recruit the P3 Officer and by the block on recruitment of administrative staff imposed by the FAO DG in January 2012.

6. The budget of the Commission for the forthcoming biennium is prepared by the outgoing Executive Committee. It was therefore the responsibility of the 85th Session of the Executive Committee, meeting in February 2013, to review the financial position and agree the budget to be proposed for approval by the 40th Session.

7. The 85th Session took into consideration the scenarios presented by the Secretariat for the administrative budget, with different staffing levels, the continuation of the Short Term Professional officers programme, the extent to which professional and administrative services provides to the EC programme are charged to that programme rather than being carried from the Commission budget, and the level of balance (reserve) in the TF throughout the biennium to offset possible increases in costs associated with exchange rate variations (USD/national currency) and exigencies; and the core staffing level required to maintain the administration of the Commission.

8. After review of 4 scenarios of expenditure, relating to different levels of staffing of the Secretariat, they concluded that only scenario 4 would involve break-even and this would require rather drastic reduction in core staff and short term professional (STP) officer positions, and Scenario 3 was the “least worst” and would result in a end of year balance in 2015 that was sufficient to avoid risk of adverse exchange rate fluctuations and would retain

the STP positions. The first (current) and scenario 2 options would deplete the cash reserve over the biennium and run the risk of a substantial overdraft.

Financial situation at 31/12/2012

The Financial Position is given in Statements provided by the FAO.

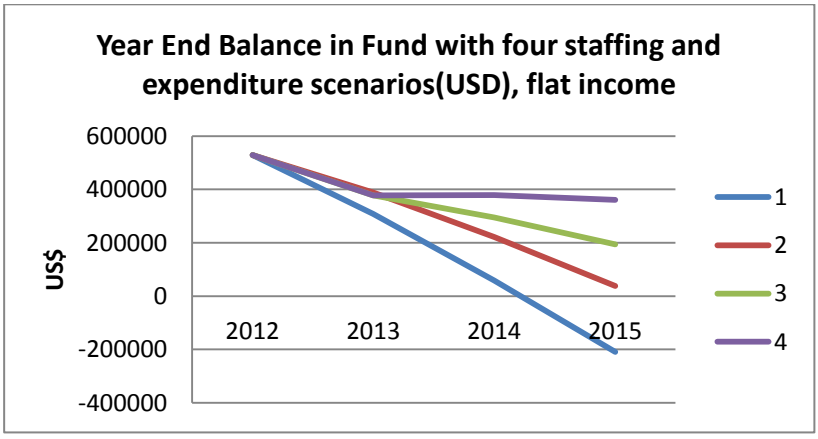
The balance in the TF, at 31/12/2012, was USD 528,732, with an expenditure in 2012 of **USD 549,233.**

Financial Outlook - Issues and scenarios for consideration by the Executive

1. The 85th Executive considered the staffing position and other expenditures. In 2012, a second animal health officer (P3 level) was recruited in March, following the agreement of the 39th Session. The Clerk position remained unfilled until November, enabling savings of 10 months. This brought staff level to 3.5 positions (one P5, one P3, half P2 and one Clerk).
2. In 2013, therefore, with 3.5 positions plus the 2 short term professional officers (whose living allowances are paid from the TRAVEL budget line) which had previously agreed at the 39th Session, the expenditure will rise to circa USD 770,000 against the target amount as agreed at the 39th Session of USD592,000. If contributions do not rise, this level of expenditure would lead to a deficit of USD 200,000 by the end of 2015 (Table 1).

Table 1

		Year End Balance (USD)(actual 2012 and predicted)			
Staff	*Scenario*	*2012 (actual)*	*2013*	*2014*	*2015*
3.5 positions/2 STPs	1	528732	307910	58888	-209262
3 positions, 2 STPs	2	528732	387910	221168	37669.2
2.5 positions, 2 STPs	3	528732	377910	295088	194466
2.5 positions/zero STPs	4	528732	377910	378432	361154



3. The Executive considered the Short Term professional officers programme has been of good value, the calibre of applicants is high and there appears significant value to the member states of their work and experience. It is therefore proposed to retain this modality.

4. Therefore, unless income rises, the scenario #3 appears financially viable but to be achieved, would require reduction in the number of positions or cost-sharing with the EC (or other funds) in order to move USD 150,000 staff costs per year from the TF.
5. Under #3, the reduction in salaries between 2013 and 2014, to USD 445,000 would be achieved by abolition of the G4 Clerk position, with effect before June (after the 40th Session).
6. Regarding non-salaries expenditure, the major item is Travel Costs. For 2013-2015, the amount indicated would allow for the travel of the STC and Special Committee members to their meetings, for 6 experts to each executive, and the ravel of the Secretariat for meetings with the Chairpersons or on non-EC programme purposes. The STP allowances are from this line, since STPs are provided only allowances to live in Rome (they remain salaried from their employers).
7. Scenario 3 (Table 2), if approved, would have implications for the actions on posts in 2013, since it would mean that these would need to be included in the proposed agreement with the EC.
8. Given the complexity of administration of the EC programme, and recommendations from FAO Corporate Services, the Executive agreed that a higher grade (G5 or above) Clerk is needed as senior Clerk/Office supervisor, and proposed that a full or part time G5 position is funded from the EC programme, or if the situation with that programme financing necessitates, a cost-sharing arrangement.

Table 2. Proposed Budget for 2013-15 based following the review by the 85th Session.

This is Scenario #3 for the Administrative Budget discussed at the Session, and based on the Actual 2012 expenditure and year-end balance. To proposed to the 40th Session.

	3			
	Actual (2012) and proposed (2013) budgets for MTF/INT/011/MUL			
	2012	2013	2014	2015
	Actual	Proposed	Proposed	Proposed
Salaries[1]	421,824	523,000	445,000	462,800
Consultant	19,455	25,000	35,000	35,000
Contracts	204	1,000	1,000	1,000
Travel (inc STPs)	85,553	125,344	125,344	125,344
Training	9,024	10,000	10,000	10,000
Gen Op Expenses	12,018	12,000	12,000	12,000
Expendable equipment	1,136	1,000	1,000	1,000
Durable Equipment	19	5,000	5,000	5,000
Total	**549,233**	**702,344**	**634,344**	**652,144**
	-	-	-	-
Income	551,522	551,522	551,522	551,522
Year END Balance	*528,732*	*377,910*	*295,088*	*194,466*

1 In 2013 assumes the G4 Clerk position would be abolished with effect soon after the 40th Session; if not, a further US$57,000 should be added. Assumes one P5, one P3 and half time P2 in 2014.

Table 3. Annual contributions (in US$) of member countries to the administrative budget of the EuFMD Commission (MTF INT/011/MTF), agreed with Sessions since the 36th (in 2005), and proposal for 2014-2015.

	MEMBER COUNTRY	LEVEL	ANNUAL CONTR- 2006-2007	CONTR- 2008-9	CONTR - 2010-11	CONTR - 2012-13	CONTR - 2014-15 (40TH GS)
			36TH GS	37TH GS	38TH GS	39TH GS	PROPOSED
1	ALBANIA	4	3,900	4060	4170	4170	4170
2	AUSTRIA	3	11,960	12450	12,786	12,786	12,786
3	BELGIUM	2	19,890	20700	21,260	21,260	21,260
4	BOSNIA-H[2]					*4170*	*4170*
5	BULGARIA	3	11,960	12450	12,786	12,786	12,786
6	CYPRUS	4	3,900	4060	4170	4170	4170
7	CROATIA	4	3,900	4060	4170	4170	4170
8	CZECH REPUBLIC	3	11,960	12450	12,786	12,786	12,786
9	DENMARK	2	19,890	20700	21,260	21,260	21,260
10	ESTONIA	4			4170	4170	4170
11	FINLAND	3	11,960	12450	12,786	12,786	12,786
12	FRANCE	1	39,650	41260	42,374	42,374	42,374
13	GERMANY	1	39,650	41260	42,374	42,374	42,374
14	GREECE	3	11,960	12450	12,786	12,786	12,786
15	HUNGARY	3	11,960	12450	12,786	12,786	12,786
16	IRELAND	3	11,960	12450	12,786	12,786	12,786
	ICELAND	4	3,900	4060	4170[3]		
17	ISRAEL	4	3,900	4060	4170	4170	4170
18	ITALY	1	39,650	41260	42,374	42,374	42,374
19	LATVIA	4		4060	4170	4170	4170
20	LITHUANIA	4	3,900	4060	4170	4170	4170
21	LUXEMBOURG	4	3,900	4060	4170	4170	4170
22	FYROM	4	3,900	4060	4170	4170	4170
23	MALTA	4	3,900	4060	4170	4170	4170
24	NETHER.	2	19,890	20700	21,260	21,260	21,260
25	NORWAY	3	11,960	12450	12,786	12,786	12,786
26	POLAND	2	19,890	20700	21,260	21,260	21,260
27	PORTUGAL	3	11,960	12450	12,786	12,786	12,786
28	ROMANIA	2	19,890	20700	21,260	21,260	21,260
29	SERBIA	3	11,960	12450	12,786	12,786	12,786
30	SLOVAK R.	*3*	11,960	12450	12,786	12,786	12,786
31	SLOVENIA	4	3,900	4060	4170	4170	4170
32	SPAIN	2	19,890	20700	21,260	21,260	21,260
33	SWEDEN	2	19,890	20700	21,260	21,260	21,260
34	SWITZ.	2	19,890	20700	21,260	21,260	21,260
35	TURKEY	2	19,890	20700	21,260	21,260	21,260
36	U.K	1	39,650	41260	42,374	42,374	42,374
	TOTALs as agreed by Session		**496,210.00**	**528,890**	***547,352***[4]	**543, 182 (*547,352 with BiH)***	**551,522**

[3] Withdrew from Membership.

[4] Estonia joined in 2010 and so their contribution was not part of the planned budget (38th Session in 2009).

Appendix 31

EuFMD Commission
On the Standing Technical and Special Committees

Proposal to the 40th Session

1. To adopt the Terms of Reference (ToR) for the Standing Technical Committee, and Special Committee for Research and Development of the FMD programme, as proposed by the Executive (Report of the 85th Session);

2. To develop an "Open Call " system for the identification of experts for the Committees under the work programme of the Executive for the coming biennium.

Legal basis

The EuFMD Constitution, in full accord with the Basic Texts of FAO, makes clear that *every Session of the Commission is empowered to establish Committees* which may be considered **Standing Committees** if there is the expectation of the need throughout their term of office on a range of issues, or **Special Committees**, relating to specific items, or **Temporary ones**, where further need beyond the immediate is not expected. The members of the Committees are approved at the regular Sessions and are usually elected on basis of their individual expertise. The Committees elect their own Chairperson.

Concerns addressed

1. The need of the ExCom to receive guidance from the Standing Technical and/or Special Committee on priorities for decision and action, and for in depth analysis or technical papers in response to specific issues delegated to them;
2. The need of the Secretariat to receive guidance and advice from leading technical experts in the relevant fields, in development of the work programme to address the needs of the member states and the partners in international actions;
3. The need for greater engagement with the "national expert and expert groups" in the MS to ensure programmes develop that reflect their issues, and the role of the Conferences organised under the EuFMD Committees in this process.

Position of the Executive Committee (Report of the 85th Session, February 2013)

Terms of Reference for the Standing Technical Committee

Will be proposed as follows to the 40th Session:

To

1. Advise the ExCom and Commission on appropriate measures of success and methodology for evaluation of programmes or projects to be taken forward;
2. Maintain an overview of FMD science and technology and global FMD issues to advise on appropriate policies or programmes that the Commission should consider;
3. Provide the ExCom and Com with advice on the scientific and technical aspects of any proposals for policies or programmes suggested by Members or others.

Terms of Reference for the Special Committee

The 85th Session agreed upon the Title and Terms of reference for the Special Committee to be proposed for the biennium 2013-15, after review of the paper provided by the Secretariat, as follows:

Special Committee on Research and Development of the FMD Programme

Terms of Reference:

To provide

1. scientific and technical assessment of regular reports, or specific evaluations of programmes or projects, that are funded or supported by the Commission;
2. Scientific and technical assessment of proposals for research put forward for funding or support by the Commission.

It was also agreed that the Special ("Research") Committee would continue to have a third responsibility , to develop specific guidance relating to their expertise and the needs of the EuFMD programme, including considering scientific and technical issues suggested by the Executive, Standing Committee or others. This would continue, for example relating to the bio-containment standards and other technical guidance.
The STC report also recommended that they should be funded to meet annually with the EuFMD Secretariat to review Programme progress and plans.

The Conclusions on this item at the 85th Session were:

1. The ToR for the STC should include the three functions as proposed by the Executive , with the fourth given to a Special Committee, and the Executive would propose a list of four names to the 40th Session;

2. The Special Committee functions in the biennium would include the two points delegated by the TC and the committee would be named for "research and development of the FMD programme';

3. An "open call" for interest to serve on the Special Committee should be considered for the future, and be on the Agenda for the next Executive;

4. The list of Special Committee experts, as developed by the STC and Secretariat, should be revised and provided by the STC Chairman to the Chairman of the Executive before the 40th Session;

5. Consultants working for EuFMD to implement the activities should not be members of the STC but would as part of their Terms of Reference be expected to support the Committee work and meetings;

6. That an FMD expert from each of the 3 FAO Reference Centres for FMD in Europe (UK, Belgium and Italy) would be invited to be ex-officio members of the Special Committee.

Proposal from the Secretariat to the 85th Session

1. To improve the process of technical guidance and review of the EuFMD programme activities, through establishing a **"Special Committee on Research and Development of the EuFMD Programme"** with experts whose profile is most appropriate to giving the type of technical input to the future 3 "Pillar" activities that is not currently found in the EuFMD team, or the STC;
2. A summary of the relationships proposed are shown below; the Executive Chairpersons would work mainly with the STC and Secretariat; the Special Committee would be supported by the Secretariat and provide reports on its meetings or positions to the ExCom through the STC.

Role of the STC and Special Committee in relation to the Executive Committee and Secretariat

3. **Special Committee on "Research and Development of the FMD Programme"; rationale, functions, and relationships**

Rationale

The EuFMD Strategy for the four year period after the 40th Session in April 2013 is proposed to be 3 pillars [strategic goals]:

1. Support Member States preparedness to manage FMD emergencies
2. Reduce the FMD risk from the European neighborhood
3. Support the Global Strategy on FMD Control

There will be significant new activities under each Pillar, that will be developed by the Secretariat in close consultation with the Executive, the EC and the stakeholders and international partners relevant top those activities. In this work, and after implementation, it will be important to have

guidance and advise from leading European experts in the technical fields, not necessarily FMD experts but whose ideas and experience will be important to ensuring activities develop in ways that reflect best practice and effective use of partners and collaborators.

Research funding in Europe on FMD is also very limited in next 4 years – so we need to keep abreast of global research relevant to Europe (Pillar 1).

Expertise from the MS on economics, epidemiology and emergency management will also assist to steer the work programme thus lightening the load on the STC.

It is proposed that the Special Committee activities

- Are organized along the 3 Pillars of the programme, with one subgroup per Pillar for efficiency.
- Each subgroup would compile its own reports for the Secretariat for transmission to the STC and ExCom.
- The role of an overall Chairperson needs discussion, but should be aware of the work of the subgroups and the Chair joint meeting of the entire Committee

Functions of the Special Committee to include:

To provide

1. scientific and technical assessment of regular reports, or specific evaluations of programmes or projects, that are funded or supported by the Commission;
2. Scientific and technical assessment of proposals for research put forward for funding or support by the Commission.
3. Specific guidance relating to their expertise and the needs of the EuFMD programme, including considering scientific and technical issues suggested by the Executive, Standing Committee or others. [for example relating to the bio-containment standards and other technical guidance].

Implementation and Reporting Relationships

1. The Secretariat is responsible for implementing the biennial work programme agreed at Regular Sessions and the decisions of the Executive at their 6 monthly meetings.
2. The attendance of the Chairs of the STC and Special Committee at the ExCom Sessions will be subject to the decision of the Chairman of the ExCom. It is recommended that at least the Chair of the STC is invited to attend.
3. Meetings of the STC and Special Committee or their subgroups would be supported by the Secretariat, and the latter will provide information and progress reports for the Committees and their working groups.
4. It needs to be decided if the Chair of the Special Committee manages the reporting by the subgroups, or the Secretariat.
5. The STC would set the policies and procedures for the management of the Research Fund, including advice to the ExCom on whether the Special Committee has a role in reviewing proposals and outcomes, and in developing new studies (where potential conflicts of interest could occur).

6. The Secretariat remains responsible for managing and publishing the reports from the Committee meetings.
7. Given the complexity and breadth of the activities of the Commission, the Special Committee should comprise experts who are “practitioners” in their technical fields, thus able to review the activities and reports and provide advice to guide programme development. The STC , in terms of technical seniority and experience in FMD policy issues concerning MS, should retain the role of providing guidance to the Executive and the commissioning of research relevant to immediate policy issues.
8. The STC should receive all reports of the Special Committee and give guidance to the Executive on the need and priorities for decisions.

Possible Members

The proposal is for 5 experts for each Pillar (total of 15 experts), plus each of the FAO Reference Centres in the European region would be invited, ex-officio, to the joint Committee meeting, as follows:

Kris de Clercq (FAO Ref Centre, VAR)

Emiliana Brocchi (FAO Ref Centre, IZSLER)

Jef Hammond (FAO-WRL)

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February 2013

منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Alimentación y la Agricultura

FINANCE COMMITTEE

Hundred and Forty-eighth Session

Rome, 18 - 22 March 2013

Review of Article XIV Statutory Bodies with a view to allowing them to exercise greater financial and administrative authority while remaining within the framework of FAO

Queries on the substantive content of this document may be addressed to:

Mr Antonio Tavares

Legal Counsel, Legal Office

Tel: +3906 5705 5132

EXECUTIVE SUMMARY

- IPA action 2.69 requested Management, the Council and the Conference to "*undertake a review with a view to making any necessary changes to enable those statutory bodies which wish to do so to exercise financial and administrative authority and mobilize additional funding from their members, while remaining within the framework of FAO and maintaining a reporting relationship with it*". The Committee on Constitutional and Legal Matters (CCLM), the Programme Committee and the Finance Committee have occasionally reviewed the matter since 2009.
- This document, prepared at the request of the Finance Committee at its Hundred and Forty-seventh Session in November 2012, reviews a number of administrative and financial issues that have been raised in connection with bodies under Article XIV of the Constitution, including matters related to external relations and attendance at external meetings; conclusion of arrangements with other organizations and institutions, budgetary, audit and financial issues, human resources matters, channels of communications with Governments, relations with donors, organization of meetings and related matters. **Appendix I** to this document contains a matrix with summary information on the status and characteristics of existing bodies under Article XIV of the Constitution and **Appendix II** on the deliberations of the CCLM on the matter.

GUIDANCE SOUGHT FROM THE FINANCE COMMITTEE

- The Committee is invited to review this document taking into due account its appendixes I (providing information on the status and characteristics of the various bodies) and II (on the deliberations of the CCLM on the matter).

Draft Advice

- **The Committee welcomed document FC148/21, as well as the detailed information provided thereon, including the information provided in Appendixes I and II.**
- **The Committee reiterated the differentiated nature of bodies under Article XIV of the Constitution and endorsed the proposed criteria for the determination of the bodies to which the recommendations of the review apply.**
- **The Committee invited Management to implement the recommendations outlined in the document, with particular reference to those set out in Appendix II.**
- **The Committee underlined the following specific points (...).**

I. BACKGROUND

1. The status of bodies established under Article XIV of the Constitution[1] has been under review since 2009 in response to IPA Action 2.69. A range of issues of an administrative and/or financial nature relating to the functional and operational autonomy of these bodies within the framework of FAO have been under review by the Governing Bodies, including the Council, the Programme Committee, the Committee on Constitutional and Legal Matters (CCLM), as well as the Finance Committee[2].

2. At its 144th Session, the Finance Committee was provided with an oral report on the status of the review of bodies established under Article XIV of the FAO Constitution. At its 147th Session, the Finance Committee considered in general terms a detailed document FC 147/20 "*Review of Article XIV Bodies with a view to allowing then to exercise greater financial and administrative authority while remaining within the framework of FAO*", as well as the deliberations of the CCLM[3] which had reviewed the same document at its 95th Session. Document FC 147/20 reviewed in detail administrative and financial areas where a relaxation of a number of operational procedures and practices could be considered.

3. At that Session, the Finance Committee noted that written observations had been submitted by some Members on documents FC 147/20 and FC 147/20 Add., which were examined by Management and which are, as appropriate, reflected in the present document. The Committee further requested Management "*to provide further information on the main statutory, administrative and financial characteristics of existing bodies under Article XIV so that it could examine the proposals made in relation to specific bodies*." The Committee decided to re-examine the matter in detail at its session of Spring 2013. In order to facilitate this review, this document contains a summary of the administrative and financial areas where increased functional and operational autonomy could be granted, prepared on the basis of earlier submissions to Governing Bodies. Information on the main statutory, administrative and financial characteristics of existing Article XIV bodies can be found in the table contained in **Appendix I** to this document.

II. CRITERIA FOR INCREASED DELEGATIONS OF AUTHORITY

4. The subsidiary Committees of the Council have recognized that the matter of allowing bodies under Article XIV of the Constitution to exercise greater financial and administrative authority while remaining within the framework of FAO is of a complex nature, given the differentiated nature of these bodies, as well as different views of the Membership as to the degree of autonomy to be recognized to them. Based on the review, it is accordingly essential to identify the Article XIV bodies which would benefit from greater financial administrative authority while remaining within the framework of FAO. It is suggested that these be identified on the basis of the following criteria: funding mechanisms, functional needs and legal authority, as defined in the constituent instruments, the conditions of appointment of their secretaries and their accountability to the bodies in question. As a general guiding principle, increased delegation of authority to Article XIV bodies could be considered, provided that the secretariats of those bodies be adequately staffed and appropriate oversight mechanisms by the Organization were in place. Appendix I to this document contains information on existing bodies under Article XIV of the Constitution, including on relevant criteria.

[1] Hereinafter often called "Article XIV bodies".
[2] See CL 136/9 (para.35), CL 137/5 (para 7-22) , CL 137/REP (para53); CL 140/8 para 27; CL 143/7 (para 19-24)
[3] FC147/20 Add.1

III. ADMINISTRATIVE AND FINANCIAL ISSUES

External relations (Attendance at external meetings)

5. Director General's Bulletin 2012/18 rev.1 of December 2012 on "*Official Travel of FAO Staff*" contains more flexible rules in respect of staff serving Article XIV bodies and seems to have settled any outstanding issues[4]. It provides for a yearly review and blanket approval by the concerned Assistant Director-General for travel plans of staff of Article XIV bodies for attending and servicing the meetings of their bodies. For other travel, the secretariats of these bodies should submit on a quarterly basis a list as accurate as possible of other missions and meetings being attended, indicating the number of participants. The only restriction concerns travel for attending representational meetings of high level and complex nature, subject to corporate review and coordination. These arrangements are working satisfactorily.

Conclusion of arrangements with other organizations and institutions

6. With respect to the conclusion of arrangements with other organizations and institutions, substantial experience has been gained since 2004 when the Council agreed on a procedure for conclusion of agreements by bodies under Article XIV of the Constitution. Secretaries have been able to conclude arrangements with other organizations and institutions, which seems to reconcile the interests of both of the bodies and the Organization, insofar as the proposals are referred to, and reviewed by the Organization. Recently some secretaries of Article XIV bodies[5] have also been authorized to sign donor agreements on the basis of a delegation to that effect.

7. The procedures have been operating satisfactorily, allowing also for coherence between the activities of those bodies and those of FAO. The only remaining open issue is related to the need to identify the extent to which the procedure applies to all Article XIV bodies, or only to some of them, if so, on the basis of which criteria. Consideration could be given to drawing up a list of Article XIV bodies which could benefit from the facilities foreseen in this section.

Budgetary, audit and financial issues

8. With respect to Project Servicing Cost, in 2011, the Conference[6] reaffirmed the Organization's policy of full cost recovery that had been approved by the Council in 2000, in line with Financial Regulation 6.7 and urged the Director-General to vigorously pursue improving administrative and operational support cost recovery from extra-budgetary activities. The policy provides also that long-term trust fund accounts (e.g. Commissions established within the framework of FAO, including Article XIV bodies) will be subject to case-by-case estimate of the actual level of varied indirect support costs and charged accordingly. In 2004, the Finance Committee took also a very restrictive approach to the matter[7].

9. The issue concerning the presentation of financial information was raised in the past and would seem to be one of a practical nature. Increased collaboration between the secretaries of the

[4] A hard copy of the Director-General's Bulletin 2012/18 Rev.1 of December 2012 on "*Official Travel of FAO Staff*" will be made available to the Finance Committee.
[5] GFCM, IOTC and ITPGRFA.
[6] C 2011/REP, paragraph 100. See also Conference Resolution 5/2011, operative 4.
[7] See FC 104/5, FC 107/4 and CL 127/14, paragraph 22-23.

bodies and the Finance Division have allowed to address the issue of financial presentation as well as to improve the quality of financial reporting. Consideration could be given to using the current level of reporting as one criteria or measure to determine the priority and eligibility of the Article XIV bodies for increased financial and administrative autonomy.

10. Some bodies under Article XIV of the Constitution have received from potential donors offers of voluntary contributions which are subject to conditions on the granting of audit access or reviews by representatives of the donor. In accordance with the single audit principle followed by the entire United Nations System requests for special audits have been resisted so far. FAO has a system of oversight which includes, *inter alia*, an internal audit function and an external audit function. The Organization's activities, including projects, may be audited only by the External Auditor appointed by the Council in accordance with Financial Regulation 12.1[8]. The Finance Committee may also request the External Auditor, who is completely independent and solely responsible for the conduct of the audit[9], to perform certain specific examinations and issue separate reports on the results[10]. The Committee is invited to advise on how to deal with the requests for special audits in some Article XIV bodies and on the proposal to refer the matter to the Finance Committee which could request the External Auditor to perform certain specific examinations under Financial Regulation 12.6, provided that costs be covered by the body in question.

Human Resources matters

11. Bodies under Article XIV of the Constitution, as well as executive secretaries, have, at times, questioned or enquired about human resources policies and rules. This subject-matter involves many facets and it is imperative to make a number of distinctions. The position of principle remains that the secretaries and the secretariat staff of the Article XIV bodies are subject to the Organization's Staff Regulations and Rules, but a number of adjustments to HR policies and practices may be necessary and could be addressed within Management's authority.

12. At its 127th Session, the Council[11] reviewed special selection and appointment procedures applicable to the executive secretaries of Article XIV bodies enjoying substantial autonomy, involving a choice of a candidate by the Members of the bodies, and endorsed them. In general terms, the Council considered that insofar as there was full involvement of both the membership and FAO

[8] Financial Regulation : "*12.1 An External Auditor, who shall be the Auditor-General (or person exercising an equivalent function) of a Member Nation, shall be appointed in the manner and for the period decided by the Council*."

[9] FR 12. 5 whereby *"the External Auditor shall be completely independent and solely responsible for the conduct of the audit"*.

[10] FR 12. 6 whereby "*the Finance Committee may request the External Auditor to perform certain specific examinations and issue separate reports on the results".*

[11] It is worth recalling the content of the deliberations of the Council on that occasion: "*93. The Council recognized that, in cases where the secretary of a body is appointed by the Director-General with the approval of the body concerned, the need arises to harmonize the requirements inherent in the status of the secretaries of functional autonomy and technical accountability towards the concerned bodies and of administrative accountability towards the Organization, as officials of FAO. The Council noted that the selection and appointment process cannot be seen as one including two parallel and independent segments consisting, on the one hand, in the identification of a candidate by the body and, on the other hand, his or her appointment by the Director-General who would be required merely to appoint the selected candidate, without any form of involvement in the process of identification of qualified candidates. The Council stressed that this would not be consistent with the applicable legal framework, including the constitutional duties of the Director-General in the selection and appointment of staff. 94. The Council agreed that the procedure adopted recently by the General Fisheries Commission for the Mediterranean (GFCM), at its Extraordinary Session (Malta, 19-23 July 2004), provided a legally acceptable solution for the appointment of secretaries of bodies under Article XIV of the FAO Constitution having autonomous budgets. The Council invited the Indian Ocean Tuna Commission (IOTC) to amend its Rules of Procedure, as far as the selection and appointment procedure of its secretary is concerned, along the lines of the procedure approved by the GFCM, on the understanding that the revised procedure would apply only in future*" (CL 127/REP).

throughout the process of identification of the candidates, this particular procedure applicable to Article XIV bodies was not objectionable.

13. With respect to the selection and appointment of professional staff of the Secretariat a distinction is made between those Article XIV bodies financed by the Regular Programme and those financed by extra-budgetary resources[12]. In respect of the latter, selection and appointment of professional staff are subject to field staff selection procedures and the secretary is involved in the selection of candidates, either as a member, or team leader of the selection panel. With respect to other Article XIV bodies financed by the Regular Programme[13], standard procedures for the appointment of Professional Staff apply involving the Professional Staff Selection Committee (PSSC). Some issues were raised regarding the procedures for making submissions to the respective staff selection bodies, which are being examined in consultation with the HR Division.

14. With respect to the performance appraisal and assessment of secretaries of Article XIV bodies, the Organization's Performance Evaluation and Management System (PEMS) is currently being reviewed and internal consultations are on-going with a view to addressing the question of the supervisory authority over secretaries of Article XIV bodies. A proposal has been made aimed at allowing for an adequate assessment of the functional and operational matters by membership, on the one hand, and purely administrative matters by Management, on the other hand. This matter is of particular relevance for secretaries of those Article XIV bodies enjoying a substantial degree of autonomy[14].

15. General Service Staff serving on secretariats of bodies under Article XIV of the Constitution located at Headquarters are currently all subject to standard HR policies and procedures applicable to Headquarters staff, irrespective of whether the bodies have the status of field projects or not. This has generated some issues in the context of the Organization's redeployment exercises, non-renewal as well as selection processes. Taking a different approach would however be difficult, in particular at Headquarters, in view of the fairly high degree of "*interchangeability*" of positions in the General Service category. While the Finance Committee is invited to note that the Organization is prepared to examine this matter further, it is also invited to advise on how to deal with requests for deviations from established procedures with respect to appointment and selection, redeployment and non-renewal of General Service staff serving on bodies under Article XIV of the Constitution financed by autonomous budgets and located at Headquarters.

16. Some Article XIV bodies enjoying a substantial level of functional autonomy have raised issues relating to the contractual arrangement for the use of Non-Staff Human Resources (NSHR)[15]. Secretaries expressed the desire to be enabled to set their own, appropriate and competitive consultancy rates. Where possible requests have been accommodated. In December 2012, the maximum ceiling for the honorarium of PSAs and consultants has been raised up of USD622 and this seems to have settled any outstanding issues.

[12] The Article XIV bodies funded by extra-budgetary funds (e.g. Indian Ocean Tuna Commission, Seychelles) have the status of field projects, including those of field projects based at Headquarters (e.g. General Fisheries Commission Mediterranean, Rome).
[13] E.g. the Secretariat of the International Plant Protection Convention.
[14] E.g. The IOTC, GFCM and ITPGRFA.

[15] Personal Service Subscriber (PSA)(MS 319) and Consultants (MS 317).

17. Since July 2011, a new Manual Section 507 – Letters of Agreement – was implemented resulting in updated templates, necessary operational flexibility, internal control and support documents that facilitate the conclusion and implementation of LoAs with more ease and convenience, including for Article XIV bodies. Occasionally, exceptions to the rules are requested on minor issues (for example approving the extension of an LoA even though it has already expired), but no major deviation from the rules has been requested. It is recommended that any deviation or concerns expressed continue to be addressed through internal consultation.

Channels of communication with Governments

18. The FAO Administrative Manual sets rules on channels of communication with Governments[16]. There might be a need for some bodies[17] to interact with heads of Government departments and for a relaxation of these rules. Informal adjustments have, in any case, been made from time to time. It might be appropriate to regularize this matter by devising special rules and criteria regarding official correspondence, and within parameters to be defined, secretariats could be allowed to inter-act with the membership up to a certain level of government authorities. However, the units that "host" or have relations with the secretariats of Article XIV bodies should be kept informed of such correspondence in order to ensure synergies of programmes and consistency of policies. It is suggested that the Correspondence Manual be adjusted to reflect the particular situation of the Article XIV bodies. This is a matter primarily for Management.

Relations with donors

19. The Technical Cooperation (TC) Department has overall responsibility for resource mobilization and the Assistant Director-General, TC has authority to sign donor agreements with donor government agencies, multilateral agencies and unilateral Trust Fund donors. The matter is of some importance in consideration of the fact that IPA Action 2.69 refers specifically to the possibility for bodies to exercise greater financial and administrative authority and "*mobilize additional funding from their members, while remaining within the framework of FAO and maintaining a reporting relationship with it*". For the past few years, some secretaries of Article XIV bodies have occasionally been able to sign donor agreements on behalf of the Organization, on the basis of a delegation from the Assistant Director-General, TC. Some secretariats may have maintained direct relations with donors because they were under a legal obligation to implement funding strategies flowing directly from the constituent instruments or from decisions of their governing bodies. Besides these particular circumstances, in general, facilities regarding resource mobilization granted to secretaries of Article XIV bodies should be subject to a need for overall coherence in resource mobilization activities of FAO and, therefore, discussed by the secretaries with the relevant units of the Organization, as appropriate. The matter is primarily one within the authority of Management.

Organization of meetings

[16] Sections 602 (Correspondence Handbook) and 603 (Guidelines for the Preparation and Dispatch of Correspondence).
[17] Some of them entrusted with authority to adopt regulatory measures directly binding upon Members.

20. Prior to each meeting held outside Headquarters or outside the main regional and sub-regional offices, the Director-General is required to conclude an arrangement defining responsibilities of the host government and FAO[18] in respect of meetings. This arrangement sets a number of requirements linked to the status of FAO as an intergovernmental universal non-profit organization of the United Nations System, under the framework of which Article XIV bodies operate.

21. It would seem important that memoranda of responsibilities should continue to be concluded by the Director-General. It is also important that the integrity of the regime of privileges and immunities be duly safeguarded as this is an essential condition for the operation of the organizations of the United Nations System as a whole[19], as confirmed by past reviews of the matter by the CCLM. In light of the above considerations, the Finance Committee may wish to confirm that memoranda of responsibilities in connection with meetings convened by Article XIV bodies continue to be concluded by the Director-General.

22. As a general rule, bodies under Article XIV of the Constitution do organize a substantial number of meetings and commission a large number of translations through the Meeting Programming and Documentation Service (CPAM). Not infrequently, the membership of Article XIV bodies has expressed reservations with respect to some current arrangements and has requested increased reliance on outsourcing. The matter has been raised in many "autonomous" Article XIV bodies and some have taken the initiative to reduce costs by means of limiting the number of languages used in meetings. The Finance Committee may wish to advise whether a selective approach to outsourcing of the translation of documents could be considered in respect of some Article XIV bodies. However, this raises much broader issues affecting current policies of the Organization on the matter.

Participation of observers from non-governmental organizations and other stakeholders in meetings of bodies

23. Pending the establishment and adoption of new policies, secretaries of Article XIV bodies could seek to implement, in consultation with concerned units of the Organization and the chairpersons of the concerned bodies, *ad hoc* measures for inviting NGOs and other stakeholders. It is proposed to continue with the current pragmatic, flexible and differentiated approach regarding participation of non-governmental organizations in meetings of the Organization including bodies under Article XIV of the Constitution [20]. This approach has operated in a satisfactory manner and has allowed for increased participation in a range of meetings of Article XIV bodies of representatives of civil society and non-governmental organizations, while responding to the specific needs of the bodies in question and the concerns of their respective constituencies.

The issue of the reporting relationship with FAO

24. The issue of the reporting relationship with FAO and its Governing Bodies is an issue which could continue to be under review in the future. In addition, as evidenced in the attached table, the scope and purpose of reporting is primarily defined with respect to each body in the light of its constituent instruments and taking into account the views of the Organization.

[18] Called "Memorandum of Responsibilities".

[19] Also taking into account the fact that any deviation by one organization from the regime generally accepted has implications in respect of other organizations of the system.

[20] In this context it should also be noted that upon request of the Council at its 145th Session, a complete and updated version of the strategy for partnerships with civil society and the strategy for partnership with the private sector will be submitted to the next Joint Meeting of the Finance and Programme Committees in March 2013, for approval by the Council in April 2013.

IV. PRINCIPLES AND PROCEDURES WHICH SHOULD GOVERN CONVENTIONS AND AGREEMENTS CONCLUDED UNDER ARTICLES XIV AND XV OF THE CONSTITUTION, AND COMMISSIONS AND COMMITTEES ESTABLISHED UNDER ARTICLE VI OF THE CONSTITUTION

25. In earlier submissions the question of whether the above principles and procedures set forth in Part O of the Basic Texts should be amended was raised. The Principles were adopted in 1957 and were amended on specific points on a few occasions, notably in 1991. They should be amended in a number of respects not only in connection with Article XIV bodies but also in connection with committees and commissions under Article VI of the Constitution. Again, the situation of Article XIV bodies is very much differentiated and evolving and it would not be easy to re-define at present a substantial number of rules and procedures so as to ensure that they respond to actual needs and "fit all situations". This exercise could be carried out at a later stage. Meanwhile, the Organization would implement the measures foreseen in this review.

V. SUGGESTED ACTION BY THE COMMITTEE

26. The Finance Committee is invited to review this document and offer such views thereon as appropriate. In doing so, the Finance Committee may wish to take into account the status and situation of each body, as presented in **Appendix I**, and the views of the CCLM which, at its 95th Session, has made a number of recommendations on the matter, presented in **Appendix II** hereto.

27. The Finance Committee is, in particular, invited to :

(a) confirm the differentiated nature and functional needs of Article XIV bodies;

(b) confirm the need for a determination of the bodies to which the recommendations of this review would apply, taking into account the views of the Members, the nature of the activities exercised, the existing oversight mechanism of any specific body and the overall status of the bodies in question or to establish criteria on the basis of which the secretariat will determine bodies eligible to facilities foreseen in this review;

(c) advise on the observations made in this review in paragraphs 11 to 16 (human resources matters), paragraph 18 (communications with Governments) and paragraph 19 (relations with donors) which are generally within Management's authority;

(d) advise on budgetary, financial and audit issues as appropriate (cf. paragraphs 8 to 10);

(e) advise on matters relating to servicing of meetings, including translation of documents in light of the observations made in this document (cf. paragraphs 20 to 22);

(f) note the considerations regarding participation in meetings of representatives of non-governmental organizations, civil society organizations and other stakeholders and advise on the need to formulate a comprehensive set of rules and procedures regarding their participation in meetings of Article XIV bodies (cf. paragraph 23);

(g) note the observations regarding the issue of the reporting relationship between Article XIV bodies and FAO varies in view of the specific legal status of each body (cf. paragraph 24);

(h) note that, in view of the evolution under way regarding the status of Article XIV bodies as well as their differentiated nature, the proposed amendments to the Principles should be deferred, until further experience on the matter is gained. The implementation of the recommendations of this review would obviate the need for immediate review of the Principles (cf. paragraph 25).

Appendix I

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
International Rice Commission (IRC) The Constitution was approved by the Conference in 1948 and entered in force in 1949. It was subsequently amended in: 1953, 1955, 1961, 1973 and 1982. **Seat:** Rome (Italy).	Global 62 Member Nations General objectives: production, conservation, distribution and consumption of rice, except matters relating to international trade.	● Constitution of IRC (the Constitution); ● Rules of Procedure (RoP).	**Advisory and managerial authority:** ● recommendations to Members through the DG; ● recommendations to the DG for the provision of technical assistance to Members; ● review of scientific, technical and economic problems that bear upon the object f the Commission; ● promotion and coordination of projects; ● collection and dissemination of information. **Audit:** the examination and audit of the accounts of the Commission shall be conducted at the FAO headquarters.
International Plant Protection Convention (IPPC) The Convention was signed in 1951 and entered in force in 1952. The IPPC is governed by the Commission on Phytosanitary Measures (CPM), which was established under Article XII of IPPC, and serves as the Convention's governing body. **Seat:** Rome (Italy).	Global 177 contracting parties General objectives: protection of plants and plan products.	● International Plant Protection Convention (IPPC); ● Rules of Procedure of CPM (RoP); ● Procedure Manual (PM); ● Financial Guidelines for the Trust Fund for the IPPC (as adopted at CPM4, 2009).	**Advisory and managerial authority:** ● international standards (standards are recognized as reference point for international trade); ● guidelines regarding the recognition of regional plant protection organizations; ● recommendations for the implementation of the Convention; ● review of the state of the plant protection **Member States undertake to:** ● establish an official national plant protection organization; ● make arrangements for phytosanitary certification in conformity with IPPC; ● conformity to phytosanitary measures for quarantine pests and regulated non-quarantine pests; ● exercise sovereign authority to regulate the entry of plants and plant products in conformity IPPC. **Adoption of the budget:** the Commission adopts the budget of the TF.
Asia and Pacific Plant Protection Commission (APPPC) The Plant Protection Agreement for the Asia and Pacific Region was signed in 1955 and amended in 1967, 1979, 1983, 1999. The Agreement as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region), is binding for 7 contracting members (Agreement A); the Agreement as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region and to introduce mandatory contributions) is binding for 17 contracting members (Agreement B). The Agreement amended in 1999 is not currently in force. **Seat:** Bangkok (Thailand).	Regional 7 contracting members (Agreement A) General objectives: plant protection.	● Plant Protection Agreement for the Asia and Pacific Region as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region),(Agreement A).	**Advisory and managerial authority:** ● determination of procedures and arrangements necessary for the implementation of the Agreement; ● review of reports submitted by the Contracting Parties on progress in the implementation of the Agreement; ● consideration for problems requiring cooperation on a regional basis and of measures for mutual assistance; ● measures of prohibition, certification, inspection, disinfection, quarantine, destruction or other measures with respect to the importation of any plants, including their packaging and containers, and any packaging and containers of plant origin: (i) from anywhere outside the Region; and (ii) from another territory within the Region. **Regulatory authority:** ● measures to exclude South American Leaf Blight of Hevea from the Region, as specified in Appendix B of the Agreement. **Adoption of budget (Agreement B):** the Commission adopts the budget and transmits it the DG for submission to the FAO Council prior to implementation.
	Regional 17 contracting members (Agreement B) General objectives: plant protection.	● Plant Protection Agreement for the Asia and Pacific Region as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region and to introduce mandatory contributions), (Agreement B); ● Rules of procedure of APPPC (RoP); ● APPPC Financial Rules (Financial Rules).	

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
Commission for Controlling the Desert Locust in South West Asia (SWAC) The establishing agreement was signed in 1963, and entered in force in 1964. **Seat:** Rome (Italy).	Regional 4 Member Nations General objectives: control of plagues of the Desert Locust within the area.	● Agreement for the establishment of SWAC (the Agreement); ● Rules of Procedure (RoP).	**Advisory and managerial authority:** ● planning and implementation of joint action for the survey and control of desert locust in the Region; ● assistance and promotion of national, regional or international action relating to the control or survey of the desert locust; ● assistance, at the request of any Member whose territory is faced with Desert Locust situations beyond the capacity of this national services to control and survey, in any measures jointly agreed to that may become necessary; ● maintenance of reserves of anti-locust equipments, insecticides and other supplies, to be used in case of emergency. **Member States undertake to:** ● maintain through the Secretary and/or between members of the Commission a regular exchange of information on the current locust situation; ● carry out all possible measures for preventive control of the desert locust within member countries and to reduce crop damage by maintaining a permanent locust information and reporting service, holding reserves of insecticides and application equipment, encouraging and supporting training, survey and research work in the field; ● submit to the Commission periodic reports on the actions taken to fulfill the above mentioned obligations. **Adoption of the budget:** after approval by the Commission, the budget is transmitted to the DG for submission to the Council prior to implementation.
Commission for Controlling the Desert Locust in the Central Region (CRC) The establishing agreement was signed in 1965 and entered in force in 1967. **Seat:** Cairo.	Regional 17 Member Nations General objectives: control of plagues of the Desert Locust within the area.	● Agreement for the establishment of CRC (the Agreement); ● Rules of Procedure (RoP).	**Advisory and managerial authority:** ● planning and promotion of joint action for the survey and control of the Desert Locust in the Region wherever required and, to this effect, arrangement of means whereby adequate resources can be made available; ● assistance and promotion of national, regional or international action relating to the control or survey of the Desert Locust; ● determination of the nature and extent of assistance needed by Members for regional programmes; ● assistance, at the request of any Member whose territory is faced with Desert Locust situations beyond the capacity of this national services to control and survey, in any measures jointly agreed to that may become necessary; ● maintenance of reserves of anti-locust equipment, insecticides and other supplies, to be used in cases of emergency. **Adoption of the budget:** the draft budget of the Commission is prepared by the Secretariat and submitted to the Commission by the Executive Committee for approval.

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
Commission for Controlling the Desert Locust in the Western Region (CLCPRO) The establishing agreement was signed in 2000, and entered into force in 2002. **Seat:** Alger (Algeria).	Regional 10 Member Nations General objectives: control of plagues of the Desert Locust within the area.	● Agreement for the establishment of CLCPRO (the Agreement); ● Rules of Procedure (RoP).	**Advisory and managerial authority:** ● promotion of national, regional and international measures and researches with a view to defeat desert locust in the Region; ● planning and promotion of joint action for the survey and control of the Desert Locust in the Region wherever required and, to this effect, arrangement of means whereby adequate resources can be made available; ● assistance, at the request of any Member whose territory is faced with Desert Locust situations beyond the capacity of this national services to control and survey, in any measures jointly agreed to that may become necessary; ● determination, in consultation with the Members concerned, of the nature and extent of assistance needed by Members for regional programmes; ● maintenance of reserves of anti-locust equipment, insecticides and other supplies, to be used in cases of emergency. **Adoption of the budget:** the draft budget of the Commission is prepared by the Secretariat and submitted to the Commission by the Executive Committee for approval. After approval, the budget is transmitted to the DG for its implementation.
International Poplar Commission (IPC) Established in 1947 during the "Semaine internationale du Peuplier" organized by the French Government. The Conference, at its 10th Session (1959), approved a convention placing the Commission within the framework of FAO. The Convention placing the International Poplar Commission within the framework of FAO entered in force in 1961. The Convention was subsequently amended in: 1967 and in 1977**.** **Seat:** Rome (Italy).	Global 37 Member Nations General objectives: promotion and study of the scientific, technical, social and economic aspects of poplar and willow cultivation.	Convention placing the International Poplar Commission within the framework of FAO.	**Advisory and managerial authority:** ● study of scientific, technical, social and economic aspects of poplar and willow cultivation; ● promotion of exchange of ideas and material between research workers, producers and users; ● arrangement of joint research programs; ● recommendations to the FAO Conference, through the DG; ● recommendations to National Poplar Commissions, through the DG and the Governments concerned (Art.III of the Convention). **Member States undertake to:** establish a National Poplar Commission or, if not possible, designate a suitable national body (Art. IV of the Convention). **Adoption of the budget:** the Commission adopts its Programme and Budget. The Budget is transmitted to the DG for submission to the Council prior to implementation.
Governing Body (GB) of the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) The Treaty was signed in 2001 and entered into force in 2004. **Seat:** Rome (Italy).	Global 128 Contracting Parties General objectives: conservation and sustainable use of plant genetic resources for food and agriculture.	● the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA); ● Rules of Procedure; ● Financial Rules.	**Advisory and managerial authority:** ● provision of policy direction and guidance to monitor the IT-PGRFA; ● policy directionism, guidance and recommendations for the implementation of the Multilateral System; ● adoption of such recommendations as necessary for the implementation of the Treaty and, in particular, for the operation of the Multilateral System; ● establishment and maintenance of cooperation with other international organizations and treaty bodies; ● consideration and approval of cooperative and effective procedures and operational mechanisms to promote compliance with the provisions of this Treaty and to address issues of non-compliance. **Member States undertake to:** ● conform national laws, regulations and procedures with the obligations provided in the IT-PGRFA; ● subject to national legislation, and in cooperation with other Contracting Parties where appropriate, promote an integrated approach to the exploration, conservation and sustainable use of plant genetic resources for food and agriculture; ● develop and maintain appropriate policy and legal measures that promote the sustainable use of plant genetic resources for food and agriculture; ● cooperate with other Contracting Parties, directly or through FAO, and other relevant international organizations, in the conservation and sustainable use of plant genetic resources for food and agriculture. **Adoption of the budget:** the Governing Body adopts the budget of the IT-PGRFA.

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
European Commission for the Control of Foot-and-Mouth Disease (EUFMD) The Constitution was signed in 1953 and entered in force in 1954. It was subsequently amended in: 1962, 1973, 1977, and 1997. **Seat:** Rome (Italy).	Regional 36 European Member Nations General objectives: prevention and control of foot-and-mouth disease (FMD) in Europe.	● Constitution of EUFMD (the Constitution); ● Rules of Procedure; ● Financial Regulations.	**Advisory and managerial authority:** ● collection of information on national programmes for control and research on foot-and-mouth disease; ● determination of the nature and extent of assistance needed by the Member States for implementing their national programmes; ● insurance of availability of an international laboratory with facilities for rapid characterization of virus by appropriate methods; ● arrangement of suitable facilities for the typing and characterization of the virus; ● maintenance of information on the stocks of antigen and vaccine available in member countries and other countries; ● advices to other organizations on the allocation of any available funds for assisting in prevention and control of foot-and-mouth disease. Member States undertake to control foot-and-mouth disease with a view to its ultimate eradication by: ● the institution of suitable quarantine and sanitary measures; ● a slaughter policy; ● slaughter together with vaccination; ● maintenance of totally immune cattle population by vaccination; ● other susceptible livestock may be vaccinated. ● vaccination in zones surrounding outbreaks. Methods adopted shall be rigorously carried out (Art. II of the Constitution). **Adoption of the budget:** the Executive Committee submits the Programme and Administrative Budget, or special budgets as the case may be, to the Commission, for submission to the FAO Finance Committee.
Regional Animal Production and Health Commission for Asia and the Pacific (APHCA) The establishing agreement was signed in 1973 and entered in force in 1975. **Seat:** Bangkok (Thailand).	Regional 18 Member Nations General objectives: promotion of livestock development and action with respect to animal health and husbandry problems in Asia, the Far East and the Southwest Pacific.	● Agreement for the establishment of APCHA (the Agreement); ● Rules of Procedure.	**Advisory and managerial authority:** ● planning and promotion of joint action for the improvement of animal production; ● planning and promotion of joint action for the survey and control of contagious and infectious diseases; ● planning and promotion of joint action to establish educational programmes to meet the needs of the animal industry and advise on standardization of education courses; ● determination of the nature and extent of assistance needed by Members to implement their national livestock development programmes and to support regional programmes ● assistance in the control of epizootic and communicable diseases whose control may be beyond the capacity of national services. **Regulatory authority:** ● recommendations on common standards and practices for the purpose of planning and promoting joint action for the survey and control of contagious and infectious diseases (Art.VI.1(b) of the Agreement); ● recommendations on common Regional standards and practices of animal production and health (Art.VII.2 of the Agreement). **Member States undertake to:** ● maintain, directly and through the Secretary of the Commission, a regular exchange of information; ● promote the growth of livestock industries in their respective countries. **Adoption of the budget:** the Commission adopts its Programme and Budget. The Budget is transmitted to the DG for submission to the Council prior to implementation.

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
Asia-Pacific Fishery Commission (APFIC) The Commission was established in 1948, as recommended by the 3rd Session of the Conference in 1947. Its establishing Agreement was amended at the 25th Session of the Commission (1996) and approved by the Council at its 112th Session (1997). **Seat:** Bangkok (Thailand).	Regional 21 Member Nations General objectives: promotion of the full and proper utilization of living aquatic resources.	● Agreement for the establishment of APFIC (the Agreement); ● Rules of Procedure.	**Advisory and managerial authority:** ● programmes or projects to (i) increase the efficiency and sustainable productivity of fisheries and aquaculture; (ii) conserve and manage resources; (iii) protect resources from pollution; ● promotion, coordination and, as appropriate, undertaking of training and extension activities in all aspects of fisheries; ● promotion, coordination and, as appropriate, undertaking of research and development activities in all respects of fisheries (Art. IV of the Agreement). **Adoption of the budget:** the Budget is approved by the Commission. After approval by the Commission, the budget shall be submitted to the DG for consideration in the preparation of the general budget estimates of the Organization.
Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (CACfish) Signed in 2009 and entered into force in 2010. **Seat:** Ankara (Turkey).	Regional 4 members General objectives: development, conservation, rational management and best utilization of living aquatic resources; as well as promotion of the sustainable development of aquaculture in the region.	● Agreement on the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (the Agreement); ● Rules of Procedures (RoP); ● Financial Regulations (FR).	**Regulatory authority:** ● measures for the conservation and rational management of living aquatic resources and for the implementation of these recommendations; ● recommendation, coordination and, as appropriate, undertaking of activities relating to training and extension, research and development, including cooperative projects in the areas of fisheries and aquaculture (Art. III of the Agreement). **Adoption of the budget:** the budget, and special budget as appropriate, is approved by the Commission. After approval, the budget is transmitted to the Finance Committee for its information.
General Fisheries Commission for the Mediterranean (GFCM) The establishing agreement was signed in 1949 and was amended afterwards, providing further obligations upon the Parties and requiring their formal acceptance. The amended text of the Agreement entered in force in 2004. **Seat:** Rome (Italy).	Regional 21 Member Nations General objectives: development, conservation, rational management and best utilization of living marine resources in the Mediterranean and the Black Sea.	● Agreement for the establishment of GFCM; ● Rules of Procedure; ● Financial Regulations.	**Advisory and managerial authority:** ● review of the state of living marine resources; ● review of the economic and social aspects of the fishing industry and recommend any measures aimed at its development; ● promotion, coordination and undertaking of training and extension activities in all aspects of fishery; ● promotion, coordination and undertaking of research and development activities and cooperative projects; ● collection and dissemination of information; promotion of programmes for marine and brackish water aquaculture and coastal fisheries enhancement. **Regulatory authority:** ● measures for the conservation and rational management of living marine resources (measures for regulating fishing methods and fishing gear, prescribing the minimum size for individuals of specified species, establishing open and closed fishing seasons and areas, regulating the amount of total catch and fishing effort and their allocation among Members); ● measures for the implementation of these recommendations. **Adoption of the budget:** the autonomous budget is adopted by the Commission and shall be submitted to FAO Finance Committee for its information. Special budgets may be adopted by the Commission in exceptional circumstances as appropriate.

Article XIV Body (date of establishment)	Global/Regional scope and Membership	Legal Framework	Authority
Indian Ocean Tuna Commission (IOTC) The establishing agreement was signed in1993 and entered in force in 1996. **Seat:** Victoria (Seychelles).	Regional 30 Member Nations General objectives: conservation and optimum utilization of stocks covered by this Agreement.	● Agreement for the establishment of the Indian Ocean Tuna commission (the Agreement); ● Rules of Procedure; ● Financial Regulations	**Advisory and managerial authority:** ● promotion of cooperation among Member States with a view to ensuring the conservation and optimum utilization of stocks; ● review of the conditions and trends of stocks; ● collection and dissemination of information; ● promotion and coordination of research and development activities in respect of stocks and fisheries; ● review of the economic and social aspects of the fisheries. **Regulatory authority:** ● conservation and management measures. **Adoption of the budget:** the Administrative Budget, the autonomous budget, and the special budgets in exceptional circumstances as appropriate, are adopted by the Commission. The Administrative Budget shall be submitted to FAO Finance Committee for its information.
Regional Commission for Fisheries (RECOFI) The establishment agreement was signed in 1999, but entered in force in 2001. **Seat:** Cairo (Egypt).	Regional 8 Member Nations General objectives: development, conservation, rational management and best utilization of living marine resources, as well as the sustainable development of aquaculture, in the region.	● Agreement for the Establishment of RECOFI (the Agreement); ● Rules of procedure.	**Advisory and managerial authority:** ● training and extension activities in all aspects of fisheries. ● research and development activities, including cooperative projects in the areas of fisheries and the protection of living marine resources (Art.III of the Agreement). **Regulatory authority:** ● measures regulating fishing methods and fishing gear; ● measures prescribing the minimum size for individuals of specified species; ● measures establishing open and closed fishing seasons and areas; ● measures regulating the amount of total catch and of fishing effort and their allocation among Members. **Adoption of the budget:** the Commission adopts its budget. After approval, the budget is submitted to the DG for consideration in the preparation of the general budget estimates of FAO.

Article XIV Body (date of establishment)	Funding[21]	Status of Secretariat[22]	Reporting to FAO Governance
International Rice Commission (IRC) The Constitution was approved by the Conference in 1948 and entered in force in 1949. It was subsequently amended in: 1953, 1955, 1961, 1973 and 1982. **Seat:** Rome (Italy).	**RP funding:** US$ 156,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG shall appoint and provide the Secretariat of the Commission from the staff of the Organization. **Staffing:** ● **P staff:** 0.5 RP **Reporting:** the Secretary reports to the DG, through the ADG/AG.	Recommendations having policy, program or financial implications for FAO shall be brought by the DG to the attention of the Conference through the Council for appropriate action.
International Plant Protection Convention (IPPC) The Convention was signed in 1951 and entered in force in 1952. The IPPC is governed by the Commission on Phytosanitary Measures (CPM), which was established under Article XII of IPPC, and serves as the Convention's governing body. **Seat:** Rome (Italy).	**RP funding:** US$ 5,900,000 for biennium 2012-2013 **TF funding:** US$ 1,675,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary shall be appointed by the DG. The Secretary shall be assisted by such staff as may be required. **Staffing:** ● **P staff:** 6 RP ● **GS staff:** 3 RP ● **NSHR:** 6-8 RP + 6-7 TF **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to ADG/AG on administrative matters.	Recommendations having policy, program or financial implications for FAO shall be brought by the DG to the attention of the Conference and/or of the Council for appropriate action.
Asia and Pacific Plant Protection Commission (APPPC) The Plant Protection Agreement for the Asia and Pacific Region was signed in 1955 and amended in 1967, 1979, 1983, 1999. The Agreement as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region), is binding for 7 contracting members (Agreement A); the Agreement as approved in 1955 and amended in 1967, 1979 and in 1983 (to include China in the definition of the Region and to introduce mandatory contributions) is binding for 17 contracting members (Agreement B). The Agreement amended in 1999 is not currently in force. **Seat:** Bangkok (Thailand).	**RP funding:** US$ 292,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 339,000 for biennium 2010-2011 (US$ 169 500 for the year 2011) **TF funding:** US$ 525,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG appoints the Secretary with the approval of the Commission. The DG appoints and provides the Secretariat of the Commission from the staff of the Organization. **Staffing:** ● **P staff:** 0.5 RP ● **GS staff:** 0.4 RP **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to DG on administrative matters.	Recommendations having policy, program or financial implications for FAO shall be brought by the DG to the attention of the Conference and/or of the Council for appropriate action. Recommendations and decisions of the Commission having policy, programme or financial implications for FAO shall be brought by the Secretary, through the DG, to the attention of the Conference or Council for appropriate action.

[21] Assessed contributions towards autonomous budgets are paid into a Trust Fund. Assessed Contributions may or may not be released in full and, as a consequence, this may account for some discrepancies in the figures. In addition, a particular body may benefit from other Trust Fund resources.
[22] Figures regarding positions financed by Trust Funds may be indicative.

Article XIV Body (date of establishment)	Funding[23]	Status of Secretariat[24]	Reporting to FAO Governance
Commission for Controlling the Desert Locust in South West Asia (SWAC) The establishing agreement was signed in 1963, and entered in force in 1964. **Seat:** Rome (Italy).	**RP funding:** US$ 138,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 142,900 for biennium 2013-2014 (US$ 71,450 per annum) **TF funding:** US$ 163,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG provides the Secretary and staff of the Commission. **Staffing:** ● **P staff:** 0.3 RP ● **GS staff:** 0.3 TF **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to AGPP on administrative matters.	The Commission shall keep the DG fully informed of its activities and transmit to him the reports and recommendations of the Commission, its accounts, its Program and its Budget, the latter for submission to the Council prior to implementation. The Commission shall transmit to the DG the reports and recommendations of the Commission, for such action by the Council or the Conference as may be appropriate.
Commission for Controlling the Desert Locust in the Central Region (CRC) The establishing agreement was signed in 1965 and entered in force in 1967. **Seat:** Cairo.	**RP funding:** US$ 500,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 266,850 for the year 2012 **TF funding:** US$ 700,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG provides the Secretary and staff of the Commission. **Staffing:** ● **P staff:** 1.2 RP ● **GS staff:** 0.2 RP + 2TF ● **NSHR:** 1 TF **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to AGPP on administrative matters.	The Commission shall keep the DG fully informed of its activities and transmit to him the reports and recommendations of the Commission, its accounts, its Program and its Budget for such action by the Council or the Conference as may be appropriate.
Commission for Controlling the Desert Locust in the Western Region (CLCPRO) The establishing agreement was signed in 2000, and entered into force in 2002. **Seat:** Alger (Algeria).	**RP funding:** US$ 530,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 639,000 for the year 2011 **TF funding:** US$ 575,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG provides the Secretary and staff of the Commission. **Staffing:** ● **P staff:** 1.2 RP + 2 TF ● **GS staff:** 2.5 RP + 0.2 TF ● **NSHR:** 1 RP + 3 seconded by Algerian MOFA **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to AGPP on administrative matters.	The Commission shall keep the DG fully informed of its activities and transmit to him the reports and recommendations of the Commission, its accounts, its Program and its Budget for such action by the Council or the Conference as may be appropriate.
International Poplar Commission (IPC) Established in 1947 during the "Semaine internationale du Peuplier" organized by the French Government. The Conference, at its 10th Session (1959), approved a convention placing the Commission within the framework of FAO. The Convention placing the International Poplar Commission within the framework of FAO entered in force in 1961. The Convention was subsequently amended in: 1967 and in 1977. **Seat:** Rome (Italy).	**RP funding:** US$ 422,000 for biennium 2012-2013 **TF funding:** US$ 30,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary is appointed by the DG from amongst the senior staff of the Organization. **Staffing:** ● **P staff:** 0.7 RP ● **GS staff:** 0.25 RP ● **NSHR:** US$ 4,000 RP + US$ 13,000 TF3[25] **Reporting:** the Secretary reports to the DG.	The Commission shall report and make recommendations to the Conference, through the DG.

[23] Assessed contributions towards autonomous budgets are paid into a Trust Fund. Assessed Contributions may or may not be released in full and, as a consequence, this may account for some discrepancies in the figures. In addition, a particular body may benefit from other Trust Fund resources.
[24] Figures regarding positions financed by Trust Funds may be indicative.
[25] Besides salary costs, NSHR may include additional costs (e.g. travel costs).

Article XIV Body (date of establishment)	Funding[26]	Status of Secretariat[27]	Reporting to FAO Governance
Governing Body (GB) of the International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA) The Treaty was signed in 2001 and entered into force in 2004. **Seat:** Rome (Italy).	RP funding: US$ 1,987,200 for biennium 2012-2013 TF funding: US$ 12,723,063 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary of the GB is appointed by the DG, with the approval of the Governing Body. The Secretary shall be assisted by such staff as may be required. **Staffing:** ● **P staff:** 2 RP + 7 TF ● **GS staff:** 3 RP + 1 TF ● **NSHR:** 3-8 TF **Reporting:** the Secretary reports to the GB.	Recommendations and decisions of the Governing Body having policy, programme or financial implications for the FAO shall be brought by the Secretary, through the DG of the FAO, to the attention of the Conference or Council of the FAO for appropriate action.
European Commission for the Control of Foot-and-Mouth Disease (EUFMD) The Constitution was signed in 1953 and entered in force in 1954. It was subsequently amended in: 1962, 1973, 1977, and 1997. **Seat:** Rome (Italy).	RP funding: no regular programme funding. Assessed contributions towards autonomous budget: US$ 543,182 for biennium 2012-2013 TF funding: US$ 6.6 million for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary and staff are appointed by the DG. The staff of the Secretariat is appointed by the DG with the approval of the Executive Committee. **Staffing:** ● **P staff:** 3 TF ● **GS staff:** 2 TF ● **NSHR:** 6TF **Reporting:** the Secretary reports to the DG.	The Executive Committee shall prepare the report on the activities of the Commission during the past biennium for approval by the Commission and transmission to the DG. Recommendations having policy, programme or financial implications shall be brought by the DG to the attention of the conference through the Council for action.
Regional Animal Production and Health Commission for Asia and the Pacific (APHCA) The establishing agreement was signed in 1973 and entered in force in 1975. **Seat:** Bangkok (Thailand).	RP funding: US$ 190,000 for biennium 2012-2013 Assessed contributions towards autonomous budget: US$ 90,488.00 for the year 2013 TF funding: US$ 190,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary and staff are appointed by the DG. **Staffing:** ● **P staff:** 0.25 RP ● **GS staff:** 0.25 RP + 0.5 TF **Reporting:** the Secretary reports to the DG.	The Commission shall: ● keep the DG fully informed of its activities and transmit to him the accounts, the Programme and the Budget of the Commission, the latter for submission to the Council prior to implementation; ● transmit to the Director-General the reports and recommendations of the Commission, for such action by the Council or Conference as may be appropriate. Recommendations having policy, programme or financial implications shall be brought by the DG to the attention of the conference through the Council for action.

[26] Assessed contributions towards autonomous budgets are paid into a Trust Fund. Assessed Contributions may or may not be released in full and, as a consequence, this may account for some discrepancies in the figures. In addition, a particular body may benefit from other Trust Fund resources.
[27] Figures regarding positions financed by Trust Funds may be indicative.

Article XIV Body (date of establishment)	Funding[28]	Status of Secretariat[29]	Reporting to FAO Governance
Asia-Pacific Fishery Commission (APFIC) The Commission was established in 1948, as recommended by the 3rd Session of the Conference in 1947. Its establishing Agreement was amended at the 25th Session of the Commission (1996) and approved by the Council at its 112th Session (1997). **Seat:** Bangkok (Thailand).	RP funding: US$ 236,000 for biennium 2012-2013 TF funding: no fund for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary and its staff are appointed by the DG. **Staffing:** ● **P staff:** 0.3 RP ● **GS staff:** 0.3 RP **Reporting:** the Secretary reports to the Commission.	The Commission shall transmit to the DG: ● a report embodying its views, recommendations and decisions, after each session; ● such other reports as it may deem necessary or desirable. Resolutions and recommendations having policy, programme or financial implications shall be brought by the DG to the attention of the conference through the Council for action.
Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (CACfish) Signed in 2009 and entered into force in 2010. **Seat:** Ankara (Turkey).	**RP funding: US$ 33,000** **Assessed contributions towards autonomous budget:** US$ 180,000 for biennium 2011-2012 **TF funding:** US$ 204,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG appoints the Secretary and its staff. **Staffing:** ● **P staff:** 0.05 RP ● **NSHR:** 0.6 TF **Reporting:** the Secretary reports to the Commission.	The Commission shall transmit to the DG: ● a written report embodying its views, recommendations and decisions, after each session; ● such other reports as it may deem necessary or desirable.
General Fisheries Commission for the Mediterranean (GFCM) The establishing agreement was signed in 1949 and was amended afterwards, providing further obligations upon the Parties and requiring their formal acceptance. The amended text of the Agreement entered in force in 2004. **Seat:** Rome (Italy).	**RP funding:** US$ 125,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 2,335,711 for the year 2012 **TF funding:** US$ 6.5 million for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary is appointed by the DG with the approval of the Commission or, in the event of appointment between regular sessions of the Commission, with the approval of the members of the Commission. **Staffing:** ● **P staff:** 7 TF ● **GS staff:** 5 TF ● **NSHR:** 44 TF **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to ADG/FI on administrative matters.	The Commission shall transmit to the DG: ● a report embodying its views, recommendations and decisions, after each session; ● such other reports as it may deem necessary or desirable. Resolutions and recommendations having policy, programme or financial implications shall be brought by the DG to the attention of the conference through the Council for action.

[28] Assessed contributions towards autonomous budgets are paid into a Trust Fund. Assessed Contributions may or may not be released in full and, as a consequence, this may account for some discrepancies in the figures. In addition, a particular body may benefit from other Trust Fund resources.
[29] Figures regarding positions financed by Trust Funds may be indicative.

Article XIV Body (date of establishment)	Funding[30]	Status of Secretariat[31]	Reporting to FAO Governance
Indian Ocean Tuna Commission (IOTC) The establishing agreement was signed in1993 and entered in force in 1996. **Seat:** Victoria (Seychelles).	**RP funding:** no regular programme funding **Assessed contributions towards autonomous budget:** US$ 2,344,777 for the year 2012 **TF funding:** US$ 5,046,000 for biennium 2012-2013 (US$ 6,683,000 [for biennium 2014-2015)	**Appointment procedure of Secretary & staff of Secretariat:** the Secretary is appointed by the DG with the approval of the Commission or, in the event of appointment between regular sessions of the Commission, with the approval of the members of the Commission. The staff of the Commission is appointed by the Secretary and is under its direct supervision. **Staffing:** ● **P staff and higher category:** 7 TF ● **GS staff:** 5 TF ● **NSHR:** 1 TF **Reporting:** the Secretary reports ● to the Commission on technical matters; ● to the DG, through the ADG/FI on administrative matters.	The Commission shall transmit to the DG reports: ● on its activities, programme, accounts and autonomous budget; ● on other matters as may be appropriate for action by the Council or the Conference.
Regional Commission for Fisheries (RECOFI) The establishment agreement was signed in 1999, but entered in force in 2001. **Seat:** Cairo (Egypt).	**RP funding:** US$ 245,000 for biennium 2012-2013 **Assessed contributions towards autonomous budget:** US$ 80,000 per biennium (US$ 5,000 per member per year) **TF funding:** US$ 75,000 for biennium 2012-2013	**Appointment procedure of Secretary & staff of Secretariat:** the DG appoints the Secretary and its staff. **Staffing:** ● **P staff:** 0.3 RP ● **GS staff:** 0.3 RP ● **NSHR:** US$ 3,000 RP + US$ 46,000 TF3[32] **Reporting:** the Secretary reports to the Commission.	The Commission shall transmit to the DG: ● reports embodying its views, recommendations and decisions, ● other reports as it may deem necessary or desirable.

[30] Assessed contributions towards autonomous budgets are paid into a Trust Fund. Assessed Contributions may or may not be released in full and, as a consequence, this may account for some discrepancies in the figures. In addition, a particular body may benefit from other Trust Fund resources.
[31] Figures regarding positions financed by Trust Funds may be indicative.
[32] Besides salary costs, NSHR may include additional costs (e.g. travel costs).

Appendix II

Extract of Report of the 95th Session of the Committee on Constitutional and Legal Matters (Rome, 8 - 11 October 2012)

VI. Review of Article XIV Statutory Bodies with a view to allowing them to exercise greater financial and administrative authority while remaining within the framework of FAO

15. The CCLM examined document CCLM 95/12 "*Review of Article XIV statutory bodies with a view to allowing them to exercise greater financial and administrative authority while remaining within the framework of FAO*". The CCLM acknowledged that the matter was complex, insofar as bodies established by treaty under Article XIV of the Constitution were differentdepending on their constituent instruments. The CCLM noted that document CCLM 95/12 had been prepared in response to IPA Action 2.69 and was based on an earlier document reviewed by the CCLM in 2009 and by the Council in October 2009. The CCLM regretted that proposals made at the time were not implemented.

16. The CCLM agreed that it was essential to identify bodies established under Article XIV of the Constitution which would benefit from the facilities foreseen in the document. Eventually, the CCLM noted the views of the secretariat that it could be counterproductive to establish an exhaustive list of these bodies and that these should be identified on the basis of criteria such as their funding mechanisms, their functional needs and legal authority as defined in the constituent instruments, the conditions of appointment of their secretaries and their accountability to the bodies in question. Examples of these bodies are the Indian Ocean Tuna Commission, the General Fisheries Commission for the Mediterranean and the International Treaty on Plant Genetic Resources for Food and Agriculture.

17. As a general guiding principle, the CCLM held the view that increased delegation of authority to bodies under Article XIV of the Constitution could be considered provided that the secretariats of those bodies be adequately staffed and appropriate oversight mechanisms by the Organization be in place. The CCLM recommended that a review be undertaken by the secretariat to examine and determine, in consultation with the secretariat of bodies, whether the above conditions (adequacy of staffing and appropriate oversight mechanisms) are in place.

18. As regards external relations of bodies under Article XIV of the Constitution, the CCLM was of the view that secretaries of bodies referred to in paragraph 16 should travel on business in accordance with the statutory body work programme and allocated budget.

19. As regards conclusion of arrangements with other organizations, the CCLM noted that a procedure approved by the FAO Council in 2004 had been operating satisfactorily and seemed to respond to the needs of bodies under Article XIV of the Constitution, while allowing for coherence between the activities of those bodies and those of FAO.

20. On budgetary, financial and audit issues, the CCLM considered that these matters should be examined by the Finance Committee. The CCLM noted that the Finance Committee shouldcomment on the issue of project servicing costs. As regards requests for "third party audits", the CCLM noted that these were not possible under the Basic Texts of the Organization. However, it was possible for the Finance Committee to request the External Auditor of FAO to perform certain specific examinations under Financial Regulation 12.6, provided that costs be covered by the body in question.

21. As regards human resources matters, the CCLM noted that these were mainly within the purview of the Finance Committee and could be addressed through Management action. The CCLM underlined that it was essential to make adjustments to Performance Evaluation Management System (PEMS), insofar as some secretaries were directly under the operational authority of Article XIV bodies and not of FAO. Hence, performance assessments of secretaries of such bodies should on technical and operational matters be done by the membership of their governing bodies.

22. As regards channels of communication with Governments and official correspondence, the CCLM noted an earlier proposal that the Correspondence Manual be adjusted to reflect the particular

situation of bodies under Article XIV of the Constitution, but this had not been done. The CCLM requested that this proposal be implemented.

23. As regards relations with donors, the CCLM noted the proposal that facilities regarding resource mobilization be given to secretaries of bodies under Article XIV of the Constitution, subject to a need for overall coherence in resource mobilization activities of FAO. The CCLM also stressed that in some cases the secretariats were under a legal obligation to implement funding strategies flowing directly from the constituent instruments or from decisions of the bodies and, therefore, had to maintain direct relations with donors.

24. As regards the organization of meetings, including the conclusion of Memoranda of Responsibilities regarding such meetings, insofar as these involved issues related to the universal status of FAO and privileges and immunities they should continue to be concluded by or on behalf the Director-General.

25. As regards the servicing of meetings, including possible outsourcing of some activities such as translation, the CCLM noted that the matter was mainly within the purview of the Finance or Programme Committee and that there was, in any case, a need for quality control by FAO. The CCLM did not agree with the recommendation that, in order to reduce costs, some meetings be held in a limited number of languages.

26. As regards the issue of participation by non-governmental organizations (NGOs) and other stakeholders in meetings of FAO, including meetings of statutory bodies, the CCLM recommended that the current flexible, pragmatic practice continue. The CCLM agreed that, for the time being, no general rules on NGO participation applicable to all meetings of the Organization should be established in view of the differentiated nature of NGOs and stakeholders, the currently evolving situation, the different needs and status of the meetings of the Organization, as well as potential lack of consensus on the matter among the membership. In this particular regard, the CCLM observed that it would be difficult to extend to other bodies of the Organization the regime currently applied to the Committee on World Food Security.

27. As regards the issue of the reporting relationship with the main bodies of FAO, the CCLM considered that in view of the specific legal status of each body under Article XIV of the Constitution, the scope and purpose of reporting should be primarily defined by each body taking into account as appropriate the views of the Organization. The CCLM considered that in some cases, reporting to the Conference is justified.

28. The CCLM noted that the review set out in document CCLM 95/12 would be referred to the forthcoming sessions of the Programme and Finance Committee and requested that its deliberations be made available to these Committees.

Appendix 33

On the understandings to be reached with FAO and OIE

The following text has been developed by the Chairpersons of the Executive Committee in close consultation with the FAO Animal Health Service and in parallel to the drafting of the agreement with the OIE in order to maintain uniformity in substance. The version below was presented through the Secretariat of the EuFMD to the Legal Office of FAO for their review, in accordance with standard FAO procedures and Legal Framework concerning agreements between Article XIV bodies of FAO with FAO Departments. The position of the Legal Office of FAO on the document will be provided at, or before, the 40th Session.

Memorandum of understanding (MoU) between EuFMD and FAO on the planning and coordination of activities carried out by EuFMD in areas outside the territories of its Members

The Executive Committee ("the Executive Committee") of the European Commission for the Control of FMD (EuFMD), FAO and OIE compliment the EuFMD Secretariat (the Secretariat) for the amount and quality of work it has performed and the innovation it has developed over the years.

This work has not been limited to the implementation of disease prevention and control measures to protect EuFMD members ("the Members") from the incursion of FMD from south-east Europe, Transcaucasia and West-Eurasia, but occasionally also from risks to Members due to the FMD situation in more distant areas.

The Secretariat is also a driving force in engaging FMD experts in research projects and developing collaboration between OIE and FAO reference laboratories and centres within a functional network.

However, its most commended achievement is the outstanding contribution to the Progressive Control Pathway (PCP) for FMD, which was developed in close cooperation with EMPRES/AGAH of FAO and OIE.

Moreover, EuFMD is recognized as a valuable Commission under Article XIV of the FAO Constitution, and countries in other regions of the globe have requested its assistance and services on numerous occasions.

However, the available human and financial resources require EuFMD to focus on the objectives established by its Constitution, i.e. "to promote national and international action with respect to preventive and control measures against foot-and-mouth disease in Europe", to which its Members have agreed.

Notwithstanding the necessary prioritisation of activities, and in line with the FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs) mechanism and the agreements with the regional and global GF-TADs Steering Committees, EuFMD and in particular its Executive Committee are committed to the FAO/OIE Global FMD Control Strategy as presented at the FAO/OIE Global FMD Conference in Bangkok in 2012.

Following the 84th Executive Committee meeting in October 2012, and in consultation with FAO and OIE during the 85th Executive Committee meeting in February 2013, the Executive Committee and FAO agreed that the work of EuFMD shall be managed as follows:

I. General remarks

1) A multiannual work programme shall be prepared by the Secretariat for approval by Members at the General Session.

2) The multiannual programme shall be linked to the agreement concluded for a period of 4 years between the European Commission (EC) and FAO on the use of the EU-Trust Fund and will be in line with the FAO/OIE FMD Global Control Strategy.

3) To prepare the multiannual programme, the Secretariat will seek as appropriate inputs and feedback on planned activities from the FAO FMD-unit, the FAO/OIE GF-TADs FMD Working Group and the Global Secretariat of GF-TADs.

4) A 24-month work and budget plan is to be prepared by the Secretariat and presented by the Chairman of the Executive Committee to the regular General Session for approval. This plan shall detail for the two consecutive 12-month periods the activities with their corresponding time lines (GANTT chart), which are to be reviewed and updated, if needed, during the regular meetings of the Executive Committee.

5) The assessment of performance and work load of the Secretary and associated staff should comply with the FAO Performance Evaluation Management System (PEMS) and should be carried out annually by FAO with inputs of the Executive Committee before its regular meeting in the first semester of the year. The final assessment shall be agreed between FAO AGAH Chief, the Chairman of EuFMD and EC.

II. Content and geographical scope of the EuFMD work program

6) The Secretary of EuFMD manages the Secretariat and associated staff for the effective implementation of a multifaceted programme funded by contributions from Members, the EU-Trust Fund, and, other donors.

7) The activities of EuFMD shall be focused on three strategic pillars determined by Members and implemented for their benefit:

(a) Improve readiness for FMD crisis management by the Members,
(b) Reduce the risk of FMD to the Members from the European neighbourhood (assistance in the application of progressive control in neighbouring regions); and
(c) Promote the PCP, including financial support to the WRL (Pirbright Institute, UK).

8) EuFMD contributes to the global understanding of FMD and provides information on its assessment of risks to the European neighbourhood arising from the circulation of different FMD viruses. To this end, EuFMD produces reports for its Members and makes recommendations on vaccine strains for the national and EU antigen and vaccine banks.

It may contribute to information on FMD which is made available through EMPRES-Animal Health and to reports compiled under the technical leadership of EMPRES-Animal Health on monitoring the Global FMD situation. FAO will ensure that the inputs of EuFMD and the OIE/FAO FMD Laboratory Network are adequately acknowledged.

9) The neighbourhood of the current 36 Members is defined as follows:

(a) European Member Nations of the World Organisation for Animal Health (OIE) and member countries of the OIE Regional Commission for Europe which are eligible for membership in EuFMD;
(b) the countries and territories adjacent to members.;
(c) the countries in North Africa cooperating with Members in the framework of REMESA

10) EuFMD - activities in the above areas shall be coherent with GF-TADs regional plans and regional networks (i.e. REMESA, West-Eurasia Roadmap, South-East Mediterranean platform) and shall be carried out in consultations with the GF-TADs Management Committee to ensure that all relevant parties of a region are informed and involved in these actions. Information sharing will be reciprocal between FAO and EuFMD. Regarding North Africa, EUFMD activities will be defined in the framework of REMESA.

11) EuFMD may assist by mutual agreement the technical activities carried out by the EMPRES-Animal Health FMD unit in FMD endemic areas outside the neighbourhood defined in point 9;

12) EuFMD undertakes to share with the Global Secretariat of GF-TADs (secretariat-GF-TADS@fao.org), the Chief AGAH and the head of EMPRES-Animal Health any relevant information received (disease information, project reports and requests for assistance) to ensure that such information can be included in the programming by the EMPRES-Animal Health FMD Unit of activities related to the prevention, early warning and forecasting of FMD related events.

13) In addition, should EMPRES-Animal Health FMD Unit related activities require EuFMD collaboration or direct EuFMD intervention in countries outside of the European neighbourhood as defined in point 9, those activities shall be cleared in advance by the Chairman of EuFMD, where necessary with EC, and the Chief AGAH, and shall be carried out within the framework of GF-TADs (i.e., GF-TADs Management Committee).

14) Without prejudice to emergencies referred to in Section III, EuFMD involvement in activities outside its programme and geographical scope must and should be of benefit to its Members as regards prevention and reduction of risks and shall be cost effective. Cost recovery for such inputs would require previous agreement with the Executive Committee.

III. Activities in emergency situations

15.) Where the epidemiological situation so warrants, in particular where new FMD virus strains have been introduced into the European neighbourhood, EuFMD shall inform the Global Secretariat of GF-TADs, the Chief AGAH and the regional FAO offices of any emergency activities it plans to carry out. Those activities shall not commence on-the-spot until approved by the GF-TADs Management Committee and the Executive Committee.

16. Should an emergent situation arise that requires immediate decisions for intervention or other actions (i.e., mission or vaccine procurement) the lead operators of the GF-TADs Management Committee would consult by teleconference and are powered to request assistance from EuFMD and its personnel, if needed.

17. Where the EC requests EuFMD to use the EU-Trust Fund in order to carry out activities in areas outside the European neighbourhood in response to the epidemiological situation or the request of a country situated outside that neighbourhood, the Secretariat shall inform and obtain agreement of the GF-TADs Management Committee and where appropriate assist on request the EC to coordinate with GF-TADs.

18. The Executive Committee reserves its right to respond in a flexible way to changing epidemiological circumstances of FMD across endemic areas by adapting its programming of activities aimed at protecting Members. Where emergencies require activities outside the European neighbourhood they will be carried out after consultation with the OIE and FAO (e.g. emergency meetings, teleconference, or other).

IV. EuFMD and the Progressive Control Pathway (PCP)

19) EuFMD has been a key player for the continuous technical development of the PCP-concept and is prepared to support the global GF-TADs FMD Working Group by maintaining and reviewing the technical documents.

20) EuFMD may support relevant training programs on the application of the PCP at national or regional level by providing human resources and the expertise of the Secretariat to FAO and OIE. EuFMD is not institutionally responsible for the development of regional PCP roadmaps with the exception of those involving member states and shall not be engaged in the evaluation of the PCP-Status of countries outside its Membership.

V. Final Remark

The Executive Committee constantly monitors that the activities carried out by EuFMD through its Secretariat are in accordance with its Constitution.

The Memorandum of Understanding does in no way supersede Article IV (9) allowing EuFMD to enter into arrangements, through the Director-General of the Organization, with other organizations, regional groups or with Nations not Members of the Commission, for participation in the work of the Commission or its committees, or for mutual assistance on problems of controlling foot-and-mouth disease.

FAO shall communicate any issues it has with the activities carried out by EuFMD by submitting to the Chairman of the Executive Committee a comment paper for distribution to the members of that Executive Committee.

This MoU shall be reviewed not later than 24 months after the date of its application.

Appendix 34

On the understandings to be reached with FAO and OIE

The following text has been developed by the Chairpersons of the Executive Committee in close consultation with the FAO Animal Health Service and the OIE. The version below was presented through the Secretariat of the EuFMD to the Legal Office of FAO for their review, in accordance with standard FAO procedures and Legal Framework concerning Agreements of Article XIV bodies with external parties. The position of the Legal Office of FAO on the document will be provided at, or before, the 40th Session.

DRAFT

AGREEMENT BETWEEN THE

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE (EUFMD)

AND THE
OFFICE INTERNATIONAL DES EPIZOOTIES (OIE)

Background

The European Commission for the Control of Foot-and-Mouth Disease (EuFMD) is an intergovernmental organization established as an Article XIV body under the Framework of the Food and Agriculture Organization of the United Nations (FAO). As such, Article XIV bodies have functions described in their Constitutions to which member states are bound by treaty, and are governed by their member states in accordance with these legal articles. Under the Constitution of the EuFMD, in its most recent revision (1997), the OIE, FAO and the European Commission (EC) are provided with a non-voting participant status. The EuFMD may enter into arrangements, through the Director-General of the FAO, with the OIE within the framework of any agreements between the FAO and the OIE to ensure that:

1. all EuFMD Members are provided with technical advice on any problem relating to the control of foot-and-mouth disease;
2. comprehensive information on outbreaks of the disease and identification of virus is collected and disseminated as quickly as possible;
3. special research work required on foot-and-mouth disease is carried out;

The agreement hereinafter shall supplement the above mentioned Articles of the EuFMD Constitution.

In accordance with the functions described in its Constitution, EuFMD primarily aims at promoting national and international action with respect to preventive and control measures against the occurrence of foot-and-mouth disease in Europe. Those objectives are to be achieved through co-operative actions of the member states, or with non-member states, other organizations, or regional groups to achieve mutual assistance on problems of controlling foot-and-mouth disease. This includes assistance in the prevention and control of outbreaks in emergency situations in any manner considered appropriate by the Commission and the Member or Members concerned.

The EuFMD and the World Organisation for Animal Health (OIE) , wishing to coordinate their efforts in the control of foot-and-mouth disease (FMD) within the framework of their respective mandates, agree to the following:

Article 1

EuFMD and OIE undertake to cooperate closely in matters of common interest pertaining to the international control of FMD.

Article 2

Within the framework of this agreement the OIE is primarily responsible for:

a. establishing standards, guidelines and recommendations relevant to FMD in accordance with its Basic Texts and as recognised in the WTO-SPS Agreement.

b. developing, updating and publication in the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals of international science-based reference standards and validation of diagnostic methods for the tests for FMD and the quality of vaccinesrequired in accordance with the Terrestrial Animal Health Code.

c. collecting the official notifications of FMD related events and Disseminating official animal health information through the OIE WAHIS/WAHID

d.. developing and updating the OIE PVS Pathway as a global programme for the sustainable improvement of the veterinary services in member countries of OIE towards compliance with OIE standards on the quality of Veterinary Services, including laboratory capacities.

e. developing and updating the published "Recommendations on the competencies of graduating veterinarians ('Day 1 graduates') to assure the National Veterinary Services of quality".

f. Contributing with FAO and EUFMD to the regular updating of the PCP FMD tool.

Article 3

3.1. General remarks to the EuFMD work program:

a. A multiannual work program shall be prepared by the Secretariat for approval by Members at the General Session.

b. The multiannual program shall be linked to the agreement concluded for a period of 4 years between the European Commission (EC) and FAO on the use of the EU-Trust Fund and will be in line with the FAO/OIE FMD Global Control Strategy.

c. To prepare the multiannual program, the Secretariat will seek as appropriate inputs and feedback on planned activities from the OIE, the FAO/OIE GF-TADs FMD Working Group and the Global and relevant Regional Secretariat of GF-TADs.

d. A 24-month work and budget plan is to be prepared by the Secretariat and presented by the Chairman of the Executive Committee to the regular EuFMD General Session for approval. This plan shall detail for the two consecutive 12-month periods the activities with their corresponding time lines, which are to be reviewed and updated, if needed, during the regular meetings of the Executive Committee.

3.2. Content and geographical scope of the EuFMD work program

e. The Secretary of EuFMD manages the Secretariat and associated staff for the effective implementation of a multifaceted program funded by contributions from Members, the EU-Trust Fund, and, other donors.

f. The activities of EuFMD shall be focused on three strategic pillars determined by Members and implemented for their benefit:

   i. Improve readiness for FMD crisis management by the Members,

ii. Reduce the risk of FMD to the Members from the European neighbourhood (assistance in the application of progressive control in neighbouring regions); and
iii. Promote the PCP-FMD, including financial support to the WRL (Pirbright Institute, UK).

g. EuFMD contributes to the global understanding of FMD and provides information on its assessment of risks to the European neighbourhood arising from the circulation of different FMD viruses. To this end, EuFMD produces reports for its Members and makes recommendations on vaccine strains for the national and EU antigen and vaccine banks.

h. The neighbourhood of the current 36 Members is defined as follows:

i. European Member Countries of the World Organisation for Animal Health (OIE) and member of the OIE Regional Commission for Europe which are eligible for membership in EuFMD;
ii. the countries and territories adjacent to members.
iii. The countries in North Africa cooperating with Members in the framework of REMESA

i. EuFMD - activities in the above areas **shall be coherent with GF-TADs regional plans** and regional networks (i.e. REMESA,, West-Eurasia Roadmap, South-East Mediterranean platform) and shall be **carried out in consultation with the GF-TADs Management Committee** to ensure that all relevant parties of a region are informed and involved in these actions. Information sharing will be reciprocal between OIE and EuFMD. Regarding North Africa, EUFMD activities will be defined in the framework of REMESA

j. EuFMD undertakes to share with the Global Secretariat of GF-TADs (secretariat-GF-TADS@fao.org), any relevant information received (disease information, project reports and requests for assistance) to ensure that such information can be included in the programming of activities related to the prevention, early warning and forecasting of FMD related events.

k. Without prejudice to emergencies referred to in Section III, EuFMD involvement in activities outside its program and geographical scope as defined in 3.2 h) must and should be of benefit to the Members as regards prevention and reduction of risks and shall be cost effective and complying with 3.2 provisions. Cost recovery for such inputs would require previous agreement with the Executive Committee.

3.3. Activities in emergency situations

l. Where the epidemiological situation so warrants, in particular where new FMD virus strains have been introduced into the European neighbourhood, EuFMD shall inform the Global Secretariat of GF-TADS, and the regional OIE offices of any emergency activities it plans to carry out. Those activities shall not commence on-the-spot until approved by the GF-TADs Management Committee and the Executive Committee.

m. Should an emergent situation arise that requires immediate decisions for intervention or other actions (i.e., mission or vaccine procurement) the lead operators of the GF-TADs Management Committee would consult by teleconference and are powered to request assistance from EuFMD and its personnel, if needed.

n. Where the EC requests EuFMD to use the EU-Trust Fund in order to carry out activities in areas outside the European neighbourhood in response to the epidemiological situation or the request of a country situated outside that neighbourhood, the Secretariat shall inform and obtain agreement of the GF-TADs Management Committee and where appropriate assist on request the EC to coordinate with GF-TADs.

o. The Executive Committee reserves its right to respond in a flexible way to changing epidemiological circumstances of FMD across endemic areas by adapting its programming of activities aimed at protecting Members. Where emergencies require activities outside the European neighbourhood they will be carried out after consultation and agreement with the GF-TADs Management Committee (e.g. emergency **meetings, teleconference, or other).**

3.4. EuFMD and the Progressive Control Pathway (PCP)

p. EuFMD has been a key player for the continuous technical development of the PCP-concept and is prepared to support the global GF-TADs FMD Working Group by reviewing and updating the PCP FMD technical documents.

q. EuFMD may support relevant training programs on the application of the PCP at national or regional level by providing on request human resources and the expertise of the Secretariat to FAO and OIE. EuFMD is not institutionally responsible for the development of regional PCP roadmaps with the exception of those involving member states and shall not be engaged in the evaluation of the PCP-Status of countries outside its Membership.

Article 4

EuFMD and the OIE collaborate, in particular, by the following means:

a. Reciprocal exchange of reports, publications and information, including on incidences of FMD;
b. The use of the GF-TADs - mechanism to ensure the exchange of information on forthcoming meetings and conferences dealing with matters of mutual interest
c. Participation of representatives of each party in the relevant meetings and conferences of the other, with the right to take part in the discussions on a consultative basis. .
d. Regular consultations between the Chairman of the EuFMD Executive Committee and the Director General of OIE on matters of common interest, with a view to promoting arrangements for joint activities in specific fields of the PCP;
e. Adoption by EuFMDand OIE of appropriate administrative arrangements necessary to implement the policies agreed between the Chairman of the Executive Committee of EuFMD and the Director-General of OIE, which may include exchange of experts and training of personnel.
f. Permanent exchange of views on request of the President of EuFMD or the Director General of the OIE.

Article 5

Both parties may request that the present Agreement be amended. Any such amendment shall be adopted by mutual consent. An exchange of letters will detail the implementation of this agreement.