1. Basic information

1.1 CRIS Number: 2009 / 021-650
1.2 Title: Support to the Agriculture and Rural Development sector
1.3 ELARG Statistical code: 03.11 European Standards/Agriculture and Rural Development
1.4 Location: Bosnia and Herzegovina

Implementing arrangements:

1.5 Contracting Authority: European Commission
1.6 Implementing Agency: European Commission
1.7 Beneficiary:

Senior Program Officer (SPO):
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Other relevant beneficiaries are the Ministry of Foreign Trade and Economic Relations of BiH (Sector for Agriculture, Food, Forestry and Rural Development), Federal Ministry for Agriculture, Water-Management and Forestry; Ministry for Agriculture, Forestry and Water-Management of Republic of Srpska; Department for Agriculture of District Brcko.

Financing:

1.8 Overall cost (VAT excluded): EUR 3 400 000
1.9 EU contribution: EUR 3 400 000
1.10 Final date for contracting: Two years following the date of the conclusion of the Financing Agreement
1.11 Final date for execution of contracts: Two years following the end date of contracting
1.12 Final date for disbursements: One year following the end date for the execution of contracts
2. **Overall Objectives and Project Purpose**

2.1 **Overall Objective**

The development and strengthening of the BiH agricultural information structure and analysis of the current situation in BiH's rural areas to aid sectoral policy for fostering the sustainable development in an EU accession context.

2.2 **Project purpose**

1. To establish low cost, BiH-based, Agriculture Market Information System delivering relevant, accurate and timely information to agriculture market users and policy decision-makers throughout BiH on a regular basis leading to expansion of agricultural trade within BiH, increased farm profitability, productivity and incomes.

2. Establishment of a framework for LPIS in BiH, based on a pilot digital geo-database consisting of; ortho-photos, production blocks and thematic layers for the identification of all agricultural parcels in production areas, as a first step towards establishment of the Integrated nation-wide LPIS.

3. To perform the analyses of BiH agricultural sectors with highest potential for improved performance as a result of well targeted measures included in the IPARD Programme.

2.3 **Link with AP/NPAA / EP/ SAA**

*The European Partnership (EP)*

**European Standards - Short-term priorities under Agriculture and Fisheries**

- Adopt the Law on Agriculture, Food and Rural Development and ensure an adequate legal framework for harmonised implementation of agricultural, food and Rural Development policies. Develop a comprehensive agricultural strategy at State level.

- Strengthen administrative capacity at State level as regards agriculture, food and Rural Development in order effectively to coordinate implementation of market and Rural Development policies throughout the whole country. Work towards the establishment of a State level Ministry of Agriculture, Food and Rural Development with sufficient resources to implement its tasks.

**Short-term priorities under Statistics**

- Improve the collection and processing of agriculture statistics in line with EU standards and methodology.

In terms of the general statistics requirement, the EP stipulates that further development of the State level capacities in statistics is needed by implementation of multi-annual plan for statistics and production of regular and sound macroeconomic indicators.

Furthermore, the *acquis communautaire* clearly delineates administrative structures, required for normal working practice in the field of agricultural information. These include: Agricultural census, Agricultural structural surveys, Farm income surveys, Sector specific elements for data collection. Establishment of an IACS system is also a requirement of the *acquis* (Council Regulation no. 1782/2003 and Commission Regulation no. 795/2004 and...
796/2004), which includes, among others, the following characteristics: a computerised database and a graphical, GIS based identification system for agricultural parcels.

The IPA Implementing Regulation (718/2007) (Article 184, Paragraph "2.b") indicates that the IPARD Programme should be based on an analysis of the current situation in the rural areas and on in-depth analysis of the sectors concerned.

**BiH Progress Report for 2008**

Collection and processing of agricultural data still remain weak. Although the first Agriculture Report (for 2007) was adopted, in the absence of accurate and standardised data collection, it gives no more than an indication of the main trends and opportunities for development of the agri-food sector in Bosnia and Herzegovina. Overall, the lack of reliable and comprehensive statistics is hampering the development of agricultural policy.

### 2.4 Link with MIPD 2009-2011

**Ability to assume the obligations of membership**

**Objectives and choices**

*Sectoral Policies:* Support the adoption and implementation of a comprehensive agriculture and Rural Development strategy.

**Expected results and indicators**

A country wide agriculture and Rural Development strategy with clearly identified priority areas is adopted and implemented, with agriculture sector actively contributing to economic growth. Agricultural legislation is further approximated to the acquis. The administrative structures, responsible for the harmonised implementation of agricultural policy and rural development measures are established and became operational. Structures, strategies and programmes for agriculture and rural development in line with the requirements for implementing EU pre-accession assistance are planned.

Support for agricultural census, farm register, land cadastre, agricultural statistics, and advisory and extension services as well as access to credits for farmers is provided. Quality and safety of domestic products is improved.

Agriculture information systems are improved and provide collection and processing of agriculture data.

### 2.5 Link with National Development Plan

There is no current National Development Plan; National Development Strategy is currently in the final phase of preparation.

### 2.6 Link with national/sectoral investment plans

At its 74th session held on 29.01.2009, the Council of Ministers passed the Decision on the adoption of the Strategic Plan of Bosnia and Herzegovina for the harmonization of agriculture, food and Rural Development, and the Operational Program of Bosnia and Herzegovina for the harmonization of agriculture, food and Rural Development (2008-2011), which was proposed by the Ministry of Foreign Trade and Economic Relations of BiH.
In this way, the framework was established for gradual harmonization of policies, programs, institutions, laws, systems and services in BiH in compliance with the EU requirements.

The objectives of the Strategic Plan and the implementation of the Operational Program are the gradual harmonization of sectoral policies and mechanisms at the state, entity and cantonal levels in BiH, and their harmonization with the EU requirements, as well as the progressive establishment of appropriate institutional structures, capacities, systems and procedures at the state level for coordination and guidance of pre-accession preparations for gradual harmonization and adoption of the agricultural acquis. Both Entity Ministries of Agriculture have developed agriculture sector strategies that outline plans to improve sector policy support.

Within 3rd Priority Area of BiH Agriculture, Food and Rural Development Operational Programme (2008-2011): Support primary production with direct farm support measures to gradually align between entities and with EU mechanisms, one of the main goals is to establish an integrated/harmonized land register and cadastre system as the basis for ensuring secure ownership and land tenure in BiH.

Within 4th Priority Area of BiH Agriculture, Food and Rural Development Operational Programme (2008-2011): Increase competitiveness of the agri-food sector of BiH through indirect support measures for production, processing and trade to gradually introduce EU IPA_RD type measures in BiH and to establish BiH Agricultural Market Information Services (AMIS) in cooperation with responsible bodies in entities and Brcko District to support agri-food trade and competitiveness.

3. Description of project

3.1 Background and justification:

**Component I - Development of an Agricultural Market Information System in BiH**

Improvements to the agriculture sector management and implementation of the *acquis* in BiH is currently constrained by the lack of accurate, reliable and timely information. Current information collection, collation and dissemination are undertaken in an ad hoc manner, not linked or guided by strategic priorities or policy demands and with limited information exchange between Entities and State. At State level, BHAS (BiH Agency for Statistics) is tasked with coordinating information and reporting to EUROSTAT, but information collection remains an Entity level activity. BiH Law on Agriculture, Food and Rural Development sets out various responsibilities for information collection and analysis within MoFTER.

In order to ensure the implementation of the Law on Agriculture, Food and Rural Development of BiH, development of bylaws was envisaged for 2009, in close cooperation with the Entities and BD, as well as their adoption at the state level, and these are as follows:

1. Decision on the establishment of the Committee for Coordination of Information in Agriculture (Article 16) - draft decision has made, and the members from the relevant institutions have been appointed. The Decision was sent to the Minister of MoFTER for signature. The first CIP meeting was held on February 19, 2009, which reviewed the texts of the rulebook on proceedings of the CIP.
Establishment of the Board has been recognized as a very important component of this process, which will enable all the bodies involved in the process of collecting statistics and information to coordinate their activities.

2. Decision on the Establishment of Agricultural Market Information Service (AMIS) (Article 17). In cooperation with the competent bodies of the entities and Brcko District, the MoFTER shall decide on the establishment of AMIS, and for the purpose of decision making a working group was formed which held 2 meetings. The Working Group will propose the structure and organization of the AMIS as a public service, and the method of its funding, which will be confirmed by the Minister of MoFTER in his decision.

The establishment of the AMIS as a public service shall provide the users in the sector regular information on prices and other information from the market. The system will introduce a greater degree of transparency in price levels for products and, in this sense, of the regional differences in relation to those that exist on the domestic market. This will provide the agricultural producers, manufacturers and dealers with information on market trends and the difference between supply and demand across the country. The system will be designed in such a way as to ensure that all goods are included that are economically or financially significant for the country.

The Proposed Rulebook Amending the Rulebook on Internal Organization of the Ministry of Foreign Trade and Economic Relations, in the Sector of Agriculture, Food, Forestry and Rural Development, is in the process of adoption by the Council of Ministers of BiH. The new Rulebook provides Department for policy analysis, monitoring, evaluation and information in charge of AMIS.

Progress report for 2008 indicates that collection and processing of agricultural data still remain weak. Although the first Agriculture Report (for 2007) was adopted, in the absence of accurate and standardised data collection, it gives no more than an indication of the main trends and opportunities for development of the agri-food sector in Bosnia and Herzegovina. Overall, the lack of reliable and comprehensive statistics is hampering the development of agricultural policy.

The EU financed “Strengthening and Harmonisation of the BiH agriculture and rural sectors Information System Project” – IPA Annual Action Programme 2007 for Bosnia and Herzegovina, is planned to address a number of the main issues which have been highlighted, including development of an AIS, functional hardware and software, database development and development of initial agricultural socio-economic and statistical information, but does not include development of Market Information Services. IPA 2009 will develop the respective Market Information Services.

Agricultural information system and database will, where applicable, include gender-disaggregated data as stipulated in the Article 18 of BiH Gender Equality Law.

Component II - Development of a Land Parcel Identification System in BiH

In accordance with Article 14 of BiH Law on Agriculture, Food and Rural Development with the aim to implement support measures for development of sector of agriculture, food and Rural Development and for needs of planning and analysis in the field of agriculture and Rural Development, the Ministry of Foreign Trade and Economic Relations shall coordinate the establishment and development of unified registers, to be implemented by the competent authorities in the Entities and Brcko District, in accordance with EU requirements, as follows:

1 In conjunction with World Bank financed Agriculture and Rural Development Project.
BiH Farm registry, BiH Client registry, BiH Animal Identification Register and BiH Land Parcel Identification System. BiH Land Parcel Identification System shall provide a unique identification system for agricultural parcels recording the geographic location, size, borders and other relevant information.

In order to implement measures to support the development of the sector of agriculture, food and Rural Development, as well as for purposes of planning and analysis in the field of agriculture, food and Rural Development, the MoFTER coordinates the establishment and development of single registers implemented by the competent bodies of entities and Brcko District of BiH, accordance with the requirements of the European Union. In this regard, we single out the establishment of a system to identify land parcels in BiH, which will provide a single identification system of agricultural land parcels with a record of their geographical locations, size, boundaries and other pertinent information.

Pursuant to the Law on Agriculture, Food and Rural Development of BiH, which states that the MoFTER is responsible for establishing an integrated database system to link registry data and other relevant information systems in order to ensure technical compliance of existing and new databases, in accordance with best EU practices, the future activities will be aimed at establishing an integrated system.

The responsibility for determining the land policy, land management, control and use, lies with the entities and BD BiH.

The new Law on Agricultural Land in the FBiH is in the process of development, and it defines, among other matters, the transactions of agricultural land (including for foreign nationals who have no property rights); and creates a land information system (LIS) and a part of the geographical information system (GIS).

According to the applicable Law on agricultural Land in the FBiH, registers and other records of agricultural land are maintained by the Cantonal Ministries of Agriculture. The registers are not updated nor are they functional.

Due to the poor conditions and mutual lack of harmonization in land registry books, an effort is being made to update the land registers and the cadastre (digitization). This is being done by the Federal Institute for Legal Property and Land Survey Affairs, and by the Federal institute for Agripedology, which designs maps. The process is only at the beginning, because digitalized recording has been completed for 90% of the municipalities in the Federation only, and negotiations are ongoing regarding the procurement of software. Digitized data on the parcels should be transferred onto maps, that is, into the land information system (LIS), which should integrate all available information on the parcels (cadastre municipalities), which will be available on the Internet. The plan is to complete these activities in the next 5 years.

In the RS the cadastre is in the phase of digitalization of the existing cadastral data. This project is being conducted through the Ministry of Justice of RS and it will be basis for the establishment of a LPIS. Right now, 45% of the territory of the RS is digitalized, and it is expected that by 2012, the complete surface of the RS will be digitalized.

Jurisdiction over agricultural land management in the BD BiH lies on the Office for the Management of Public Property.

A key component necessary for improvement of the agriculture sector management and implementation of the acquis in BiH is the organisation of the Integrated Administration and Control System (IACS) to establish a system of administration and control for the utilisation of the EU funds directly addressed to support the agriculture and rural sectors.
The baseline for the development of the IACS system is the Land Parcel Identification System (LPIS), the geodetic, geographic and geometric base for the IACS system application. The LPIS identifies on a geographic basis the eligible parcels for subsidy applications. The parcels are generally identified on a digital map super-imposed on geo-referenced ortho-photos. Each parcel has a unique code attribute, which is related to the farm register using a unique farm (applicant) identification code. The subsidy entitlements refer to the land parcel managers or users (tenancies) and not to the landowners themselves.

The system is a "single - unique" reference base that may be used for a large number of applications on the basis of land representation (Local Property Tax, zoning schemes, forestry management plans, land-use plans, roads, etc.) by different institutions of the public administration (Environment, Finance, Public Works, Transport, etc.).

The current state of land registration in BiH is totally inadequate for the EU requirements. The existing cadastre data bases cannot be used as they have not been updated to take account of the post-war changes in the land properties and cropping. It is intended in this proposal that a national approach is adopted, including all land areas in BiH, but this will involve many logistical problems – large areas are forested and difficult to access, similar large areas remain covered in mines, many cases of disputed land ownership and duplication of documents, etc. This issue must therefore be resolved as a priority by the IACS working group that will be formed and endorsed by the CCAI (Committee for Coordination of Agricultural Information) in consultation with all involved partners. For the purpose of the project, greater emphasis is likely be placed on the parcels in production areas initially as they will be easier for the newly trained local staff to deal with, relatively easy to access in case of the need for field visits and more easily identified from the ortho-photos. Other more difficult areas will be treated as less of a priority initially, but will be completed as part of the national strategy.

Current regulations stipulate that the GIS based identification system for agricultural parcels shall be established on the basis of land registry maps and documents, other cartographic references or of aerial photographs or satellite pictures or other equivalent supporting references or on the basis of more than one of these elements.

**Regarding the compliance with EU agricultural acquis** numerous EU regulations and Directives are in force applying to collection and reporting of information to the European Commission and also to EUROSTAT. Legislation covers amounts and prices of procured raw agricultural production, amounts and wholesale prices of produced products, retail prices of agricultural and food products, input prices and prices in the domestic market as well as other necessary data, which are to be provided by enterprises and other data suppliers, preparing reports to the European Commission, other institutions or data recipients, preparing and publishing official statistical bulletins.

Major regulations in this regard are:


In the longer term, in order to prepare for accession to the European Union, BiH needs to develop and implement an adequate agriculture information system (collecting and reporting),
so that it will be in the position to supply to the General Directorate for Agriculture (DG Agri) of the European Commission, the market information required to conduct market management as part of the Common Market Organisations (CMOs) of the Common Agricultural Policy.

The implementation, management and control of the CAP requires the creation, modification and/or reinforcement of appropriate administrative structures. In this case, the structure is the IACS (Council Reg: 1782/2003 and Commission Reg: 795/2004) whose requirements are:

- Computerised database;
- System for the identification and registration of payment entitlements;
- Aid applications;
- Single system to record the identity of each farmer submitting an aid application;
- System for identification and registration of animals (where appropriate).

Further EU legislation can be found at Annex 3: List of relevant EU Regulations

IPA 2009 will assist designing the full-scale LPIS in BiH with implementing the LPIS in the pilot regions.

**Component III – Performance of the sectoral analysis for agricultural sectors to be included in IPARD programme**

The IPARD programme should include, among other issues, a quantified description of the current situation, showing disparities, shortcomings, the potential for development and the quantified objectives. The analyses of the situation and prioritisation of the areas for potential intervention should be made involving independent expertise.

Considering the above, BiH needs to carry out a number of the sectoral analyses to complement the forthcoming IPARD Programme and provide the grounds for justified and appropriate targeting of the measures included in the Programme (i.e. to find the weakest links in a supply chain).

BiH Strategic Plan for Harmonization of Agriculture, Food and Rural Development (AFRD) and Operational Programme for 2009-2011 were adopted early this year. This document provides the framework for gradual harmonization of policies, programmes, institutions, laws and other regulations, systems and services both within BiH and with the EU. It also provides a platform for introduction of pre-IPARD actions to be in place for receipt of EU Rural Development funds. Importantly, it also provides basis for development of a national Rural Development Plan and subsequently the IPA Programme through the participatory planning process to be adopted by end of 2010. Currently, MoFTER based Sector for Agriculture, Food, Forestry and Rural Development is coordinating activities of the Working Group for Rural Development with a mandate to work on harmonization of agricultural and Rural Development measures BiH wide. Also, awareness is increasing among the key stakeholders on importance of Monitoring and Evaluation process to be introduced for the current agriculture and Rural Development support measures.

Overall, despite some progress made in provision of information on agriculture and rural sectors performance in the past years, BiH authorities are not yet in a position to establish a clear link between the situation in the main agriculture sectors and rural areas in BiH and related support measures. Consequently, its effectiveness in such situation remains questionable, despite an increasing inflow of government and donors support to the sector.
To address some of above mentioned weaknesses, the EC will support the preparation of BiH Rural Development Plan from its upcoming IPA 2007 technical assistance project "Pilot Support to the Rural Development Programming". The current assistance under IPA 2009 is aimed to complement this process by filling the data gaps in the IPARD programme and identify the weaknesses and sectoral concerns.

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

Project impact

Implementation of this project will bring benefits at two levels:

Harmonisation with acquis requirements

- MIS established in and reporting on major products across important markets in BiH;
- Market information supplied to European Commission, in line with stipulated requirements to conduct market management as part of the Common Market Organisations (CMOs) of the Common Agricultural Policy;
- Availability of timely and reliable market information will support and strengthen the general AIS process in BiH, particularly the farm income surveys and farm economic performance monitoring.
- LPIS will be established and operational in pilot areas in BiH providing detailed and accurate data on all land parcels, ownership and or tenancy;
- The information provided by LPIS will be linked to the farm registers being established as the cornerstone of the IACS;
- Government of BiH along with both Entities and District Brcko will be able to harmonise support measures in line with EU systems using the information provided.
- Sectoral analyses provide the grounds for justification of IPARD programme and measures and will assist BiH in better assessing its needs and capacities for acquis approximation;

Improved access to market information for producers and other market users

- Increase general efficiency, competitiveness and transparency in the BiH agri-food market;
- Reduce seasonal variation / fluctuation and improve supply chain efficiency;
- Increase general trade flows both into and out from BiH for commodities covered by AMIS;
- Reduce farm input costs through identification of alternative cheaper suppliers and breakdown of regional input supplier monopolies;
- Increase market opportunities for sale of farm outputs of key commodities thereby increasing farm incomes from sales;
- Improve farmer awareness of market signals, allowing planting decisions for future seasons to be based on shifting market signals and trends.

More efficient use of resources and potential conflict reduction

- Increase general efficiency, competitiveness and transparency in the BiH agriculture and Rural Development sector;
- Reduce potential for disputes over land ownerships and usage rights;
- Improve the process of management and opportunity of producers (and others) to access Rural Development support measures;
- Government of BiH along with both Entities and District Brcko will be able to use the information provided to develop more targeted, effective and efficient support measures for the sector.

Catalytic effect and sustainability

Component I - Development of an Agricultural Market Information System in BiH

The availability to producers of the improved market information, along with increased understanding for proper analysis and development of performance modelling (by Extension Services and through farmer training) will serve to illustrate how productivity may be increased leading to improved economic growth and sectoral development.

Development of farm economic performance models, as a desired output of the information provided by this project, coupled with the Farm Economic performance monitoring to be undertaken by the EU financed “Strengthening and Harmonization of the BiH agriculture and rural sectors Information System Project” – IPA Annual Action Programme 2007 and publication and dissemination in the form of a Farm Managers Handbook will act to stimulate producers to carry out proper pre-planting planning of cropping strategies leading to better resource utilization and marked improvements in performance.

Availability of accurate and reliable information will enable government agencies and donors alike will be able to assess the economic performance of the sector as a whole and also on an individual crop or production system basis, thereby increasing the potential to monitor support interventions and to track and forecast likely effects of policy programmes. This should allow reallocation of subsidy and other state interventions on a more cost effective and efficient basis.

Longer term sustainability is likely to reflect existing EU country models where MIS is generally operated on a semi-privatized basis with users of information directly contributing to the cost of information collection and analysis. With future development of producer groups or processors requiring specific market data there is potential for cost recovery through charging for the information supply. In the short term there is definite potential to adopt a system of simple SMS text messaging using mobile telephone technology to supply the latest market information to interested users on a cost sharing basis with the telephone service provider.

Component II - Development of a Land Parcel Identification System in BiH

The availability of a fully functional LPIS will provide the detailed information necessary for BiH to access future IPA Rural Development funds. The BiH capacity to implement, control and monitor effects of the policy measures based on availability of reliable and accurate information obtained through application of EU harmonized methodologies and working practices will be in line with EU best practices and applied and managed in a uniform manner across the whole country.

Formulation and application of rural support measures would be standardized with EU systems and become more effective with improved management control and monitoring of effectiveness. Development of a more efficient support system would encourage longer term sector development and efficiency, leading to increased opportunity for employment and improved income generation in rural areas.
A properly functioning IACS will also ensure that proper control (by government) is placed on the support measures provided for Rural Development removing distortions to the local economy and resulting in improved market efficiency.

Availability of accurate and reliable information will enable government agencies and donors alike to begin to develop coordinated sectoral development plans that reflect the situation “on the ground”.

**Component III- Performance of the sectoral analysis for agricultural sectors to be included in IPARD programme**

Identified weakness of the selected sectors and rural areas will assist BiH to tackle the development disparities and identify investments potential for attraction and improved utilization of national and private funds as well as prospective measures under IPARD component once the country obtains the EU candidate status.

**Cross border impact**

Realignment of the sectoral statistical and information reporting by BiH in line with the EU acquis will serve to strengthening the BiH international negotiation position, such as those with the EU and WTO, in light of an enhanced transparency, accuracy and reliability of sectoral information.

A recent TAIEX performed assessment on status of Agricultural statistics in Western Balkans revealed that BiH is falling behind the region in this field across all the main progress indicators, including availability of registers, market information system and planning for the basic agricultural census. Improvement in sectoral reporting would contribute to enhanced common reporting on Western Balkans compiled by EUROSTAT.

Information on markets within BiH will encourage international agriculture sector input suppliers to enter the market thereby enhancing competition and discouraging localized monopoly supply problems. In the longer term, availability of information on international markets could encourage BiH based producers or processors to actively target those markets where they feel they have a comparative advantage, leading to increased productivity and sectoral performance.

Performance of sectoral studies in the region could be used for identification of the sectoral priorities on the larger scale and consequent planning of the EU assistance that will recognize specific needs of the region.

### 3.3 Results and measurable indicators

**Results under Component I - Development of an Agricultural Market Information System in BiH**

**R1: AMIS set up and operational**
- AMIS coordination office established and fully equipped by end of 10th month of the project;
- At least two full time staff of the AMIS coordination office appointed and trained and to manage AMIS by end of 6th month of the project;

**R2: Market intelligence collation network established across all major BiH markets**
- At least fifteen significant markets identified and prices being collected and reported by the end of the first year of the project;
At least fifteen enumerators identified, trained and regularly report on market activities by end of the first year of the project.

R3: Improved market information on quality and supply levels available

- Market information covering farm, wholesale and retail prices for key agricultural commodities updated and published on monthly basis and widely disseminated through electronic and print media by end of the first year of the project;

R4: Market information collected, processed and stored in line with EU best practice

- Manuals on EU best practice techniques prepared by end of the first year of the project

R5: Producers using market information to change marketing practices

- One hundred producers interviewed about use of AMIS for changing their marketing strategies by the end of the project.

R6: Sustainability of AMIS determined

- Budget (BiH budget and partially covered by private contribution) for operational costs of AMIS is determined and secured by end of the project;

Results under Component II - Development of a Land Parcel Identification System in BiH

R7: Institutional capacities for implementation of LPIS in MOFTER and at other relevant levels of governments (entities and pilot municipalities) developed

- Capacity assessment of MOFTER and other levels of governments (entities and pilot municipalities) for LPIS introduction and implementation available by end of 4th month of the project;

- At least 30 people trained about LPIS (introductory training to LPIS, LPIS structure, technical components, link with other systems) by the end of 5th month of the project;

- Report on the equipment needs (hardware, software and GPS) for pilot LPIS implementation drafted by end of 4th month of the project.

R8: LPIS and GIS model developed and agreed between stakeholders involved

- Working group for development and implementation of LPIS is established and meets at least once in two months;

- Training Needs Analysis for institutions involved made by end of 4th month of the project;

- Lessons learned through the study visit documented, available and used as inputs for the model discussion to be adapted in BiH by end of 6th month of the project;

- Feasibility study on LPIS model(s) available by end of 8th month of the project;

- LPIS development study with development and implementation phases prepared and agreed with beneficiaries by the end of the project;

- Proposals for relevant by-laws and guidelines for LPIS implementation available and ready for adoption by the end of the project;

- Public within pilot municipalities informed about LPIS by end of 9th month of the project.

R9: Pilot area(s) for implementation of LPIS defined

- MoU for cooperation between MoFTER, entity ministries for agriculture and the participating with pilot municipalities signed by end of 4th month of the project.
R10: LPIS implemented in the pilot areas
- Institutions equipped with hardware and software for pilot LPIS as well as with technical layers and orthophotos by the end of 10th month of the project;
- Test results for LPIS model pilot areas available by end of 16th month of the project;
- Final report and recommendations made by the end of 17th month of the project.

R11: Subsidy control check made based on the use of LPIS
- Test results from the subsidy control test in pilot area available by the end of 19th month of the Project;
- Final report on LPIS testing in municipalities made by the end of 20th month of the Project.

R12: Full scale LPIS designed
- Strategy for establishment of full scale LPIS prepared and is ready for adoption by relevant structures by end of the Project;

Result under Component III - Performance of the sectoral analysis for agricultural sectors to be included in IPARD programme

R13: BiH sectors for performance of sectoral analyses agreed by the main beneficiaries based on consideration of the EU standards and its economic relevance for BiH
- Criteria for selection and layout for sectoral analysis agreed between relevant stakeholders;
- MoFTER's endorsement of the sectors to be analyzed with inclusion of meat and dairy as compulsory sectors;

R14: Information on the main features and performance of BiH sectors for which the sectoral analysis were performed available to BiH institutions and broader stakeholders
- Sectoral studies documented and available to SAFFRD by the end of the 10th month of the project
- Relevant stakeholders are aware of the main findings of the analyses by the end of the 10th month of the project

3.4 Activities

Activities related to accomplishment of results no. 1-6 under component I:

1.1. To develop of AMIS unit within MoFTER SAFFRD and establish of operational set up:
- Establish and equip AMIS coordination office in MoFTER SAFFRD;
- Staff appointed to AMIS office and fully trained in correct operational procedures (EU best practice).
- Set up database system and purchase equipment for enumerators.
- Develop programs and price collection templates.

1.2. To establish network of local AMIS enumerators able to provide regular and accurate market intelligence
- Enumerators selected and equipped for price collection;
- Train enumerators in best information collection techniques, determination of product quality and supply level estimation;
- Establish network reporting system:
- Set up database in AMIS central office;
- Quality control system devised and in place.

1.3. To determine range of AMIS products to be developed and systems for dissemination
- Define commodity list in line with EU requirements;
- Identify market recording points and regularity of information collection – daily, weekly, monthly;
- Survey potential users on alternate MIS requirements;
- Identify and set up dissemination systems – SMS text messaging, web site, printed reports, newspapers, radio, T.V.

1.4. To establish AMIS Management system established and operational including representatives from all key stakeholder groups
- Establish AMIS steering committee;
- Select representatives for steering committee and hold regular meetings;
- Define AMIS monitoring and quality control system.

1.5. To implement AMIS
- Information collected, collated and stored in database system;
- Intelligence analyzed, trends and forecasts being produced utilizing EU recommended methodology;
- Specialized reports compiled according to pre-identified demand from end users (on a commercial basis);
- Monitoring of accuracy and reliability through quality control system.

1.6. To establish sustainable finance mechanism for AMIS;
- Design of mechanism and propose to government;
- Obtain agreement/approval;
- Initiate mechanism and set targets for level of self-financing to be attained.

1.7. Reporting
- Preparation of reports on AMIS implementation and operation.
- Develop strategy and methodology for long-term sustainability (cost neutral operation) of system.
- Suggestions for future development and possible expansion of AMIS.
There will be a service contract for technical assistance and supply\(^2\) contract for the total amount of EUR 500,000.

**Activities related to accomplishment of results no. 7-12 under component II:**

2.1. To support the development of unit for LPIS coordination in MoFTER and units at local level
   - Training of staff of MoFTER, entity and cantonal MoA, technical institutes
   - Specification of equipment for pilot LPIS and supervise its delivery

2.2. To support the establishment of LPIS model through stakeholders participation
   - Identification of relevant institutions to be involved in LPIS
   - Establishment of Working group for LPIS
   - Assessment of current legal framework and preparation of legislation needed for LPIS
   - Study trip for members of WG
   - Identification of LPIS model applicable in BiH and phases for its implementation
   - Identification of roles and tasks of institutions involved in the implementation of LPIS and establishment of coordination between all levels
   - Identification of technical requirements for equipment and thematic layers as well as financial and human resources needed
   - TNA
   - Implement a public information campaign

2.3. To implement LPIS in pilot area(s)
   - Identification of criteria for selection of pilot areas
   - Selection of area(s) for implementation of pilot LPIS
   - Acquisition of ortho-photos and other thematic layers of the pilot areas
   - Purchase of hardware and software for implementation of pilot LPIS
   - Collection, analysis and digitalization of existing cadastral layers and data
   - Quality control of layers
   - Interpretation of ortho-photos and identification of present agricultural land use
   - Preparation of agricultural parcels layers and databases
   - Implementation of information campaign for farmers
   - Field checks in consultation with farmers
   - Update and corrections of agricultural parcel layers
   - Final set up of LPIS

\(^2\) The contract will cover indicatively: PDA hand held computers with telephone connection and preloaded software, network connections, servers, database software and development cost, set up of dissemination of Market Information, Initial cost of SMS text messaging linkage, printing, web site establishment, etc.
- Preparation of final report and recommendations

2.4. Subsidy control based on the use of LPIS
- Identification of sample for subsidy control
- Testing of LPIS on an identified sample
- Preparation of final report and recommendations

2.5. To design of full scale LPIS
- Develop strategy for full scale LPIS
- Preparation of reports on LPIS implementation and operation and recommendations for its sustainability
- Organization of workshops, training sessions and presentation of the results of project supporting long term commitment

There will be a service contract for technical assistance (in the amount of EUR 2 000 000) and supply contract for the amount of EUR 400 000.

Activities related to accomplishment of results no13 and 14

3.1. Support definition of BiH sectors for performance of sectoral studies
- Establish working group for definition of specific BiH criteria;
- Assess the state of play of BiH Rural Development programme;
- Identify and agree three other BiH sectors (besides meat and dairy) to be analyzed;
- Define criteria and layout of analysis compliant with IPARD requirements;

3.2 Perform and present the main findings of five sectoral analyses for BiH agriculture and Rural Development sector
- Conduct five sectoral studies;
- Organize public event to present the main findings to key stakeholders.

3.5 Conditionality and sequencing

Conditionality
- Ministry can provide additional adequate manpower resources to support the daily data collection in regional markets at Municipal level (enumerators)
- Ministries give commitments to provide adequate financial resources to continue and extend the AMIS
- Collaboration with other projects (EU and other donors) is maximized
- BiH and Entity level (including District Brcko) can provide additional adequate manpower resources to support the LPIS activities at Municipal level (parcel identification and registration on digital maps);

3 The contract will cover indicatively: equipment for pilot LPIS, plotters, scanners, workstations, storage and backup systems for use at central level and institutes, hardware and software for the local level for implementation of pilot LPIS, GIS packages and operating software.
- Government and Entities give commitment to secure adequate financial resources to continue and extend the LPIS through budget support or financial support given by other bilateral donors;
- Existing Institutes with knowledge and experience of GIS systems (Agropedology Institute of Sarajevo and/or other implementing agency agreed by the main project beneficiaries) are included as key actors in project development and implementation;
- Collaboration with other projects (EU and other donors) is maximized – detailed linkages in next section.

**Sequencing**

Project development is logical with no specific identified requirements no sequencing, other than those already identified in the sequencing of the planned activities.

The development of the LPIS within BiH will start from a very basic level and so the activities follow a very typical development path, starting with set up of the basic facilities, identifying information to be collected, services to be supplied, establishing institutions and personnel networks, training of staff, development of a management and quality control methodology, establish supporting databases, implementation of services, information dissemination (how, what, where and when), monitoring of results, development of a longer term methodology, including financing and reporting.

Implementation of this project is linked with timely start and progress with the preparation of BiH Rural Development plan.

**3.6 Linked activities**

A number of other developmental activities are either underway or planned which have close relevance to the proposed project and complementarily and cooperation must be ensured at all levels to avoid confusion and replication of efforts:

EC Support for Establishment of State Ministry of Agriculture and Rural Development (SESMARD) project (CARDS 2005) had worked at all administrative levels in BiH and provided technical support to strengthen the capacity of the agricultural sector public administration in BiH which will contribute to the development of an efficient and competitive agricultural sector, capable of contributing to the BiH economic development and prepared for integration with the EU. SESMARD was assessed as one of the most successful EC projects in the sector of agriculture. Its main achievement relates to the creation of the state level competencies within BiH Ministry of Foreign Trade and Economic Relations to coordinate the international matters (SAA, CEFTA, and WTO) and to harmonize the policy, strategy, subsidies, registers, payments, etc. as the issues which are according to Dayton PA under the responsibility of the entities.

EC Support to the Statistics Sector of BiH – Phase III CARDS Twinning project that is only working on a limited scale in the agricultural sector on development of agro monetary indicators, including outline agricultural price statistics and is also providing training on adoption of EUROSTAT standards and brief training in former accession countries (Hungary and Slovenia). Experience gained in the training programmes will be used as a basis on which to develop further training and initial pilot activities in the proposed project. Other agro monetary indicators developed will be utilised in the proposed project to aid development of more accurate FADN and eventually to link to any longer term activity regarding market information (outside the scope of the current project but a longer term aim for development).
IPA 2007 Project “Pilot support to BiH Rural Development Programme” (EUR 1 million) is expected to be implemented from mid 2009 until mid 2011. This project will build upon the outcomes of the SESMARD project by supporting Rural Development capacities for access to IPA RD and by piloting a number of measures in Rural Development. In addition it is expected to have developed mechanism and structures for engagement of the communities and local administrations in the Rural Development planning process.

The EC IPA 2007 project “The Strengthening and harmonization of the BiH Agriculture and rural sectors information system” has an envisaged budget of EUR 1.5 million, and it is expected to provide key reliable data and information on farm census, farm production data, cropping and livestock data. It will be an important source of updated information related to the farm sector. The establishment of a farm performance monitoring system will be an important output that will feed into this project.

Project Spatial information services for BiH - phase two Digital Ortho-photo Maps of Ministry of Civil Affairs BiH (IPA 2008) - Creating ortho-photo maps, air picturing and ortho-photo maps would be made, as a complete and functional way to overview of whole Bosnia and Herzegovina, with clearly visible and proportionally marked land structure, agricultural potential, forests, roads, cities, factories and other elements.

IPA 2008 EC support "Capacity building in agriculture policy and preparations for BiH's access to IPA Rural Development (IPARD) programme (EUR 2.5 million) . The aim of this project is to support the harmonisation of sectoral policies and measures for enhanced performance of agri-food sector and creation of structures and capacity for managing the future IPA Rural Development funds with focus on IPARD complaint payment system. Project is also planned to create range of sub-sector analysis and policy reform documents prioritized by commodity sector, prepared for alignment with CMO requirements. This technical assistance will consider within the CMO assessment the priority products for which the standardisation requirements will be introduced for the purpose of market price monitoring. The project is expected to start in early 2010 and is aimed to support BiH through the process of IPARD Agency accreditation.

In 2008 two very important projects were completed in the area of land management, and these are: the FAO project called Inventory of the status of land resources in BiH in the post-war period, and CORINE Land Cover 2006 project. The results of both projects (digital maps and databases of land resources) shall serve as a basis for establishing the operating system of land resource assessment and monitoring of land use methods, which will in future serve as the technical basis for planners and decision-makers at all levels of government.

World Bank financed Rural Development project (and related investment plans for IT software and hardware and other management infrastructure). Overall value of 21 M USS to be implemented over the 4.5 years, commencing in early 2008 (became effective from 26th February 2008). The scope and activity range of this project is still being determined, but support for this proposal is available from WB to finance purchase of ICT equipment at Municipal level and regional/Cantonal level, along with establishment of network systems to speed up the process of collection and movement of data. It also has plans to develop Agricultural Extension services, which should be major users of market information.

World Bank financed Land Registration Project - effective since April 2006 and seeks to facilitate the development of transparent land markets through the registration of real estate rights (predominantly in urban areas) and complementary policies that enable transactions to be made with security and efficiency. 2008 saw the continuation in the implementation of land registration project, which aims to improve the quality, efficiency and effectiveness of land registration services through the development of a transparent real estate market in BiH,
advancing the process of entry of the rights on real estate, as well as additional strategies that enable safe and efficient sale of real estate.

3.7 Lessons learned

Ongoing projects operating at a BiH State level have experienced problems in the following areas:

- Lack of broad based political commitment to the state-wide development in absence of an agreement on constitutional changes;
- Slow project start up mainly due to a lack of availability of suitably qualified and experienced counterpart or beneficiary staff, resources and insufficient support budgets.

Some previous attempts at establishing a market information service in BiH have proven short lived due to the lack of a suitable implementing agency and a failure to collate and analyze information on a daily basis for rapid dissemination to potential users. This proposal addresses those problems by utilizing latest (low cost) technology and data transfer techniques in the form of the PDA telephone network systems to collect market intelligence and to transmit it to the central base. From there it can be disseminated in numerous formats, possibly including SMS text messaging to subscribing users.

LPIS development will require a high level of activities at local (municipal) level to identify with farmers the land parcels and tenancies on the digital photo maps. While this methodology will speed up the process of registration, a cadre of local staff used to dealing with farmers will be required. Planning for this project has taken account of this factor by suggesting that the existing Agricultural Inspectorate may take on this role. The Agricultural Inspectorate is already working in all municipalities to monitor and check subsidy applications by farmers. This role will be eliminated (or at least greatly reduced) with the introduction of a central payment system and so the Agricultural Inspectors could instead become active in LPIS registration with farmers.

4 Perishable products daily, other products weekly or monthly, product inputs on a seasonal basis
### 4. Indicative Budget (amounts in EUR)

#### SOURCES OF FUNDING

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>TOTAL EXP.RE</th>
<th>IPA COMMUNITY CONTRIBUTION</th>
<th>NATIONAL CONTRIBUTION</th>
<th>PRIVATE CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IB (1)</td>
<td>IN (1)</td>
<td>EUR (a)=(b)+(c)+(d)</td>
<td>EUR (b)</td>
</tr>
<tr>
<td>Total</td>
<td>EUR</td>
<td>%</td>
<td>EUR</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>2930 000</td>
<td>100</td>
<td>2930 000</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>TOTAL IB</td>
<td>2930 000</td>
<td>100</td>
<td>2930 000</td>
</tr>
<tr>
<td></td>
<td>TOTAL INV</td>
<td>470 000</td>
<td>100</td>
<td>470 000</td>
</tr>
<tr>
<td></td>
<td>TOTAL PROJECT</td>
<td>3 400 000</td>
<td>100</td>
<td>3 400 000</td>
</tr>
</tbody>
</table>

Amounts net of VAT

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

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

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Start of Tendering</th>
<th>Signature of contract</th>
<th>Project Completion</th>
</tr>
</thead>
</table>

All projects should in principle be ready for tendering in the 1st Quarter following the signature of the FA.

6. Cross cutting issues

6.1 Equal Opportunity

Equal opportunity for participation of men and women will be assured in all aspects of project implementation. It will support the creation of an environment for improving the participation of rural women, in agriculture and Rural Development programmes.

By integration of gender equality component the project will support both, the national government policies and legislation (BiH Gender Equality Law, Gender Action Plan) and the implementation of the relevant provisions of the SAA (Article 99) and MIPD (cross-cutting issues) which call for respect for equal opportunities and non-discrimination as regarding gender as well as minorities in the IPA programming.

The following gender mainstreaming activities can be considered under the project:

- Ensure equal participation in identification of market products and price collection,
- Use/produce gender-disaggregated statistical data
- Ensure that new created support system reach women and men farmers equally
- Ensuring equal participation in the area of information and communication technologies
- Contractors involved in the project will be required to provide monitoring data recording the participation of men and women in terms of expert inputs and trainee days as an integral component of all project progress reports.

6.2 Environment

The project will not have any negative environmental effects.

6.3 Minorities

The project will promote participation of minorities in all the activities.
ANNEXES

1- Log frame in Standard Format
2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
3- Description of Institutional Framework
4- Reference to laws, regulations and strategic documents (EC and BiH)
5- Details per EU funded contracts:
ANNEX 1: Logical framework matrix in standard format

<table>
<thead>
<tr>
<th>Program name and number: IPA National Programme 2009 part II – Bosnia and Herzegovina</th>
<th>Final date for contracting: Two years following the date of the conclusion of the Financing Agreement</th>
<th>Final date for disbursements: One year following the end date for the execution of contracts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGFRAME PLANNING MATRIX for Project Fiche</td>
<td></td>
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</tr>
<tr>
<td><strong>Project:</strong> Support to the Agriculture and Rural Development sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CRIS Number:</strong> 2009 / 021-650</td>
<td>Total budget : EUR 3 400 000</td>
<td>IPA budget: EUR 3 400 000</td>
</tr>
<tr>
<td><strong>Overall objective</strong></td>
<td><strong>Objectively verifiable indicators</strong></td>
<td><strong>Sources of Verification</strong></td>
</tr>
<tr>
<td>The development and strengthening of the BiH agricultural information structure and analysis of the current situation in BiH's rural areas to aid sectoral policy for fostering the sustainable development in an EU accession context.</td>
<td>Market Information System established in line with EU best practice</td>
<td>EU Country progress report (BiH)</td>
</tr>
<tr>
<td></td>
<td>LPIS system in pilot areas operating in full compliance with EU standards and regulations</td>
<td>MOFTER reports</td>
</tr>
<tr>
<td></td>
<td>Economic growth of agriculture sector improved</td>
<td>Statistical reports</td>
</tr>
<tr>
<td></td>
<td>Available BiH agricultural policy</td>
<td>Available BiH agricultural policy</td>
</tr>
<tr>
<td></td>
<td>LPIS maps</td>
<td>LPIS maps</td>
</tr>
<tr>
<td><strong>Project purpose</strong></td>
<td><strong>Objectively verifiable indicators</strong></td>
<td><strong>Sources of Verification</strong></td>
</tr>
</tbody>
</table>
1. To establish a low cost, BiH-based, Agriculture Market Information System delivering relevant, accurate and timely information to agriculture market users and policy decision-makers throughout BiH on a regular basis leading to expansion of agricultural trade within BiH, increased farm profitability, productivity and incomes.

2. Establishment of a framework for LPIS in BiH, based on a pilot digital geo-database consisting of: ortho-photos, production blocks and thematic layers for the identification of all agricultural parcels in production areas, as a first step towards establishment of the Integrated nation-wide LPIS.

3. To perform the analyses of BiH agricultural sectors with highest potential for improved performance as a result of well targeted measures included in the IPARD Programme

<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. AMIS set up and operational;</td>
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<td></td>
<td></td>
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<tr>
<td>2. Market intelligence collation network established across all major BiH markets;</td>
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<tr>
<td>3. Improved market information on quality</td>
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<tr>
<td>1.1 AMIS coordination office established and fully equipped by end of 10th month of the project</td>
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<tr>
<td>1.2 At least two full time staff of the AMIS coordination office appointed and trained and to manage AMIS by end of 6th month of the project</td>
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<tr>
<td>2.1 At least fifteen significant markets identified and prices being collected and reported by the end of the first year of the project</td>
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<tr>
<td>2.2. At least fifteen enumerators identified, trained and regulatory report on market activities</td>
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<tr>
<td>1. Market Information System providing regularly updated information for major products on BiH markets by end of PY 1</td>
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<tr>
<td>1.2. Information collected and reported in line with EU best practice</td>
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<tr>
<td>1.3. Development of better marketing practice among producers</td>
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<tr>
<td>2.1. LPIS installed and operational in pilot areas</td>
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<tr>
<td>2.2. LPIS maps and identifies land parcels in pilot areas in the agricultural production areas of BiH</td>
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<tr>
<td>2.3. Farm register developed and implemented on a geodetic, geographic and geometric base in pilot areas</td>
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<tr>
<td>AMIS reports</td>
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<tr>
<td>SAFFRD reports</td>
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<tr>
<td>European Commission Delegation regular reports</td>
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<tr>
<td>Increased market activity</td>
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<tr>
<td>Diversification in farmer marketing process</td>
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<tr>
<td>Increased farm income</td>
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<tr>
<td>EC Delegation regular reports</td>
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<tr>
<td>SAFFRD reports</td>
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<tr>
<td>LPIS digital maps</td>
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<tr>
<td>Reports on monitoring of register against land parcels information</td>
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<tr>
<td>More efficient use of government support measures</td>
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</tbody>
</table>

Government support to maintain system in longer term
Unconditional commitment at all administrative levels
Availability of local staff to operate AMIS
Farmers can understand and react to market information, supply and price signals.

Available ortho-photos from Geodetic Administrations;
Land registration data available from Land Registration and Cadastre Offices;
Government support to maintain system in longer term;
Unconditional commitment at all administrative levels;
Appointment of local staff who can be trained to operate system effectively;
Farm register complete.
and supply levels available by end of the first year of the project

3. Market information covering farm, wholesale and retail prices for key agricultural commodities updated and published on monthly basis and widely disseminated through electronic and print media by end of the first year of the project

4. Manuals on EU best practice techniques prepared by end of the first year of the project

5. One hundred producers interviewed about use of AMIS for changing their marketing strategies by the end of the project;

6. Budget (BiH budget and partially covered by private contribution) for operational costs of AMIS is determined and secured by end of the project

<table>
<thead>
<tr>
<th>Component II</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>7. Institutional capacities for implementation of LPIS in MoFTER and at other relevant levels of</td>
<td></td>
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</tr>
</tbody>
</table>

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**Project reports;**

**Government reports;**

**Monitoring reports;**

**Orthophoto maps;**

**Training evaluations;**

**Staff appraisals;**

**Study tour reports;**

**Database establishment;**

**Consultation and information process reports;**

**Farmers registration reflects LPIS;**

**Cross referencing (IACS) between farm register and LPIS database;**

**Reports on LPIS implementation;**

**Support measures linked to information from farm registers and LPIS;**

**Government budget records;**

---

**Sufficient motivated and high calibre staff can be identified by MoFTER and units at local level;**

**BiH Government resources remain available to support LPIS (MoFTER);**

**Supportive legislation in place;**

**Farm registers completed and made available;**

**Timely implementation of the tendering procedure;**

**Good co-operation between institutions involved in project implementation;**

**Ortho-photos and cartographic layers available and accessible at central level;**

**Farmers are receptive to LPIS data available to support AMIS MoFTER/ (Sector for Agriculture, Food, Forestry and Rural Development);**
### 7. Capacity assessment of MOFTER and other levels of governments (entities and pilot municipalities) for LPIS introduction and implementation available by end of 4th month of the project:

7.1. Capacity assessment of MOFTER and other levels of governments (entities and pilot municipalities) for LPIS introduction and implementation available by end of 4th month of the project.

7.2. At least 30 people trained about LPIS (introductionary training to LPIS, LPIS structure, technical components, link with other systems) by the end of 5th month of the project.

7.3. Report on the equipment needs (hardware, software and GPS) for pilot LPIS implementation drafted by end of 4th month of the project.

### 8. Working group for development and implementation of LPIS is established and meets at least once in two months:

8.1. Working group for development and implementation of LPIS is established and meets at least once in two months.

8.2. Training Needs Analysis for institutions involved made by end of 4th month of the project.

8.3. Lessons learned through the study visit documented, available and used as inputs for the model discussion to be adapted in BiH by end of 6th month of the project.

8.4. Feasibility study on LPIS model(s) available by end of 8th month of the project.

8.5. LPIS development study with development collection needs.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>10.</td>
<td>LPIS implemented in the pilot areas</td>
</tr>
<tr>
<td></td>
<td>and implementation phases prepared and agreed with beneficiaries by the end of the project;</td>
</tr>
<tr>
<td></td>
<td>8.6. Proposals for relevant by-laws and guidelines for LPIS implementation available and ready for adoption by the end of the project;</td>
</tr>
<tr>
<td></td>
<td>8.7. Public within pilot municipalities informed about LPIS by end of 9th month of the project.</td>
</tr>
<tr>
<td>11.</td>
<td>Subsidy control check made based on the use of LPIS</td>
</tr>
<tr>
<td></td>
<td>9.1. MoU for cooperation between MoFTER, entity ministries for agriculture and the participating with pilot municipalities signed by end of 4th month of the project.</td>
</tr>
<tr>
<td>12.</td>
<td>Full scale LPIS designed</td>
</tr>
<tr>
<td></td>
<td>10.1. Institutions equipped with hardware and software for pilot LPIS as well as with technical layers and orthophotos by the end of 10th month of the project</td>
</tr>
<tr>
<td></td>
<td>10.2. Test results for LPIS model pilot areas available by end of 16th month of the project;</td>
</tr>
<tr>
<td></td>
<td>10.3. Final report and recommendations made by the end of 17th month of the project</td>
</tr>
<tr>
<td></td>
<td>11.1. Test results from the subsidy control test in pilot area available by the end of 19th month of the Project</td>
</tr>
<tr>
<td></td>
<td>11.2. Final report on LPIS testing in municipalities made by the end of 20th</td>
</tr>
</tbody>
</table>

Component III

13. BiH sectors for performance of sectoral analyses agreed by the main beneficiaries based on consideration of the EU standards and its economic relevance for BiH
14. Information on the main features and performance of BiH sectors for which the sectoral analysis were performed available to BiH institutions and broader stakeholders

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Costs</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Development of AMIS unit within MoFTER SAFFRD and establishment of operational set-up</td>
<td>Service contract EUR 430 000 incl.</td>
<td>Services EUR 430 000</td>
<td>Sufficient absorption capacity in the beneficiary institutions to effectively utilise project resources. The trained staff will stay in the relevant posts. Longer term government support and</td>
</tr>
<tr>
<td>- Establish and equip AMIS coordination office in MoFTER SAFFRD;</td>
<td>LTE (15 months)</td>
<td>Investment (supply) EUR 70 000</td>
<td></td>
</tr>
<tr>
<td>- Staff appointed to AMIS office and fully trained in correct operational procedures</td>
<td>Short term pool of TA Experts (6 months)</td>
<td></td>
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<tr>
<td></td>
<td>Incidentals 60 000 (Training; To include one study tour to a new member state; Internal travel)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.1. Strategy for establishment of full scale LPIS prepared and is ready for adoption by relevant structures by end of the Project

13.1. Criteria for selection and layout for sectoral analysis agreed between relevant stakeholders

13.2. MoFTER's endorsement of the sectors to be analyzed with inclusion of meat and dairy as compulsory sectors

14. Sectoral studies documented and available to SAFFRD by the end of the 10th month of the project

14.1. Relevant stakeholders are aware of the main findings of the analyses by the end of the 10th month of the project
(EU best practice).
- Set up database system and purchase equipment for enumerators.
- Develop programs and price collection templates.

1.2. Establish network of local AMIS enumerators able to provide regular and accurate market intelligence
- Enumerators selected and equipped for price collection;
- Train enumerators in best information collection techniques, determination of product quality and supply level estimation;
- Establish network reporting system:
  - Set up database in AMIS central office;
  - Quality control system devised and in place.

1.3. Determine range of AMIS products to be developed and systems for dissemination
- Define commodity list in line with EU requirements;
- Identify market recording points and regularity of information collection – daily, weekly, monthly;
- Survey potential users on alternate MIS requirements;
- Identify and set up dissemination systems – SMS text messaging, web site, printed reports, newspapers, radio, T.V.

1.4. AMIS Management system established and operational including representatives from all key stakeholder groups
- Establish AMIS steering committee;
- Select representatives for steering committee and hold regular meetings;
- Define AMIS monitoring and quality control system.

1.5. Implementation of AMIS
- Information collected, collated and stored in database system;

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<tr>
<th>Supply Contract EUR 70 000</th>
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<tr>
<td>(PDA hand held computers with telephone connection and preloaded software, network connections, servers, database software and development cost)</td>
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<tr>
<td>Set up of dissemination of Market Information Initial cost of SMS text messaging linkage, printing, web site establishment, etc.)</td>
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</table>
- Intelligence analysed, trends and forecasts being produced utilising EU recommended methodology;
- Specialised reports compiled according to pre-identified demand from end users (on a commercial basis);
- Monitoring of accuracy and reliability through quality control system.

1.6. Sustainable finance mechanism established for AMIS;
- Design of mechanism and propose to government;
- Obtain agreement/approval;
- Initiate mechanism and set targets for level of self financing to be attained.

1.7. Reporting
- Preparation of reports on AMIS implementation and operation.
- Develop strategy and methodology for long-term sustainability (cost neutral operation) of system.
- Suggestions for future development and possible expansion of AMIS.

Component II
2.1. Support the development of unit for LPIS coordination in MoFTER and units at local level
- Training of staff of MoFTER, entity and cantonal MoA, technical institutes
- Specification of equipment for pilot LPIS and supervise its delivery

2.2. Support to the establishment of LPIS model through stakeholders participation
- Identification of relevant institutions to be involved in LPIS
- Establishment of Working group for LPIS
- Assessment of current legal framework and preparation of legislation needed for LPIS
- Study trip for members of WG

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<th>Technical Assistance EUR 2 000 000</th>
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<td>Investment (supply) EUR 400 000</td>
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</table>

- Availability of ortho-photos and land registration and/or cadastral data.
- Sufficient absorption capacity in the beneficiary institutions to effectively utilise project resources.
- Sufficient budget funds for staffing and operational costs.
- The trained staff will stay in the relevant posts.
- Longer term government support and finance.
- Identification of LPIS model applicable in BiH and phases for its implementation
- Identification of roles and tasks of institutions involved in the implementation of LPIS and establishment of coordination between all levels
- Identification of technical requirements for equipment and thematic layers as well as financial and human resources needed
- To conduct Training Needs Analysis
- Implement a public information campaign

2.3. Implementation of LPIS in pilot area(s)
- Identification of criteria for selection of pilot areas
- Selection of area(s) for implementation of pilot LPIS
- Acquisition of orthophotos and other thematic layers of the pilot areas
- Purchase of hardware and software for implementation of pilot LPIS
- Collection, analysis and digitalization of existing cadastral layers and data
- Quality control of layers
- Interpretation of orthophotos and identification of present agricultural land use
- Preparation of agricultural parcels layers and databases
- Implementation of information campaign for farmers
- Field checks in consultation with farmers
- Update and corrections of agricultural parcel layers
- Final set up of LPIS
- Preparation of final report and recommendations

2.4. Subsidy control check based on the use of LPIS
- Identification of sample for subsidy control

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<tr>
<th>• Identification of LPIS model applicable in BiH and phases for its implementation</th>
<th>• Identification of roles and tasks of institutions involved in the implementation of LPIS and establishment of coordination between all levels</th>
<th>• Identification of technical requirements for equipment and thematic layers as well as financial and human resources needed</th>
<th>• To conduct Training Needs Analysis</th>
<th>• Implement a public information campaign</th>
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<tr>
<td>2.3. Implementation of LPIS in pilot area(s)</td>
<td>Identification of criteria for selection of pilot areas</td>
<td>Selection of area(s) for implementation of pilot LPIS</td>
<td>Acquisition of orthophotos and other thematic layers of the pilot areas</td>
<td>Purchase of hardware and software for implementation of pilot LPIS</td>
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<td>Quality control of layers</td>
<td>Interpretation of orthophotos and identification of present agricultural land use</td>
<td>Preparation of agricultural parcels layers and databases</td>
<td>Implementation of information campaign for farmers</td>
<td>Field checks in consultation with farmers</td>
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<td>Final set up of LPIS</td>
<td>Preparation of final report and recommendations</td>
<td>2.4. Subsidy control check based on the use of LPIS</td>
<td>Identification of sample for subsidy control</td>
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<td>2.5. Design of full scale LPIS</td>
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<td>- Testing of LPIS on an identified sample</td>
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<td>- Preparation of final report and recommendations</td>
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<td>- Development strategy for full scale LPIS</td>
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<td>- Preparation of reports on LPIS implementation and operation and recommendations for its sustainability</td>
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<td>- Organization of workshops, training sessions and presentation of the results of project supporting long term commitment</td>
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**Component III**

**3.1. Support definition of BiH sectors for performance of sectoral studies**
- Establish working group for definition of specific BiH criteria;
- Assess the state of play of BiH Rural Development programme;
- Identify and agree three other BiH sectors (besides meat and dairy) to be analyzed;
- Define criteria and layout of analyses compliant with IPARD requirements;

**3.2 Perform and present the main findings of five sectoral analyses for BiH agriculture and Rural Development sector**
- Conduct five sectoral studies;
- Organize public event to present the main findings to key stakeholders.

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<tr>
<th>Contribution Agreement with FAO EUR 500 000</th>
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<td>EUR 500 000</td>
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## ANNEX II: amounts (in EUR) Contracted and disbursed by quarter for the project

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<td>Contract 1.2 Supply contract AMIS</td>
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ANNEX III Description of Institutional Framework

Implementation of the proposed intervention will be coordinated at State level by MoFTER (Sector for Agriculture, Food, Forestry and Rural Development) and the future State level Payments Harmonisation Administration, while the actual implementation of activities and data collection could be assigned to the Agro-pedology Institute of Sarajevo (or other relevant institutions in BiH which need to be formally agreed by the main project beneficiaries) as well as respective Ministries of Agriculture at the entities level. At a national level, the role of MoFTER will be strengthened to ensure that they act to co-ordinate development of the collection, analysis, storage and reporting of information. To overcome institutional weaknesses and inherent overlapping institutional competencies of the key institutions, the formation of an IACS working group will be supported as the vehicle through which to coordinate longer-term national level development of agricultural payment schemes application. Furthermore, the eventual formation of a task force on LPIS will be discussed. While the organisational structure of the IACS working group is expected to be decided by the key beneficiary institutions at project start up, a proposal for its composition is indicated as likely to be the following; representatives from MoFTER (Sector for Agriculture, Food, Forestry and Rural Development), Entity Ministries of Agriculture, a representative of the “Land Administration Coordination and Advisory Board”.

A Memorandum of Understanding will be required to provide sufficient power for this working group to set and define standards and levels of information to be collected, require lower level administrations to provide basic information as requested and to resolve any disputes and questions about on agricultural subsidies and on land registration/administration.

While the mandate of the working group will be determined during the project’s initial phase and in participatory manner involving the key BiH institutions, it is assumed that activities will include:

- Co-ordination between the different structures working on agricultural subsidies and on land registration/administration;
- Co-ordination and definition of responsibilities between the different activities;
- Evaluating the cost-effectiveness of the LPIS implementation and the subcontracting activities;
- Creating synergies with other activities (projects and programmes) in agricultural and land registration;
- Approving standards and methodologies defined by the LPIS working group;
- Maintenance of suitable standards of quality for information produced.

The LPIS task force should include representatives of; MoFTER (Sector for Agriculture, Food, Forestry and Rural Development), Entity Ministries of Agriculture (and Brcko), Agropedology Institute of Sarajevo (and/or other implementation agency agreed by the main project beneficiaries), Geodetic Administration of both Entities and the Land Registration and Cadastre Offices.

There is a clear need for embedding and training of staff at all levels who are capable of implementing and coordinating the project activities. At central and Entities level an initial in depth training session on GIS and remote sensing techniques and management should be implemented for qualified staff from MoFTER, Entity Ministries of Agriculture, and the Agropedology Institute of Sarajevo (and/or other implementation agency agreed by the main
Improvement will also be required at regional and municipal levels, especially for raw data collection and initial analysis. This will focus on development of both Ministry of Agriculture regional staff, especially the staff from the Agricultural Inspectorate Department (particularly for collection of Farm land management data) and also the regional staff from the extension services. Municipal level staff will also be supported through training and development for collection of information.

It is foreseen that much initial support and development will be required at the very base level in the Municipalities and at regional or Cantonal level where the majority of the agricultural advisors/inspectors will be located. Infrastructure improvement, particularly through supply of Information Communications Technology (ICT) equipment on which land parcel information materials can be collected and analyzed will be key to rapid development and success of the project interventions. Networks will be established to speed up the data flow system.

An important support to the project will be the experience and the results from the EC funded “Spatial information services for BiH - phase two Digital Orthophoto Maps” project that is expected to produce ortho-photo maps responding to the LPIS requirements for the entire BiH territory (IPA 2007).

The institutions directly involved in the realization of the LPIS are expected to be:

- MoFTER (later MAFRD);
- Entity Ministries of Agriculture;
- Agropedology Institute of Sarajevo (and/or other implementation agency agreed by the main project beneficiaries);
- Land Registration and Cadastre Offices.
ANNEX IV Reference to laws, regulations and strategic documents (EU and BiH)

1. **LIST OF RELEVANT EU REGULATIONS**

   **a) AMIS**
   - Commission Regulation (EC) No 1663/95 of 7 July 1995 laying down detailed rules for the application of Council Regulation (EEC) No 729/70 regarding the procedure for the clearance of the accounts of the EAGGF Guarantee Section
   - Commission Regulation (EEC) No 3887/92 of 23 December 1992 laying down detailed rules for applying the integrated administration and control system for certain Community aid schemes
   - Commission Regulation (EC) No 2390/1999 of 25 October 1999 laying down detailed rules of the application of Regulation (EC) No 1663/95 as regards the form and content of the accounting information that the Member States must hold at the disposal of the Commission for the purposes of the clearance of the EAGGF Guarantee Section accounts
   - Council Regulation (EC) No 1259/1999 of 17 May 1999 establishing common rules for direct support schemes under the common agricultural policy
   - Council Regulation (EC) No 1234/2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation).\(^5\)
   - Council Regulation (EC) No 1249/2008 laying down detailed rules on the implementation of the Community scales for the classification of beef, pig and sheep carcases and the reporting of prices thereof.\(^6\)
   - Council Regulation (EC) No 562/2005 laying down rules for the implementation of Council Regulation EC No 1255/1999 as regards communications between the Member states and the Commission in the milk and milk products sector.\(^6\)
   - Council Regulation (EC) No 877/2004 laying down detailed rules for applying Regulation (EC) No 2200/2006 as regards notification of the prices recorded on the markets for certain fresh fruit and vegetables.\(^6\)

   **b) LPIS**

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\(^5\) Relevant regulations were presented at the TAIEX workshop in Sarajevo, BiH in March 2009.
Short review of the main EC regulations and definitions in the field of IACS and LPIS


- EC Regulation no. 885/2006 establishing norms for enforcing EC Regulation no. 1290/2005 on the accreditation of the paying agencies and other bodies and on the clearance of EAGF and EFRD accounts.

Relevant BiH legislation

1. The organization of the current BiH statistical system is organized on three levels (State, entity and level of local-regional or cantonal offices) with the competencies based upon the following legislation:
   - Law on protection of Individual Data (2001);
   - Law on Ministries (2002);
   - Law on Statistics of BiH (2004);
   - Law on Statistics of FBiH (2003);
   - Law on Statistics of RS (2003);
ANNEX V Details per EU funded contracts

**Component I - Development of an Agricultural Market Information System in BiH**

**Supply contract (EUR 70 000) Software and Hardware**  
The main provision regarding software and hardware are as following:  
1. PDA telephones  
2. Desktop computers  
3. Printer  
4. All in one printer, copier, scanner  
5. UPS 500 VA  
6. Interface to SMS service providers  
7. SMS messaging service

**Technical Assistance (service contract EUR 430 000)**  
1. Key Expert Long term (15 months) – Agriculture economics, Agriculture marketing or related topic  
2. Pool of ST Experts (6 months) including:  
   - Database and IT expert  
   - Market price collection expert  
   - Agricultural economists/statistics expert

**Component II - Development of a Land Parcel Identification System in BiH**

The main provision regarding software and hardware are as following (supply contract EUR 400 000):  
Provision of equipment for GIS and remote sensing activities and management  
- Purchase and installation of computers  
- Acquisition (or development) of GIS software compliant with IACS architecture – to use for managing spatial raster and vector layers, aerial photographs and satellite images being part of the GIS database for IACS purposes.  
- Purchase of ortho-photomaps obtained from aerial photographs in a scale of 1:10 000 or more if necessary for LPIS purposes (These are likely to be available through the EC funded project “Support to the Spatial Information Services”- aimed to improve administrative process and local governance related to land management and real property rights).  
- Purchase of satellite images (high, medium and low resolution, as well as multispectral) for crop identification.  
- Purchase of Hardware and software for the local level (municipalities), including:  
   - PCs;  
   - Scanners A4 format;  
   - Printers;  
   - Optical Character Recognition (OCR) software in Bosnian language.  
Also at local level, each municipality involved in the LPIS development will have some software and hardware equipment from the previous IPA – World Bank project 2007, but not sufficient for the project requirement. In any case the contractor should monitor if some
economies are possible. During the Inception phase a checking activities of the already available equipment should be carried out.

**Required Software and Hardware: description**

1. Workstation - High performance hardware configuration (full assuring both Geo-processing functionality in GIS environment and advanced elaborations, such as: Remote Sensing/Image Processing, 3-D Modelling, Photogrammetry and Stereo Display). The tenderers should propose a workstation that is designed to handle multiple users and multiple processes.
2. Storage and backup system
3. Plotter
4. Scanner A0
5. Desktop computers plotter - for the local level for implementation of pilot LPIS
6. Printers - for the local level for implementation of pilot LPIS
7. Scanners - for the local level for implementation of pilot LPIS
8. GIS packages (advanced version)- compatible with ESRI standards and formats, and compatible with ortho-photo formats – single and compressed
9. GIS packages (basic version)- compatible with ESRI standards and formats, and compatible with ortho-photo formats – single and compressed
10. Remote sensing/image processing package (compatible with ERDAS/ENVI standards and formats, and compatible with ortho-photo formats – single and compressed)
11. Full-featured OCR (Optical Character Recognition) 32-bit standalone software program with the library for Bosnian language - for the local level for implementation of pilot LPIS

**Technical Assistance (service contract EUR 2 000 000)**

1. Land Parcel Identification System Expert (Team leader)
2. Mid-term expert on GIS and remote sensing techniques - 10 months in the country during the life of the project
3. Key Expert in land registration - 9 months in the country during the life of the project
4. ST Expert in technical specification of equipment and software - 1 month in the country during the first part of the project
5. Two STE in training - 2 months each one in the country during the first 9 months of the project
6. Pool of STE Experts

**Component III – Agricultural Sectoral analysis** The agricultural sectors in which sector analysis is to be carried out are selected in close cooperation with the beneficiary country. In practice, each country is pre-selecting the sectors based on the EU standard- and economic-relevance. Then the sector study is conducted to find out what segment/area/beneficiary would be targeted in detail. Clear justification should be provided for selection of the individual sectors. Typically, the analyses are carried out for:
- Meat, including rendering
- Dairy
- Fruits and vegetables (or separately for each, depending on the local circumstances)
- Wine.
Sectoral analyses should result in filling the data gaps in the IPARD Programmes, identifying the weaknesses and sectoral concerns. The sector analysis should also take into account specific regional development needs, where appropriate.

**Expected costs /method of implementation**

The studies should be **carried out by the independent experts**. The option of concluding the Contribution Agreement with **Food and Agriculture Organization** of the United Nations (FAO) has been considered as recommended by DG AGRI in light of FAO's extensive experience in the field of sectoral analysis in agriculture across different countries. As seen in the past, cost of an individual sectoral study may be up to EUR 150 000. However, if done as Contribution Agreement with FAO, the whole set of sectoral analyses are estimated to cost around EUR 500 000⁶.

Method of implementation related to this contract is explained in PRAG under Item 7.1. Relations with international organizations: joint management, under actions to be financed "*to be jointly elaborated between the Commission and the international organization*". Consequently, the Contribution Agreement would be proposed as a legal instrument to be signed between the parties. The detailed budget and the description of the action should be determined during the preparation of the Contribution Agreement, which is in line with Item 7.1.2. of PRAG which states: "*For organizations covered by a framework agreement focusing on results, it should be reminded that the scrutiny of the implementation of the action by the services of the Commission should focus more on results*".

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⁶ Reference document: "Sectoral analyses for the IPARD" prepared by DG AGRI