1. Basic information

1.1 CRIS Number: TR2010/031202
1.2 Title: Control of Foot and Mouth Disease- Phase 2
1.3 Sector: ELARG Statistical Code-12
1.4 Location: Turkey

Implementing arrangements:

1.5 Implementing Agency:
The CFCU will be the Implementing Agency and will be responsible for all procedural aspects of the tendering process, contracting matters and financial management, including payment of project activities. The director of the CFCU will act as the Programme Authorizing Officer (PAO) of the project. The contact details of the CFCU Director are given below:

Mr. Muhsin ALTUN (PAO- CFCU Director)
Central Finance and Contracts Unit
Tel: + 90 312 295 49 00
Fax: + 90 312 286 70 72
E-mail: muhsin.altun@cfcu.gov.tr
Address: Eskişehir Yolu 4. km. 2. Cad. (Halkbank Kampüsü) No: 63 C-Blok 06580 Söğütözü/Ankara TÜRKİYE

1.6 Beneficiary:
The General Directorate of Protection and Control (GDPC) under the Ministry of Agriculture and Rural Affairs will be the beneficiary of the project. The Senior Programme Officer of the Project will be the Head of the Department for Animal Health Services of the General Directorate of Protection and Control, whose contact details are given below.

Mr. H. Haluk AŞKARoğlu
Head of Department for Animal Health Services
Tel: + 90 312 418 24 36
Fax: + 90 312 417 82 09
E-mail: haluka@kkgm.gov.tr
Address: General Directorate of Protection and Control, Akay Cad. No:3
Bakanlıklar Kızılay/Ankara TÜRKİYE

Financing:

1.7 Overall cost (VAT excluded)¹: 38,375,000 Euros
1.8 EU contribution: 32,618,750 Euros
1.9 Final date for contracting: 2 years after the signature of the financing agreement
1.10 Final date for execution of contracts: 2 years following the end date for contracting
1.11 Final date for disbursements: 1 year after the end date for the execution of contracts

¹ The total cost of the project should be net of VAT and/or other taxes. Should this not be the case, the amount of VAT and the reasons why it should be considered eligible should be clearly indicated (see Section 7.6)
2. Overall Objective and Project Purpose

2.1 Overall Objective:
The overall objective of the project is to eradicate FMD in Turkey and thereby to ensure a high level of animal health status, similar to that in the EU.

Keep Trace free from FMD and maintain the Recognition of Thrace region as an FMD free zone.

Following maintain of the FMD free zone recognition in Trace, generalizing the process in other Anatolian provinces.

2.2 Project purpose:
Control of FMD in Turkey by mass vaccination policy in accordance with other EU control measures such as animal identification, movement and market controls.

In the year 2009, 214 outbreaks had happened in Turkey. Projects purpose is to bring down the outbreaks to minimum by the year 2015. Concluding the predefined eradication phase (2006-2013) referred to in Point 10 of the Project Fiche

Current Prevalence of FMD in Anatolia is %10.3 targeted prevalence of FMD in Anatolia is % 5.

2.3 Link with AP/NPAA / EP/ SAA
2.3.1 Link with Accession Partnership
The project addresses the medium-term priority related to the ability to assume obligations of membership under Chapter 12 Food Safety, Veterinary and Phytosanitary Policy, namely, adopting control measures for animal diseases and setting up eradication plans where this is justified by the animal health situation, in the 2008 Accession Partnership Document.

2.3.2 Link with NPAA
The project addresses Priority 12.5 titled “Adopting control measures for animal diseases and set up eradication plans where this is justified by the animal health situation” under Chapter 12-Food Safety, Veterinary and Phytosanitary Policy of the 2008 NPAA.

2.4 Link with MIPD
The Project addresses the priority of “eradication of main animal diseases, continuing on-going programmes related to the eradication of rabies, FMD” indicated in the 2009-2011 MIPD.

2.5 Link with National Development Plan
Not applicable.

2.6 Link with national/ sectoral investment plans
The project is consistent with and supportive of established government policies and relevant sector programmes. It is in line with “Animal diseases control and eradication plan”

3. Description of project

3.1 History of the disease situation in Turkey:

The Terrestrial Animal Health Code of the World Organisation for Animal Health (OIE) lists foot and mouth disease (FMD) as one of the most important infectious diseases in livestock due to the serious economic losses it may cause and its severe effect on trade.

FMD (Types O and A, and from time to time ASIA 1) has been endemic in Anatolia for decades. The disease is the most important economic disease of ruminants in the country. It has appeared in isolated outbreaks over the past ten years in Thrace. If FMD took hold in Thrace it would constitute a persistent threat to the entirely susceptible (unvaccinated since
The FMD types currently circulating in Turkey are a new variant of Type O Panasia II (endemic in Anatolia since October 2006) and A Iran 2005 (endemic in Anatolia since November 2005). FMDV Type Asia 1 has not been detected in Turkey since 2002. Turkey has implemented FMD control programmes by an extended vaccination policy since 1967, taking into consideration the prevailing FMDV types and subtypes. In addition to routine vaccination, when there is a disease outbreak, control measures, including the restriction of animal movements, quarantine and ring vaccination, are implemented. An epidemiological investigation is conducted to determine the source of infection and possible spread of infection. Independent from outbreaks, active and passive surveillance activities are carried out to detect and control FMD and other contagious animal diseases.

The control of animal movements throughout the country is an important part of animal disease control. The identification and registration of bovine animals has significantly contributed to control activities. Furthermore, training and communication activities for both the national veterinary services and stakeholders have been initiated in recent years. In the past years despite the national efforts of Turkey to control FMD, these attempts have not achieved the expected results because of insufficient vaccine coverage and lack of coordination in animal movement control measures. But now the situation is different. In addition to the existing serotypes, Turkey, due to its geographic location, is under the threat of new strains of virus intruding from her eastern and south-eastern neighbouring countries. Under the technical assistance component of the 2006 EU project for the control of FMD in Turkey, the Turkish Veterinary Services have prepared a dossier, which was submitted to the Ad Hoc Committee of the OIE in late November 2009, for the recognition of Thrace region as an FMD-free zone where vaccination is practised. The issue will be voted in the General Assembly of the OIE to be held in May 2010.

Based on the measures which led to the eradication of the last outbreaks in Thrace during the years 2006 and 2007, and FMD surveillance, the Ministry of Agriculture and Rural Affairs of Turkey declared that there has been no outbreak of FMD for the past 2 years, (since 22 October 2007) that there is no evidence of FMDV circulation for the past 12 months, as of November 2009, and that surveillance for FMD and FMDV circulation is in operation.

A Working Group Meeting on Animal Health between the European Commission and Turkish officials took place in Amasya, Turkey on 7-9 July 2009. The Working Group recommended the preparation of a new project to be submitted to the 2010 IPA component I under the normal procedures. It was decided that this project of 3 years (2011-2014) will be based on the continuation of mass vaccination against FMD of bovines and small ruminants. However, for small ruminants the vaccination will be limited to the Marmara and Aegean Regions. Serological surveillance will be carried out to evaluate the vaccination coverage and to detect virus circulation. The project will aim at concluding the predefined eradication phase (2006-2013) referred to in Point 10 of the 2006 Project Fiche.

3.1.1. FMD Situation in Anatolia

The number of FMD outbreaks in Anatolia has started to decrease sharply since 2006. Most of the outbreaks which were recorded in 2006 were due to an epidemic of type A infection in Turkey. The epidemiology of type A had been dominated by the viruses antigenically and genetically related to A Iran 96 until 2006, when this type was dominated by FMD viruses antigenically related to A22. This might have been as a result of a natural or vaccine induced cessation of A Iran 96 outbreaks. The last recorded outbreak of A Iran 96 type in Turkey was in May 2005. This period was followed by a major epidemic following the incursion of a new virus group antigenically related to A22 viruses in November 2005. This date was rather close to the first events in eastern Turkey of the H5N1 avian influenza
epidemic. The epidemiological analysis of the available data suggested that the incursion of the virus occurred probably via the eastern border, during some period in late 2005; but the data was not sufficient to confirm or refute this. This virus was first detected in Elazığ province (Eastern Anatolia) in December 2005. Many outbreaks had been confirmed by the FMD Institute as type A, between December 2005 and February 2006, in a number of central and western provinces. The distribution was consistent with the hypothesis that the disease moved with animals being transported to fattening farms in western Turkey, ahead of the Kurban Festival. The most likely explanation of how these viruses were introduced into Thrace was by cattle/sheep/goat animal movements associated with the Kurban Festival (7-15 January 2006). Furthermore, the severe winter conditions could have assisted virus transmission and survival in vehicles and under market conditions.

3.1.2. FMD Situation in Thrace

Thrace is a small geographical area, which is separated from Anatolia by the Dardanelles, the Marmara Sea and the Bosphorus. There are only two bridges connecting Anatolia and Thrace. This geographical advantage has always been used to keep Thrace free from FMD and the aim has always been to eradicate the disease when it occurs in Thrace. Therefore, FMD outbreaks in Thrace during 2006-2007 were controlled according to the provisions and measures of the Animal Health Control Law (No. 3285). These measures included the application of a cordon around infected areas, restrictions on animal movements, closing of animal markets, modified stamping out of animals, compensation for culled animals, compensation for cleaning and disinfection activities. Furthermore, vaccination of all FMD susceptible animals with FMD vaccine was conducted routinely in Thrace. All large ruminants were vaccinated twice per year and small ruminants once per year, and because of the introduction of a new type A strain which was antigenically quite distant from the vaccine strain, A Aydin equivalent of A Iran 96, the vaccine strain of 2006 and 2007 was replaced by A 22 Mahmatli (A22 Iraq equivalent). The average farm size is larger in Thrace and there is a stronger commercial attitude among livestock farmers. They are used to working closely with private veterinary practitioners, who in turn notify the State Veterinary Services immediately in the case of disease suspicion. It is this close cooperation and trust which has enabled Thrace to deal effectively with the 2006 and 2007 outbreaks.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact

1) EU financial assistance under IPA-I is essential for the control and eradication of FMD, in terms of the continuation and sustainability of the programme developed under project TR 0603.02.

2) As explained under subtitle 3.1 Background and justification, the eradication of the disease constitutes a substantial economic and financial burden to Turkey and if FMD took hold in Thrace it would constitute a persistent threat to the entirely susceptible (unvaccinated since 1990) cloven-hoofed animal population of the European Union.

3) It is important for the negotiations on Accession that animal health standards of the OIE will be respected which implies world trade.

4) As Turkey has been fighting against FMD for a long time and has developed a very well designed sampling and testing procedures to identify and confirm presence of virus, the experience gained through Projects will contribute to Turkeys fight against FMD.

5) For the past few years a number of campaigns have been carried out in Turkey within the framework of the Project, to make farmers aware of the importance of vaccination and the need to give quick information in case of suspicion. The
campaigns have also been aimed at the veterinary profession and local authority officials. In addition collaboration with professional organizations representing those involved with animal production has been achieved. All above mentioned experiences will contribute to Turkey’s fight against FMD.

6) Coordination with Neighbouring Countries is very crucial for the project as Turkey occupies a unique geographical position at the crossroads between Europe and Asia. The spread risk of FMD to European Union countries from Turkey will increase if the disease is not eradicated in Turkey.

Vaccination of all large and small ruminants against FMD is compulsory in Turkey, including Thrace region. Large ruminants are vaccinated twice a year and small ruminants are vaccinated once a year with a vaccine containing suitable vaccine strains, which can provide protection against field viruses circulating in Turkey. The vaccines which have been used are generally produced by the FMD Institute, but frequently vaccines supplied by the EU have also been used, especially in Thrace. All of these vaccines comply with Chapter 2.1.5 Foot and Mouth Disease of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals. The vaccines which have been produced by the FMD Institute and the vaccines which have been supplied by EU are prepared from purified FMD antigens and do not induce antibodies against non-structural proteins (NSP) of FMDV. Therefore, these vaccines can be used safely and do not interfere with the tests used to differentiate vaccinated animals from those infected with FMDV.

Together with national efforts, an EU project was launched in November 2007 for the control of FMD. The ongoing project covers a 3 year period and the objective is the control of foot and mouth disease by means of an efficient vaccination policy. The main activities of the project are vaccination, serosurveillance, cleaning and disinfection and technical assistance. All of these efforts have resulted in a better disease situation in the Anatolian part of Turkey and no new reintroduction of the disease into Thrace since October 2007.

3.3 Results and measurable indicators:

1. Thrace region is maintained as FMD free zone where vaccination is practised.
2. The disease is taken under control in Anatolia with a high level of immunization of the main susceptible species.

Objectively Verifiable Indicators:
- Maintenance of freedom from FMD with vaccination in Thrace region by achieving OIE recognition of the region as FMD free zone.
- Seventy five-percent decrease in the number of FMD outbreaks in Anatolia between the years 2011-2014
- Number of NSP (+) animals between the years 2011-2014

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3.4 Activities:

Activities will comprise vaccination and serosurveillance supported with relevant control measures. Activities will be carried out through the supply of vaccines and serosurveillance equipment.

3.4.1 Supply of Vaccines-Vaccination Campaigns:

FMD vaccination campaigns for large and small ruminants will be carried out under the control of official veterinarians for 3 years with an aim to control the disease. These campaigns will be organized by the Central Competent Authority (GDPC) and implemented by provincial authorities. The vaccination of large and small ruminants will be carried out by official veterinarians working for the 81 Provincial Agriculture Directorates. The administration cost of the vaccines is not included in the project budget. The vaccines procured will be delivered by the contractor to the Etlik Central Veterinary Control and Research Institute (VCRI) in Ankara in accordance with the instructions of the Central Competent Authority. The number of doses which will be delivered to the Etlik VCRI will be determined by the Central Competent Authority on the basis of animal numbers in each province. The delivery of the vaccines to the Etlik VCRI will be carried out under cold chain before the implementation of each vaccination campaign. The storage of the vaccines under cold chain will be the responsibility of the Etlik VCRI throughout the vaccination campaign.
The excessive doses will be delivered to the Central Competent Authority at the end of each vaccination campaign.

3.4.1.1 Supply of vaccines to obtain result no. 1 - vaccination campaigns in Thrace:

To keep up with the timeline for the vaccines be ready for Autumn 2011 campaign, GDPC will submit the tender dossier to the CFCU in the fourth quarter of 2010.

Procurement and transport (delivery) of a total of 2.7 million doses (450,000 doses x 2 Campaigns x 3 years= 2.7 Million) of trivalent FMD vaccines for large ruminants and 2.1 million doses (700,000 doses x 1 Campaign x 3 years= 2.1 million) of bivalent FMD vaccines for small ruminants.

a. The approach for large ruminants: Each year two vaccination campaigns (spring and autumn) will be carried out for bovine animals. 450,000 doses of trivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain.

b. The approach for small ruminants: Each year one vaccination campaign (spring) will be carried out for ovine and caprine animals. 700,000 doses of bivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain.

3.4.1.2. Supply of vaccines to obtain result no. 2 - vaccination campaigns in Anatolia:

Procurement and transport (delivery) of a total of 52.8 (8,800,000 doses x 2 Campaigns x 3 years= 52.8 ) million doses of bivalent FMD vaccines and 7.5 (1.25 million x 6 ) million doses of trivalent FMD vaccines for large ruminants and 13.2 million doses of bivalent FMD vaccines for small ruminants.

a. The approach for large ruminants: Each year two vaccination campaigns (spring and autumn) will be carried out for bovine animals. 8.8 million doses of bivalent vaccines (A Tur 06 and O1 Manisa) and 1.25 million doses of trivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign, without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain. Trivalent vaccines will be used in the north-eastern, eastern and south-eastern provinces of Artvin, Ardahan, Ağrı, Gaziantep, Erzurum, Hakkari, Iğdır, Kars, Mardin, Şırnak, Siirt, Şanlıurfa, Kilis and Van, whilst bivalent vaccines will be used in the rest of Anatolia.

b. The approach for small ruminants: Each year one vaccination campaign (spring) will be carried out for ovine and caprine animals. 4.1 million doses of bivalent vaccines (A Tur 06 and O1 Manisa) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain. The vaccination of small ruminants in Anatolia with bivalent vaccines will be limited to the Marmara and Aegean regions.

Means/Inputs
Contracts will be arranged in accordance with prevailing conditions and requirements. Vaccines must be delivered preferably 2 months and at least 1 month prior to the start of the vaccination campaign.

3.4.2. Supply of Serosurveillance Equipment- Serosurveillance:
Procurement of sampling and test kits and reagents for serosurveillance to identify the level of immunization against FMD. Serosurveillance studies will be organized by the Central Competent Authority and samples will be collected by official veterinarians working for the Provincial Agriculture Directorates. Tests will be carried out by the FMD Institute in Ankara. To increase the efficiency of the vaccination campaigns relevant control measures will be taken.

3.4.2.1. Supply of equipment to obtain result No. 1 serosurveillance in Thrace:

a. The approach for large ruminants: A survey design for the detection of virus circulation has already been prepared under an EuFMD Technical Assistance Project in cooperation with the FMD Institute in Ankara (sample size). 4096 sera will be collected and tested each year (from 64 villages/64 samples per village: 64x64=4096; 5% detection level with 95% confidence interval), not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

b. The approach for small ruminants: A stratified random survey for the detection of virus circulation will be carried out in supplement of the survey in large ruminants and its statistical parameters are the same determined for large ruminants. 1032 sera will be collected each year (from 152 villages/66 samples per village: 66x152=1032; 2% detection level with 95% confidence interval) not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

3.4.2.2 Supply of equipment to obtain result No. 2 – serosurveillance in Anatolia:

a. The approach for large ruminants: A survey design for the detection of virus circulation has already been prepared under an EuFMD Technical Assistance Project in cooperation with the FMD Institute in Ankara (sample size). 33900 sera will be collected and tested each year (from 565 villages/60 samples per village: 60x565=33900; 2% detection level with 95% confidence interval), not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

b. The approach for small ruminants: In the third year of the project a stratified random survey for the detection of virus circulation will be carried out in supplement of the survey in large ruminants and its statistical parameters will be the same with those for large ruminants. In total 30,000 serum samples will be collected and tested, not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

Means/Inputs

1 supply contract with lots. The delivery of serosurveillance equipment shall be made at least one year before the expiry date of the equipment.
3.5 Conditionality and sequencing

Before the signature of the supply contract for vaccines, MARA should provide adequate cold storage facilities at the Etlik Central Veterinary Control and Research Institute, which will receive the delivered vaccines.

Before each sacrifice festival, required control measures will be implemented throughout the country and designated slaughter places and collection centres will be established by MARA.

Government will fully finance 2011 Spring campaign nationally.

The tendering schedule for 2011 Autumn Campaign which seems optimistic is the outcome of the discussions in the Amasya Meeting. The beneficiary is aware of the difficulty of keeping up with the time line. However, in order to have continuity in vaccination without interfering with the sustainability in the field, GDPC will stand at most efforts to keep up with the timeline.

Turkey should provide proofs before the start of the project that the identification and registration system of animals is efficiently in place.

3.6 Linked activities

TR 0603.02 Control of FMD in Turkey

Service contract numbered ‘TR 0603.02-08/001’ is a component of the project ‘TR 0603.02 Control of FMD in Turkey.

The objective of the ongoing project is to control FMD in Turkey by mass vaccination policy in accordance with other EU control measures such as animal identification, movement and market controls. The actions comprise vaccination, sero surveillance, control measures, and cleaning and disinfection through the supply of vaccines, laboratory equipment and disinfectants. A stratified random survey has been designed and implemented for the detection of virus circulation. Under this project;

Technical Assistance for Communication Campaign and Preparation Country Dossier for OIE Declaration for FMD in Turkey (with Identification Number EuropeAid/128028/D/SER/TR)

The ongoing technical assistance is aimed at the strengthening of the capabilities of the Veterinary Services for the effective and efficient control and eradication of FMD, the provision of technical assistance to the GDPC and FMD Institute for the preparation of an application dossier to be submitted to the OIE for the recognition of Thrace as “FMD free zone where vaccination is practised”, including sero-survey planning, design and analysis, and the development and implementation of programs for raising public awareness to more successfully implement and manage FMD control. Within this scope, the number of FMD outbreaks has significantly reduced with the implementation of the FMD Control Project. There were 1557 FMD outbreaks in 2006, this was reduced to 809 in 2007, 254 in 2008 and 213 in 2009.

The Thrace region of Turkey has been awarded the “FMD vaccinated free zone” certificate in 2010.
Vaccination coverage of both large and small ruminants in Turkey have been significantly increased.

In order to apply vaccines under optimal conditions the problems in the cold chain of FMD vaccines have been solved.

Whereas in the former project, the aim was to vaccinate all animals in Anatolia, the current Phase 2 aims only to vaccinate ovine animals in Marmara and Aegean Regions, because the former project was faced with difficulties in the provision of vaccines, as well as problems arising from insufficient labour force.

The protection and improvement of these benefits are aimed with the second phase of the Project. For this purpose;
- Extension of FMD free zones progressively.
- More efficient control of animal movements with the completion of identification and registration Project of small ruminants.
- Early detection and control of FMD outbreaks with the introduction and implementation of additional control measures.

New measures will be introduced in order to prevent the entry and spread of exotic virus strains.

TR 0203.05 Support to the Alignment of Turkey to the EU Veterinary Acquis

The objective of the project was to support the Turkish Ministry of Agriculture and Rural Affairs in aligning to the relevant EC standards of veterinary legislation and in activities related to animal health, veterinary public health and animal welfare. The project included the following components:
- Animal Health
- Inspection System, Veterinary Information System, Disease Surveillance, Control and Eradication
- Veterinary Public Health
- Animal Welfare

Within the scope of this project, a Contingency Plan for FMD was prepared and an Implementing Regulation on FMD was drafted, which is foreseen to be enacted in 2010.

3.7 Lessons learned

Turkey has been fighting against FMD for a long time and with the contribution of the wealth of experience gained during the implementation of the EU projects numbered 0603.02 and 0203.05, Turkey has developed very well designed sampling and testing procedures to identify and confirm the presence of the causative agent.

Under Project No. 0603.02, an up-to-date FMD contingency plan was developed together with an EU-compliant draft implementing regulation on FMD control, which is foreseen to be enacted following the adoption of the Framework Law on Veterinary Services. The main component of the FMD control programme applied in Turkey is vaccination. Turkey has a vaccine production facility (FMD Institute) in Ankara, and vaccine strains, which are important for Turkey and the region, are maintained in ready-to-use form for emergencies. Through a training programme conducted under Project No. 0203.05, the overall picture of the FMD diagnosis laboratory was evaluated in terms of biosecurity conditions, quality systems, GLP, and laboratory tests.
Furthermore, under Project No. 0203.05, economical losses due to FMD, financial appraisal and long term benefits of FMD eradication were analysed.

Turkey has very good relationships with the European Commission for the Control of Foot and Mouth Disease (EuFMD) and the World Reference Laboratory in Pirbright, UK and follows carefully the disease situation worldwide and particularly in the Middle East and Iran to assess the risk for Turkey.
### SOURCES OF FUNDING

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**NOTE:** DO NOT MIX IB AND INV IN THE SAME ACTIVITY ROW. USE SEPARATE ROW.

Amounts net of VAT

(1) In the Activity row use "X" to identify whether IB or INV

(2) Expressed in % of the Public Expenditure (column (b))

(3) Expressed in % of the Total Expenditure (column (a))
5. Indicative Implementation Schedule (periods broken down per quarter)

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<th>Project Completion</th>
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6. Cross cutting issues

6.1 Equal Opportunity
The project will apply the policy of equal opportunities for all groups including vulnerable groups.

6.2 Environment
The project has no negative impact on the environment.

6.3 Minorities and vulnerable groups
According to the Turkish Constitutional System, the word minorities encompasses only groups of persons defined and recognized as such on the basis of multilateral or bilateral instruments to which Turkey is a party. This project has no negative impact on minorities and vulnerable groups.

ANNEXES TO THE PROJECT FICHE

1- Log frame in Standard Format

2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
ANNEX 1: Logical framework matrix in standard format

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX</th>
<th>Programme name and number</th>
<th>Contracting period expires</th>
<th>Disbursement period expires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control of Foot and Mouth Disease- Phase 2</td>
<td>2 years after the signature of the Financing Agreement</td>
<td>1 year after the end date for the execution of contracts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Objective</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>The overall objective of the project is to eradicate FMD in Turkey and thereby to ensure a high level of animal health status, similar to that in the EU. Keep Trace free from FMD and maintain the Recognition of Thrace region as an FMD free zone. Following maintain of the FMD free zone recognition in Trace, generalizing the process in other Anatolian provinces.</td>
<td>- Maintenance of freedom from Foot and Mouth Disease (FMD) with vaccination in Thrace region. - Decrease in FMD prevalence in Anatolia between the years 2011-2014.</td>
<td>- Ministry of Agriculture and Rural Affairs (MARA) documentation - Turkish Veterinary Information System (TURKVE T) data - World Animal Health</td>
</tr>
<tr>
<td>Project Purpose</td>
<td>Objectively verifiable indicators</td>
<td>Sources of Verification</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Control of FMD in Turkey by mass vaccination policy in accordance with other EU control measures such as animal identification, movement and market controls. In the year 2009, 214 outbreaks had happened in Turkey. Projects purpose is to bring down the number of outbreaks.</td>
<td>- Maintenance of freedom from FMD with vaccination</td>
<td>- TURKVET data</td>
</tr>
</tbody>
</table>
outbreaks to minimum by the year 2015. Concluding the predefined eradication phase (2006-2013) referred to in Point 10 of the Project Fiche

Current Prevalence of FMD in Anatolia is %10,3 targeted prevalence of FMD in Anatolia is % 5.

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Trace region with a view to achieve OIE recognition of the region as FMD free zone</td>
<td>- Enforcement and implementation of FMD Implementing Regulation in alignment with Council Directive 2003/85/EC on Community measures for the control of foot-and-mouth disease.</td>
</tr>
<tr>
<td>- Current Prevalence of FMD in Anatolia is %10,3 targeted prevalence of FMD in Anatolia is %5.</td>
<td>- Circular orders issued by the GDPC Project monitoring reports</td>
</tr>
<tr>
<td>- Laboratory analysis results and reports of the FMD Institute</td>
<td>- No genetic and antigenic shift occurs in the virus strains circulating in the field</td>
</tr>
<tr>
<td>- Circulation orders issued by the GDPC Project monitoring reports</td>
<td>- Public awareness concerning FMD increased</td>
</tr>
<tr>
<td>- Enforced control measures are properly implemented</td>
<td>- Accession of Turkey to the EU continues</td>
</tr>
</tbody>
</table>
Implementation of FMD contingency plan.
- Gradual decrease in the prevalence of FMD in Anatolia between the years 2011-2014.
- Protective antibody levels in animals post-vaccination
- Control measures enforced within the project life time

<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thrace region is maintained as FMD free zone where vaccination is practised.</td>
<td>- Maintenance of freedom from FMD with vaccination in Thrace region with a view to achieve OIE recognition of</td>
<td>- TURKVET data</td>
<td>- Commitment toward s the accessi on of Turkey to the</td>
</tr>
<tr>
<td>2. The disease is taken under control in Anatolia with a high level of immunization of the main susceptible species.</td>
<td></td>
<td>- Records of the GDPC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Laboratory analysis results and reports of</td>
<td></td>
</tr>
</tbody>
</table>

**RESULTS OF NSP ELISA BY AGE(*)**

<table>
<thead>
<tr>
<th>AGE</th>
<th>RESULTS</th>
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</thead>
<tbody>
<tr>
<td>4-12</td>
<td></td>
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<tr>
<td>12-18</td>
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<tr>
<td>18-24</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>
(**) foreseen prevalence indicators
(*)This should be accepted as a indicator only if another substrain is not seen or a genetic and antigenic diversity doesn’t happen in Turkey.

-Number of vaccinated animals between the years 2011-2014

<table>
<thead>
<tr>
<th>Years</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers*</td>
<td>8925</td>
<td>17,850</td>
<td>17,850</td>
<td>8925</td>
<td>53,550</td>
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<tr>
<td>(1Campaign)</td>
<td>17,850</td>
<td>17,850</td>
<td>8925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2Campaigns)</td>
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<tr>
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<td></td>
<td></td>
</tr>
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<td>(1Campaign)</td>
<td>53,550</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

(*) % 85 of animal population is targeted.

-Number of protected animals between the years 2011-2014

<table>
<thead>
<tr>
<th>Years</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

(*) % 85 of animal population is targeted.
### Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1 Supply of Vaccines-Vaccination Campaigns: FMD vaccination campaigns for large and small ruminants will be carried out under the control of official veterinarians for 3 years with an aim to control the disease. These campaigns will be organized by the Central Competent Authority (GDPC) and implemented by provincial authorities. The vaccination of large and small ruminants will be carried out by official veterinarians working for the 81 Provincial Agriculture Directorates. The administration cost of the vaccines is not included in the project budget. The vaccines procured will be delivered by the contractor to the Etlik Central Veterinary Control and Research Institute (VCRI) in Ankara in accordance with the instructions of the Central Competent Authority. The number of doses which will be delivered to the Etlik VCRI will be determined by the Central Competent Authority on the basis of animal numbers in each province. The delivery of the vaccines to the Etlik VCRI will be carried out under cold chain before the implementation of each vaccination campaign. The storage of the vaccines under cold chain will be the responsibility of the Etlik VCRI throughout the vaccination campaign. The excessive doses will be delivered to the Central Competent Authority at the end of each vaccination campaign.</td>
<td>will be arranged in accordance with prevailing conditions and requirements. Vaccines must be delivered preferably 2 months and at least 1 month prior to the start of the vaccination campaign.</td>
<td>37,875,000 EUR</td>
</tr>
</tbody>
</table>

#### 3.4.1.1 Supply of vaccines to obtain result no. 1 - vaccination campaigns in Thrace:

To keep up with the timeline for the vaccines be ready for Autumn 2011 campaign, GDPC will submit the tender dossier to the CFCU in the fourth quarter of 2010.

Procurement and transport (delivery) of a total of 2.7 million doses (450,000 doses x 2 Campaigns x 3 years) of trivalent FMD vaccines for large ruminants and 2.1(700,000 doses x 1 Campaign x 3 years) million doses of trivalent FMD vaccines for small ruminants.

- The approach for large ruminants: Each year two vaccination campaigns (spring and autumn) will be carried out for bovine animals. 450,000 doses of trivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain.

- The approach for small ruminants: Each year one vaccination campaign (spring) will be carried out...
for ovine and caprine animals. 700,000 doses of trivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain.

3.4.1.2. Supply of vaccines to obtain result no. 2 - vaccination campaigns in Anatolia:
Procurement and transport (delivery) of a total of 52.8 million doses (8.8 million doses x 2 Campaigns x 3 years) of trivalent FMD vaccines and 7.5 million doses of trivalent FMD vaccines for large ruminants and 13.2 million doses of bivalent FMD vaccines for small ruminants.

a. The approach for large ruminants: Each year two vaccination campaigns (spring and autumn) will be carried out for bovine animals. 8.8 million doses of bivalent vaccines (A Tur 06 and O1 Manisa) and 1.25 million doses of trivalent vaccines (A Tur 06, O1 Manisa, Asia 1 Shamir) will be procured for each campaign, without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain. Trivalent vaccines will be used in the north-eastern, eastern and south-eastern provinces of Artvin, Ardahan, Ağrı, Gaziantep, Erzurum, Hakkari, Iğdır, Kars, Mardin, Şırnak, Siirt, Şanlıurfa, Kilis and Van, whilst bivalent vaccines will be used in the rest of Anatolia.

b. The approach for small ruminants: Each year one vaccination campaign (spring) will be carried out for ovine and caprine animals. 4.1 million doses of bivalent vaccines (A Tur 06 and O1 Manisa) will be procured for each campaign without prejudice to the use of vaccines with additional strain(s) in case of the occurrence of a new strain. The vaccination of small ruminants in Anatolia with bivalent vaccines will be limited to the Marmara and Aegean regions.

3.4.2. Supply of Serosurveillance Equipment - Serosurveillance:
Procurement of sampling and test kits and reagents for serosurveillance to identify the level of immunization against FMD. Serosurveillance studies will be organized by the Central Competent Authority and samples will be collected by official veterinarians working for the Provincial Agriculture Directorates. Tests will be carried out by the FMD Institute in Ankara. To increase the efficiency of the vaccination campaigns relevant control measures will be taken.

3.4.2.1. Supply of equipment to obtain result No. 1 serosurveillance in Thrace:

a. The approach for large ruminants: A survey design for the detection of virus circulation has already been prepared under an EuFMD Technical Assistance Project in cooperation with the FMD Institute in Ankara (sample size). 4096 sera will be collected and tested each year (from 64 villages/64 samples
per village: 64x64=4096; 5% detection level with 95% confidence interval), not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.
b. The approach for small ruminants: A stratified random survey for the detection of virus circulation will be carried out in supplement of the survey in large ruminants and its statistical parameters are the same with those determined for large ruminants. 1032 sera will be collected each year (from 152 villages/66 samples per village: 66x152=1032; 2% detection level with 95% confidence interval) not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

3.4.2.2 Supply of equipment to obtain result No. 2 – serosurveillance in Anatolia:
a. The approach for large ruminants: A survey design for the detection of virus circulation has already been prepared under an EuFMD Technical Assistance Project in cooperation with the FMD Institute in Ankara (sample size). 33900 sera will be collected and tested each year (from 565 villages/60 samples per village:60x565=33900; 2% detection level with 95% confidence interval), not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.
b. The approach for small ruminants: In the third year of the project a stratified random survey for the detection of virus circulation will be carried out in supplement of the survey in large ruminants and its statistical parameters will be the same with those for large ruminants. In total 30,000 serum samples will be collected and tested, not including the follow up in accordance with the OIE guidelines. Each serum will be tested for antibodies to non-structural proteins of FMDV to determine disease prevalence and will also be tested for structural proteins of FMDV to demonstrate protective immunity levels in vaccinated animals.

Contracts will be arranged in accordance with prevailing conditions and requirements. Vaccines must be delivered preferably.
| 2 months and at least 1 month prior to start of the vaccination campaign. |  |  |
The delivery of serosurveillance equipment shall be made
at least one year before the expiry date of equipment.

Pre-conditions:
- Rules will be introduced by MARA for the restriction of the movement of livestock from provinces in which the vaccination coverage is lower than 85% throughout the project period.
## ANNEX II: amounts (in €) Contracted and disbursed by quarter for the project (IPA contribution only)

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</thead>
<tbody>
<tr>
<td>Supply Contract (Vaccines)</td>
<td>-------</td>
<td>32,193,750</td>
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<tr>
<td>Supply Contract (Serosurveillance)</td>
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<td>-------</td>
<td>-------</td>
<td>425,000</td>
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<tr>
<td><strong>Cumulated</strong></td>
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<td>32,193,750</td>
<td>32,193,750</td>
<td>32,618,750</td>
<td>32,618,750</td>
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<tbody>
<tr>
<td>Supply Contract (Serosurveillance)</td>
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<td>57,000</td>
<td>57,000</td>
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<tr>
<td><strong>Cumulated</strong></td>
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<td>3,219,375</td>
<td>5,356,250</td>
<td>8,840,000</td>
<td>10,986,250</td>
<td>14,262,625</td>
<td>16,408,875</td>
<td>19,628,250</td>
<td>21,774,500</td>
<td>25,050,875</td>
<td>27,197,125</td>
<td>30,416,500</td>
<td>32,618,750</td>
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</tbody>
</table>