WORKPLAN 2019-2021

Pillar II: Reduced risk to Members from the European neighbourhood¹ (progressive control in neighbouring regions)

Background

The presence and regular occurrence of Foot and Mouth Disease and Similar Transboundary Animal Diseases (FAST) in countries neighbouring to European borders represents a constant risk for introduction and FAST spread into Europe. Actions aimed at improving the surveillance and control in European neighbourhood can reduce the probability of FAST spreading towards European borders as well as improving productions and reduce the impact that such diseases have on the economy and livelihoods in European neighbouring countries. Furthermore, the constant monitoring of the epidemiological situation can provide relevant risk information and contribute to increase awareness on major animal disease threats in the regions neighbouring to Europe.

Foot-and-mouth disease (FMD) is present in European neighbouring countries with different serotypes and lineages circulating. The increased animal movements driven by seasonality, climatic conditions, festivities, social and economic factors improves the risk of spreading of FMD towards EU borders as demonstrated by the genotyping analysis carried out on isolates delivered to the international reference laboratories from different regions. Other transboundary animal diseases such as Peste des Petits Ruminants (PPR), Sheep and Goat Pox (SGP), Lumpy Skin Disease (LSD), Rift Valley Fever (RVF), Bovine Ephemeral Fever(BHF) affecting same susceptible species are also present at different level in the European neighbouring regions. Considering that, such diseases have similar risk factors and/or control measures, the definition and implementation of integrated controls for multiple diseases can lead to improved results and better use of resources.

An integrated approach for FAST risk based surveillance and control in European neighbourhood and the availability of timely risk information to risk managers can increase the capacity to early detect and promptly react to FAST incursion and circulation. Regular submission of virus isolates to international reference laboratories increases the understanding of connection between different disease events and allows to detect new strains that could threaten the European neighbourhood and beyond. Improved national and regional capacity for FAST prevention and control, achieved through the development and delivery of training programme for national staff, is essential to prevent and control animal diseases. Furthermore, public private partnerships (PPP) can contribute to make adequate emergency arrangements for vaccine supply in situations where the international vaccine banks would be unable to provide to the extent needed. Significantly contributed

The activities included in Pillar II are addressed to the 16 European neighbouring countries (Algeria, Armenia, Azerbaijan, Egypt, Georgia, Iran, Iraq, Jordan, Lebanon, Libya, Mauritania, Morocco, Palestine, Syria, Tunisia, Turkey) in 3 sub-regions (1- South East Europe, 2-South-East Mediterranean and 3-North Africa).

Specifically:

Having land-borders with EuFMD MS: Armenia, Azerbaijan, Iran, Iraq, Syria, Lebanon, Palestine, Jordan, Egypt; Non-EU Members of REMESA: Jordan, Lebanon, Egypt, Libya, Tunisia, Algeria, Morocco, Mauritania; Countries significant for epidemic spread of FAST diseases to the above countries: Sudan, Mali, Afghanistan and Pakistan

¹ The neighbourhood of the current 39 EuFMD Members states (MS) is defined as: the neighbouring countries which are NOT MS and which either have land borders with EuFMD MS OR are members of the Mediterranean animal health network (REMESA) or whose animal health status provides an early warning for FAST disease spread to the neighbourhood of Europe.

Outputs are proposed in the three components of Pillar II and addressed to the three sub-regions with the purpose to optimize resources, use the expertise developed and promote good results obtained within the EU neighbourhood.

Activities proposed at country level will be adapted to the specific country needs and to the different context in order to improve impact and achieved valuable results.

Considering the outputs identified, the cost-benefit of extending to other countries the activities planned for the neighbouring counties and the indication and guidance of the Executive Committee, other countries of West Africa, Sahel, Middle East and West Eurasia may be involved in events and training programmes organised within the Pillar II workplan.

COMPONENTS - Outputs and Activities

COMPONENT 2.1: Co-ordination and FAST control framework

Different national, regional and international organizations are involved in activities in the European neighbourhood aimed at improving national capacities and capabilities to prevent and control transboundary animal diseases. The possibility to use training methodologies, tools, experience, networks developed by EuFMD for diseases similar to FMD is beneficial to improve the prevention and control of other transboundary animal diseases (TADs), without duplicate initiatives already in place and ongoing activities. An improved coordination with other institutions will allow a better use of the resources available and enhance support to countries.

Provision of regular updates on the progress of the EuFMD workplan can allow a better harmonization the activities implemented in European neighbourhood and the regular reporting of FAST situation and control strategies adopted in EU neighbouring countries can facilitate the better understanding of the epidemiological situation and major risks present at the EU borders.

The Progressive Control Pathway (PCP) for FMD is a tool to assist endemic countries to progressively manage the FMD risks. The value of this approach for national and regional progress has been demonstrated and has stimulated the development of several similar (progressive and "step-wise") approaches for international action against rabies, peste des petits ruminants (PPR), African trypanosomiasis. The PCP-FMD approach has been used by EuFMD in the past years to assist European neighbouring countries to define their national strategy and then monitor its impact.

The progression along the Progressive Control Pathway (PCP) for FMD control remains the main expected achievement within this programme for the EU neighbouring countries in order to improve control of FMD. The coordination mechanism is aimed at better identifying the specific needs of the different countries in the neighbourhood to develop and revise the FMD control strategies according to the different PCP stages, taking into consideration risks, socio-economic benefits and difficulties encountered in the implementation of control measures. This component also includes targeted support to specific country projects as part of regionally coordinated GF-TADs programmes and roadmaps as well as the assistance to the work plans defined by epidemiology and laboratory networks established in the different regions and sub-regions in order to facilitate the exchange of experience and expertise and the identification of needs, problems but also good practices and centres of expertise.

Promotion of public-private partnership with the development of new schemes of collaboration between public services and private sector in the veterinary domain is considered key for improved FAST monitoring and control. The implementation of new synergies between public and private sectors can facilitate the achievements of relevant goals especially with regards to surveillance of diseases, emergency preparedness and availability of vaccines.

Activities and expected results

The activities within this component will contribute or ensure to:

1) Co-ordination with the GF-TADS partners (FAO, OIE), with other International Agencies providing technical support to countries (e.g. AOAD), achieving a jointly agreed workplan with close daily interaction in the implementation and reporting to the regional steering committees and Joint Permanent Committee (JPC, REMESA).

This should ensure:

- An agreed basis for delivery of national support to FMD and FAST disease surveillance and control with the National Competent Authorities
- An established framework for regular monitoring and reporting of the FAST situation, response to emergency events, and prioritisation of efforts to promote surveillance and control in the European neighbourhood
- 2) Improved implementation of strategic plans for FAST control at national level on the basis of PCP principles, availability of resources and results of control strategies already in place
- 3) Co-ordination of inputs and efforts with the leading technical institutional partners (including CIRAD, EFSA, IZS, ANSES) to achieve improved laboratory and epidemiology networking in the European neighbourhood for better early warning and support to risk based control strategies with increased efficacy and improved guidance to the countries of the sub-regional epidemiology and laboratory networks of the PCP roadmaps
- 4) Improved engagement with private sector (including private sector veterinarians, education and training providers and vaccine producers) in line with PCP and OIE –PPP principles

The expected results under this component will mainly be expressed in terms of: progress in cooperation with regionally coordinated GF-TADs programmes and roadmaps, regular reporting of FAST situation and national progression on the PCP in the EU neighbourhood, implementation of the epi-lab networks workplan, and clear roles for public and private sectors in national control strategies (PCP implementation).

Detailed activities for period 2019-2021

| Outputs | South East Europe | South East Mediterranean | North Africa |
|----------------------------|-----------------------------|----------------------------|-----------------------------|
| Regular monitoring and | 2 meetings on FAST risk | 2 meetings on FAST risk | 2 meetings on FAST risk |
| three-monthly reporting of | assessment, surveillance | assessment, surveillance | assessment, surveillance |
| FAST situation and control | and risk info sharing | and risk info sharing | and risk info sharing |
| strategies adopted in EU | | | |
| neighbourhood | Regular monthly reporting | Identification of NFP/NCs | Identification of NFP/NCs |
| | from National Consultants | and definition of | and definition of |
| | and/or focal points | information sharing system | information sharing system |
| | (NCs/NFPs) on FAST | | |
| | situation through | | |
| | information sharing system | | |
| Revision of FAST strategic | Follow –up country missions | 2 WS for RBSP finalization | 1 WS (or mission for |
| plans according to updated | for PCP stage 3 | Lebanon and Syria | Morocco, Algeria and |
| risk assessment, socio- | implementation and | | Tunisia) on optimization of |
| economic analysis, | monitoring and evaluation | 1 WS for M&E RBSP Jordan | control measures for |
| monitoring and evaluation | (M&E) of RBSP in Armenia, | (for FMD and PPR) | multiple diseases |
| results | Azerbaijan, Georgia | | |
| | | | |
| | | | |

| | 1 WS revision and M&E RBSP Iran 1 country missions in Turkey on implementation of integrated FAST control plans 1 multi-country simulation exercise (SOI) and follow up on shortcomings 1 socio-economic study supported on impact of control plan for priority FAST diseases | 1 WS for revision and M&E RBSP of Egypt (for FMD and PPR 1 WS for M&E RBSP Palestine 1 mission for RBSP Sudan 1 Simulation exercise on FAST for Egypt + local outbreak response 1 socio-economic study supported on impact of control plan for priority FAST diseases | 2 WSs on RAP for FMD (PCP 1) in Libya + RBSP M&E of PPR 1 Simulation exercise on FAST for Morocco-Algeria- Tunisia 1 socio-economic study supported on impact of control plan for priority FAST diseases |
|--|--|---|--|
| Implementation of laboratory and epidemiology network workplans in the European neighbourhood with | Epinet: 1 sub-regional meeting (7 countries) for sharing of risk information and best | REVEPI WS to define priorities on FAST Sub-regional meeting in Middle Fact (online or face). | REVEPI WS to define priorities on FAST Sub-regional meeting in North Africa (online or face) |
| neighbourhood with development of best practices promoted in Roadmap regions | practices/documents Training course (1 WS + national sessions) on | Middle East (online or face to face) on implementation of ME epinet workplan and follow up activities | North Africa (online or face to face) on REVEPI follow up activities |
| | serosurveillance design for FAST diseases Welnet: 1 sub-regional | Training course (1 WS + national sessions) on risk assessment and | Training course (1 WS + national sessions) on serosurveillance design for FAST diseases |
| | meetings (7 countries) 2 training course at SAP institute for the sub-region | serosurveillance design for FAST diseases 1 RELABSA WS to define | 1 RELABSA WS to define priorities on FAST and follow up activities |
| | labs on diagnosis for 2 priority diseases (according to training need assessment) | priorities on FAST and follow up activities 1 Sub-regional meeting in Middle East (online or face | 1 Sub-regional meeting for North Africa (online or face to face) on follow up activities |
| | Assistance to proficiency test schemes (PTSs) and assessment of performance of the national veterinary diagnostic laboratories | to face) on labnet follow up activities Assistance to improve performance of the national veterinary diagnostic laboratories and National lab expert missions in laboratories for training/mutual assistance | Assistance to improve performance of the national veterinary diagnostic laboratories and National lab expert missions in laboratories for training/mutual assistance |
| Promotion of public-private | PPP training scheme | PPP training scheme | PPP training scheme |
| partnerships (PPP) for FAST monitoring and control and development of new PPP | implemented (elearning + WS + in country meetings) | implemented (elearning + WS + in country meetings) | implemented (elearning + WS + in country meetings) |
| schemes | 1 WS on PPP for FAST monitoring and control | 1 WS on PPP for FAST monitoring and control | 1 WS on PPP for FAST monitoring and control |
| | with public and private sectors involved | with public and private sectors involved | with public and private sectors involved |

Indicators and means of verification

| Outputs | Indicators | Baseline | Target 2 years (2021) | Target 4 years (2023) | Means of Verification |
|--|---|----------|-----------------------------|-----------------------------|---|
| | # regular monitoring and three- monthly reporting of FAST situation and control strategies adopted in EU neighbourhood | 0 | 8 | 16 | three-monthly reports on FAST situation and control measures |
| Component 2.1 Co-ordination and FAST control | # number of FAST strategic plans revised according to updated risk assessment, socio-economic analysis, monitoring and evaluation results | 4 | 7 | 10 | reviewed control programmes confirmed by countries and officially available |
| framework | # laboratory and epidemiology network workplans fully implemented in the european neighbourhood with development of best practices promoted in respective Roadmap regions | 1 | 2 | 4 | epi and lab networks reports to roadmap meetings and to REMESA JPC meetings |
| | # public-private partnerships (PPP) promoted for FAST monitoring and control and new PPP schemes developed | 0 | 2 | 6 | new PPP collaboration schemes included in the national FAST control strategies |

Oversight board

| | South East Europe | South East Mediterranean | North Africa |
|--------------------------|-----------------------|--------------------------|------------------------|
| Management of | C. Pötzsch – F. Rosso | S. Baiomy – F. Rosso | A. Bakkouri – F. Rosso |
| programme | | | |
| Standing technical | | | |
| Committee | | | |
| Executive Committee | | | |
| Special Committee for | | | |
| Surveillance and Applied | | | |
| Research | | | |
| FAO | | | |
| OIE | | | |

COMPONENT 2.2 - Improved early warning for FAST diseases

The European neighbouring sub-regions of Maghreb, South East Mediterranean and South East Europe are key areas for a number of emerging risks for Europe. A better knowledge of the livestock flows in these regions would be a major advance for the anticipation of dangers threatening Europe as well as useful information for the national veterinary services for designing more effective national disease surveillance and control programs.

The implementation of specific surveys and the monitoring of proxy indicators of animal movements especially in areas with a general lack of national animal identification systems and movement monitoring (e.g. North Africa or Near East), are key elements for tailoring a risk based approach for surveillance and for the development of early warning systems. The combination of qualitative risk

analysis and risk mapping can contribute to assess the risk of introducing and disseminating FMD and similar TADs within the EU neighbouring countries and across their borders. The resulting risk maps will be useful to develop disease surveillance programs focused on specific risk hubs, in order to optimize the veterinary service resources deployed in the field and improve the effectiveness of control measures implemented.

Activities and expected results

The activities will principally implement the workplans agreed at the co-ordination level (comp 2.1) and take place at the national level, and with the advanced technical institutions and reference centres providing support services to surveillance.

The activities within this component will contribute or ensure to:

- Implement a programme of risk based surveillance for multiple diseases in risk hot-spot locations on a regular or continuous basis for detection of virus circulation and early warning of FAST unusual epidemiological events;
- Improve the sharing of risk information between countries and between technical expert networks, promote the collaboration between countries for improved surveillance of FMD and similar TADs.

The expected results under this component will mainly be expressed in terms of quantifiable indicators for improved communication of surveillance results. This includes the number of neighbouring countries which have identified risk hot-spots for FAST diseases and utilise the risk maps based on animal mobility in surveillance and control plans; the number which conduct regular risk based surveillance implemented for multiple diseases in hot spot locations; the number regularly participating in multi-country risk information sharing practice for FAST diseases similar to the THRACE and Trans-Caucasus "statement of intentions" agreements .

Detailed activities for period 2019-2021

| Outputs | South East Europe | South East Mediterranean | North Africa |
|--|---|---|--|
| Identification risk hot-spots for FAST diseases and | 2 WS on risk mapping system development | 1 WS on risk mapping system + remote support for | 2 WS on risk mapping system development |
| development of updated risk maps based on animal mobility | (Statement of intention workplan) 3 National meetings (Turkey, Iran, Iraq) on results of risk mapping for FAST and implementation of risk based surveillance | development of risk maps 1 National meeting in Egypt on results of risk mapping for FAST and implementation of risk based surveillance | Back-to-back meeting at REMESA JPC on results of risk mapping for FAST and implementation of risk based surveillance |
| Implementation of regular risk based surveillance (RBS) | 1 WS on RBS for FAST | 1 WS on RBS for FAST | 1 WS on RBS for FAST |
| for multiple diseases in hot spot locations | 1 in-country mission for RBS logistics (implementation in 2 countries) | 1 in-country mission for RBS logistics (implementation in 2 countries) | 1 in-country mission for RBS logistics (implementation in 2 countries) |
| | Three/monthly meetings (face-to-face or online) for follow up surveillance | Three/monthly meetings (face-to-face or online) for follow up surveillance | Three/monthly meetings (face-to-face or online) for follow up surveillance |
| Regular participation of countries in multi-country risk information sharing models for FAST diseases | 2 meetings on FAST risk info sharing | 2 meetings on FAST risk info sharing + follow up missions (if necessary) | 2 meetings on FAST risk info sharing + follow up missions (if necessary) |

Indicators and means of verification

| Outputs | Indicators | Baseline | Target 2 years (2021) | Target 4 years (2023) | Means of Verification |
|--|---|----------|-----------------------------|-----------------------------|---|
| Component 2.2 | # countries with idetified risk hot-spots for FAST diseases and updated risk maps based on animal mobility | 3 | 6 | 9 | Countries with updated risk maps available |
| FAST disease: Improved Early Warning | # regular risk based surveillance implemented for multiple diseases in hot spot locations | 0 | 2 | 6 | Results of surveillance |
| | # countries regularly participating in multi-country risk information sharing models for FAST diseases | 4 | 7 | 12 | Updated information sharing systems and risk warning information communicated to EuFMD members and neighbouring countries |

Oversight board

| | South East Europe | South East Mediterranean | North Africa |
|---|-----------------------|--------------------------|------------------------|
| Management of programme | C. Pötzsch – F. Rosso | S. Baiomy – F. Rosso | A. Bakkouri – F. Rosso |
| Standing technical Committee | | | |
| Executive Committee | | | |
| Special Committee for Surveillance and Applied Research | | | |
| FAO | | | |
| OIE | | | |

COMPONENT 2.3 - Capacity development for surveillance and improved control programmes

The capacity development opportunities offered by EuFMD in the past year to the European neighbouring regions have been intense to assist countries in improving their national FMD control plans and monitoring their effectiveness. A specific attention has been dedicated for the development and delivery of different training courses (e.g. FMD outbreak investigation, post-vaccination monitoring, risk assessment along the value chain, FMD socio-economic impact assessment, laboratory diagnosis, safe trade, progressive control) in order to improve knowledge on FMD surveillance and control and guarantee sustainability of the achievement reached in different countries.

Face-to-face training and e-learning allow the national veterinary services in gaining more sustainable and long term capacity to investigate outbreaks and collect samples of good quality, implement risk based control measures, better understand FAST impact and identify options to reduce risk associated with trade. Socio-economic and cost benefit analysis for FAST control can be promoted through

specific training opportunities aimed at assisting policy makers in defining best integrated control strategies with proper engagement of stakeholders.

Laboratory capacity to confirm and investigate suspicions and epidemiological skills to adapt surveillance according to the risk are necessary to implement an early detection system with a good level of sensitivity. Regular training and networking between centres of expertise can contribute to build capacities in Europe and neighbouring countries.

The component 2.3 will utilize the successful EuFMD training platform to cover the specificities of other TADS or other learning priorities to improve preparedness for the threats identified. The training programme of Pillar II will be based on the concept of 'progressive applied training' with the purpose to combine training events at sub-regional and national level with practical implementation (field activities and studies) of the subjects taught. Specific attention will be also dedicated to the improved regional and national capacity to "cascade" training.

Activities and expected results

The activities will principally implement the capacity development workplans agreed at the coordination level (component 2.1). The 16 neighbouring countries plus 4-5 of the most significant neighbours for risk and early warning will be direct beneficiaries, and advanced technical institutions and reference centres will be supported to ensure capacity in the European partners as well neighbourhood reference centres.

The activities within this component will contribute or ensure to:

- Develop and implement a program of capacity building that will support national and regional activities required for improved PCP progress and FAST disease control (comp.2.1) and implement improved early warning surveillance, notification and early response activities (comp 2.2). As part of this they will:
 - Develop improved capacity in the network of FAST disease reference laboratories in the neighbourhood to undertake the confirmatory and specialised tests required by the programme;
 - Develop resources that enable "national cascade" training on progressive control and on recognition and control of FAST diseases;
 - Develop a body of evidence on vaccine efficacy and vaccination effectiveness for FAST diseases through studies conducted at national level or by regional technical partners and facilitate the sharing of the results to improve decision on vaccination programmes (including the scheduling of FAST vaccination)
- Build international awareness and understanding among public and private veterinarians and para-professionals in the EU neighbouring region on FAST disease recognition, surveillance and control through e-learning courses and online events.

The expected results under this component will be evaluated at the mid-term stage, and mainly be expressed in terms of number (#) national laboratories with improved capacity for FAST diagnosis; number of studies on vaccine efficacy and vaccination effectiveness implemented and results shared; number of training course schemes developed and delivered to assist FAST; number of trainees completing e-learning courses and the impact of the course measured by their recall and subsequent application.

Detailed activities for period 2019-2021

| Outputs | South East Europe | South East Mediterranean | North Africa |
|--|--|--|---|
| Improvement of national laboratories capacity for FAST diagnosis | Definition of training programme according to the outcomes of Laboratory Mapping Tool exercise | Definition of training programme according to the outcomes of Laboratory Mapping Tool exercise | Definition of training programme according to the outcomes of Laboratory Mapping Tool exercise |
| Implementation of studies on vaccine efficacy and vaccination effectiveness and sharing of results | 2 Training events on priorities identified 2 meetings of vaccination advisory group (under SOI) 2 side-meetings for studies on FMD vaccine efficacy in Iran and Iraq Support for continued implementation of PVM studies in Turkey and Transcaucasus countries | 2 Training events on priorities identified 2 meetings for studies on vaccine efficacy in Jordan and Egypt Support implementation of PVM studies in Jordan, Egypt, Palestine. 2 meetings of vaccination advisory group (proposal to be endorsed at REMESA | 2 Training events on priorities identified 1 Sub-regional WS on sharing outcomes of SISS implemented and PVM Support for implementation of PVM studies 2 meetings of vaccination advisory group (proposal to be endorsed at REMESA JPC) |
| Development and delivery of training course schemes | and new implementation in Iran, Iraq and other countries PPP training scheme: elearning, WS and in | PPP training : elearning, WS and in country meetings | PPP training : elearning, WS and in country meetings |
| to assist FAST control and Early Warning Systems | country meetings Socio economic analysis: elearning, WS and research grants studies Serosurveillance design: evidence of freedom from diseases/disease prevalence/ early detection/ PVM | Socio economic analysis: elearning, WS and research grants studies Serosurveillance design: evidence of freedom from diseases/disease prevalence/ early detection/ PVM | Socio economic analysis: elearning, WS and research grants studies Serosurveillance design: evidence of freedom from diseases/disease prevalence/ early detection/ PVM |
| Delivery of elearning courses to large audience of veterinarians and paraprofessionals in the workpaln 2019-2023 | FAST-ATC (Awareness Training Course: clinical signs, notification, control measures, sampling). 1 FITC-Turkish 1 FITC- English + additional modules on PPR, LSD | FAST-ATC (Awareness Training Course: clinical signs, notification, control measures, sampling) 1 FITC-English + additional modules on PPR, LSD | FAST-ATC in French (Awareness Training Course: clinical signs, notification, control measures, sampling) 1 FITC-French + additional modules on PPR, RVF |

Indicators and means of verification

| Outputs | Indicators | Baseline | Target 2 years (2021) | Target 4 years (2023) | Means of Verification (MOV) |
|---|---|----------|-----------------------------|-----------------------------|---|
| Component 2.3 Capacity development for surveillance and | # national laboratories with improved capacity for FAST diagnosis (baseline: Laboratory Mapping Tool - exercise 2019) | 0 | 3 | 8 | Laboratory assessment ahead of 2023 General Session |

| improved control programmes | # number of studies on vaccine efficacy and vaccination effectiveness implemented and results shared | 2 | 5 | 8 | Results of vaccine studies implemented made available |
|-----------------------------|--|---|------|------|--|
| | # training course schemes developed and delivered to assist FAST control and Early Warning Systems | 2 | 4 | 6 | Results of trainings shcemes reported to Executive Committee meetings |
| | # delivery of elearning courses to large audience of veterinarians and para-professionals in the workpaln 2019-2023 | 0 | 2000 | 4000 | Number of participants to the elearning who completed courses in new workplan |

Oversight board

| | South East Europe | South East Mediterranean | North Africa |
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| Management of | C. Pötzsch – F. Rosso | S. Baiomy – F. Rosso | A. Bakkouri – F. Rosso |
| programme | | | |
| Standing technical Committee | | | |
| Executive Committee | | | |
| Special Committee for | | | |
| Surveillance and Applied | | | |
| Research | | | |
| FAO | | | |
| OIE | | | |