

Standard Summary Project Fiche – IPA centralised programmes

Project number 22: Equipment and courier service supply and capacity building of Serbian National Referent Laboratories Directorate in food chain

1. Basic information

- 1.1 CRIS Number: 2009/021-765**
- 1.2 Title:** Equipment and courier service supply and capacity building of Serbian National Referent Laboratories Directorate in food chain
- 1.3 ELARG Statistical code:** 03.12
- 1.4 Location:** Serbia, laboratory complex in food chain located in Batajnica.

Implementing arrangements:

- 1.5 Contracting Authority:** EU Delegation to the Republic of Serbia
- 1.6 Implementing Agency:** EU Delegation to the Republic of Serbia
- 1.7 Beneficiary** (including details of project manager):

Ministry of Agriculture, Forestry and Water Management- Sector for legal and financial affairs- Project centre, Omladinskih brigada 1, New Belgrade

The Project Manager is assistant Minister for legal and financial affairs, Mr. Momcilo Mitreski.

The Project Steering Committee (PSC) will be responsible for the overall quality of project implementation and provision of strategic direction. The PSC will ensure that the project outputs and main goals are met, approve work plans and reports, offer guidance and advise on project activities.

The Steering Committee will be chaired by the Beneficiary Project Manager and additionally consist of representatives of EC Delegation, Plant Protection Directorate, Veterinary Directorate and MAFWM.

The steering committee will meet each quarter to discuss the scope and progress of implementation.

Financing:

- 1.8 Overall cost (VAT excluded)¹:** **6.500.000 EUR**
- 1.9 EU contribution:** **6.500.000 EUR**
- 1.10 Final date for contracting:** 2 years after the signing of the Financing Agreement (FA)
- 1.11 Final date for execution of contracts:** 4 years after the signing of the FA
- 1.12 Final date for disbursements:** 5 years after the signing of the FA

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

2. Overall Objective and Project Purpose

2.1 Overall Objective:

To contribute to sustainable and confident food chain laboratory network capable of protecting human health, animals, plants and the environment, and promote the state economy through the provision of safe and good quality food to domestic and international markets.

2.2 Project purpose:

The purpose of the project is to commission National Reference Laboratories Directorate in Food Chain in Batajnica complex and make it fully operational in order to be in line with EU best practice and standards.

2.3 Link with AP/NPAA / EP/ SAA

European Partnership (EP)

European Partnership (EP) – Annex II, Section Agriculture, point 4. “Continue to upgrade veterinary, phytosanitary, wine and sanitary laboratories, inspectorates and controls at external borders”.

One of the principles, priorities and conditions in the European Partnership with Serbia including Kosovo under UNSCR 1244 is to continue to upgrade laboratories in food chain: phytosanitary, veterinary and food safety (sanitary) laboratories which are the focus of this project.

Stabilization and Association Agreement (SAA)

Article 97 “Agriculture, and the agro-industrial sector”: cooperation between the Parties involves modernization and restructuring the agriculture to reach community sanitary requirements and implementation of practices of Community rules and standards. This project is supporting efforts of Serbia to reach best EU practices and standards in food chain.

National Plan for Integration (NPI)

When Serbia becomes candidate country NPI will become National Plan for Adoption of Acquis (NPAA), pages 362, 366, 373, 379, 367, 368, 370, 374, 376, 384.

All quoted pages refer to either institutions that Serbia has already developed or short/mid term priorities. Serbia dedication to follow Memorandum of understanding of food chain safety laboratories reform from 2002 and the Annex from 2003 was the starting point for upgrading selected laboratories and all activities from this project will allow performance of final steps to achieve min term priorities in running Serbian National Reference Laboratories network.

2.4 Link with MIPD

Multi Annual Indicative Plan (2009-2011) states support for standardization, accreditation, food safety, veterinary and phytosanitary policy consumer protection alignment of national legislation with EU standards in the food safety, veterinary and phytosanitary field. Commissioning, achieving full operation and accreditation of Serbian National Reference Laboratories network will support Serbia to achieve this (pages 26-27).

2.5 Link with National Development Plan (where applicable)

N/A.

2.6 Link with national/ sectorial investment plans (where applicable)

Public Administration Strategy

Serbian National Reference Laboratories Directorate is going to be integral part of Ministry of Agriculture, Forestry and Water Management. All employees are going to be civil servants and most of the facts from Public Administration Strategy will be addressed for them as well.

Regional Development Strategy

In order to provide safe food for consumers, Regional Development Strategy (page 134) is quoting Strategy for Agriculture which defines regional and national laboratories. Except regional public health laboratories, all laboratories are going to be in focus of this project, especially national reference ones. Project will support institutional, organisational development of „centre of excellence“- Serbian National Reference Laboratories Directorate.

Poverty Reduction Strategy Paper and other sectorial strategies

Pages 81 and 85: areas like animal and plant health, food safety and full harmonization with EU are sources for new employment. In order to start up this network, approximately 100 staff in national reference laboratories and 20 in regional laboratories are going to be employed. The target group is young bachelor, master or PhD mainly without experience in order to adopt best available science without prejudice coming from experience in working in old system. Results of this project will affect decrease of non employed young staff with high degree in education.

3. Description of project

3.1 Background and justification:

Serbia's presence at international level is verified by membership in International Plant Protection (IPPC), OIE, and Codex, accession to World Trade Organization (WTO), UPOV, signing of the Convention of Biodiversity and commitments to become member of EU which was verified with SAA.

Transposition and implementation of Council Regulation 882 and other relevant legislation in food chain (phytosanitary, seed, etc) is priority for MIPD, EP and SAA. Establishment of National Reference Laboratories is middle term priority in SAA.

Risk management for food chain is increasing the focus on the adequacy of national food surveillance programs, the need of harmonization of standards and quality assurance role.

The laboratories will play a major role in contributing to the MAFWM objective for evidence based policy. They will provide surveillance data, expert interpretation and advice, scientific support for underpin risk based regulation and statutory inspection functions (annual multiannual and surveillance programs, etc). They will exchange information during emergency response with national laboratories of other countries and provide risk assessment and knowledge management.

The opening of different markets (EU, WTO, CEFTA, and Russia) to the Serbian agro-industry is dependent on the confidence in laboratory system, crucial aspect for entering and participation on these markets.

Consumers' attitude has changed significantly and they demand to be guaranteed about safe and good quality food.

Serbian National Reference Laboratories Directorate and its associated network can now be legally established by Law on food safety which is approved by Parliament and it will be under jurisdiction of MAFWM only. The whole concept was resulted from recommendations from previous EU funded projects: A Policy Advisory Unit (PAU), Technical Assistance to the Reform of the Food Chain Laboratories in Serbia (RFL), Technical Assistance to Serbian Food Chain Safety Laboratories (FCSL) and current Twinning project „Institutional Capacity Building of the Food-Chain Laboratories Administration“ (SR 2005/IB/AG/04).

An assessment of all laboratories within food chain has been undertaken by EU experts on Policy Advisory Unit funded through European Agency for Reconstruction (EAR). Careful consideration was given to geographical coverage, including proximity to major border crossings, to important production areas, to the staff, resources and management of existing laboratories, and to potential conflicts of interests.

Based on this assessment, the Government of Serbia adopted the Information on donations in sector of Agriculture part of which was the list of agreed laboratories for control of food chain safety. Subsequently, the Memoranda of Understanding for the use of counterpart funds generated within previous EU funded programmes (please see section 3.6) have been signed. The Memoranda foresaw upgrading of the food chain control laboratories as one of the priorities for funding.

The following reference laboratories were defined in MoU: National Reference Food Safety Laboratory, National Animal Health Reference Laboratory, National Reference Laboratory for Residues, National Reference Phytosanitary Laboratory, National Reference Laboratory for Exotic Diseases from former List A, Official Seed Testing Station.

Besides that a supporting network is selected:

- 6 regional animal health laboratories (within Scientific Veterinary Institutes- Niš, Novi Sad, Šabac, Zaječar, Sombor and Kraljevo),
- 14 Regional Phytosanitary Laboratories (within Agricultural Stations- Sombor, Novi Sad, Vrbas, Sremska Mitrovica, Vršac, Pančevo, Kikinda, Kragujevac, Kruševac, Čačak, Smederevo, Niš, Vranje and Zaječar);
- 12 Regional Seed Laboratories (within Agricultural Stations- Sombor, Novi Sad, Vrbas, Sremska Mitrovica, Vršac, Pančevo, Kikinda, Kragujevac, Čačak, Smederevo, Niš, and Zaječar);
- 9 Regional Laboratories for Food Safety (within Public Health Institutes- Subotica, Novi Sad, Požarevac, Šabac, Niš, Kruševac, Belgrade, Zaječar and Vranje).

Among regional phytosanitary laboratories there is not same level of expertise. Only five regional phytosanitary laboratories (Sombor, Sremska Mitrovica, Čačak, Smederevo and Niš) are performing screening and some identification tests of harmful organisms the others represent support for visual inspection and official control during marketing of seed and planting material.

National Reference Laboratories Directorate will monitor performance of tasks of associated network according to criteria specified by Council Regulation 882. Annual monitoring plan in part of food chain is specifying number of samples that will be processed by regional laboratories. Number of samples in phytosanitary field is approximately 20.000 thousands of samples, in seed 100.000 samples, pesticide residues it is planned to be 2.000 samples, 8.000

of veterinary medicines samples. National Reference Laboratories Directorate will monitor performance of regional laboratories by retesting certain percent of samples processed by regional laboratories. Beside that it will do confirmatory testing and other testing where expertise is required.

Current Twinning project “Institutional Capacity Building of Food Chain Laboratories Administration” is deeply involved in commissioning of Serbian National Reference Laboratories Network. Working group for Strategic plan for reform of Serbian Food Chain laboratories Network established by Ministry of Agriculture, Forestry and Water Management prepared a report on equipment that was supplied through RFL project before reconstruction, refurbishment and decision on official status of laboratories (reference in Interim mission report no. 6 of the Twinning project). On request of BC project leader, raised on Steering group meeting 14. May 2008 audit of equipment being relocated was performed. In report on audit it is cited „It is important to note that much of the equipment in use was purchased several years ago and although most could be moved to Batajnica laboratory, it is fast becoming obsolete and will be in need of replacement in next few years. It should also be noted that some items have already gone repair e.g. laminar flow cabinet- Sremska Mitrovica. However an important point to note is that the removal of this equipment from these laboratories to the Batajnica laboratory is likely to have significant impact on the work programmes in each laboratory, and will for example disrupt surveillance and monitoring of official samples (Serbian borders and internal control). These laboratories have, in order to comply with legislative requirements, had to purchase additional equipment to supplement that obtained as part of the Batajnica shipment. If the equipment is moved to Batajnica laboratory will not be able to support implementation of any standards whilst the equipment is being re-commissioned. In view of the age of equipment it is recommended that the possibility of funding for purchase of new equipment for the Batajnica laboratory in support of its proposed role as National Reference Laboratory should be explored.“ Current Twinning project will assist in preparation of equipment check list and its technical specification necessary to fulfil relevant standards.

SWOT analyses are result of current Twinning project “Institutional Capacity Building of Food Chain Laboratories Administration” since it was necessary to prepare draft of Strategic plan.

| Strength | Weakness |
|---|---|
| <p>Law on food safety solves legal basis for establishment of National reference laboratories in food chain</p> <p>Law on food safety allows transparent procedure for authorization of laboratories, using procedures prepared by current Twinning Project</p> <p>Highly motivated and trained staff</p> <p>Staff for veterinary and seed laboratories having good technical knowledge</p> <p>Number of postgraduates highly motivated to be selected to work in referent laboratory</p> <p>Awareness of tasks of future reference laboratories</p> <p>Good background and experiences from previous and current projects related with National Reference Laboratories</p> | <p>Lack of laboratory managers</p> <p>Impact related to the transfer of working staff</p> |

| Opportunities | Threats |
|--|--|
| <p>Existing infrastructure</p> <p>Existing equipment in regional laboratories, which is used for current surveillance programs</p> <p>Existing protocols for analyses available and SOPs prepared in regional phytosanitary laboratories</p> | <p>Needs for further adaptation</p> <p>New equipment needs, since the previously bought are obsolete</p> |

Based on SWOT analyses procurement plan for equipment is prepared and so far all necessary equipment for all National Reference Laboratories (food safety, residues, seed, phytosanitary, exotic diseases from former OIE list A) specified and approximates of costs as well by this Working group.

Recently approved Law on Food safety and other relevant laws in food chain (Law on pesticides, Law on Plant Health etc) provide legal basis for establishment of National Reference Laboratories Directorate as part of MAFWM with some level of autonomy coming from its status of legal entity. Current Twinning project will assist in preparation of appropriate job descriptions, but when this project expires it will be hard for this completely new institution to develop in line with EU best practices and standards without assistance through new twinning project.

3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact (where applicable)

When project will end Serbia will have its National Reference Laboratories Directorate and associated network in place, operational, performing its activities defined by following laws: food safety, animal health, plant health, pesticides. It will be financed from budget and from fees collected during official controls performed by inspectors. Law on Food Safety is establishing Directorate for National Reference Laboratories in Food Chain as integral part of state administration and at the same time legal entity so the results of the project will be coherent with the Serbian Institutional strategy.

Serbian National Reference Laboratories Directorate will play a major role in contributing to the MAFWM objective for evidence based policy. They will provide surveillance data, expert interpretation and advice, scientific support for underpin risk based regulation and statutory inspection functions (annual multiannual and surveillance programs, etc). It will exchange information during emergency response with national laboratories of other countries and provide risk assessment and knowledge management.

Serbian National Reference Laboratories Directorate will become “centre of excellence” since it will implement or develop standards to unify performance by regional laboratories, participate in international proficiency testing and organize and monitor domestic proficiency testing, prepare guidance for sampling, survey for inspectors (good practice manuals), work plans for regional laboratories and check their performance, represent Serbia in relevant organisations where technical expertise is required.

It will be financed from budget as integral part of the Ministry and from fees collected it will be able to further upgrade its performance and participate in international networks.

3.3 Results and measurable indicators:

Result 1: Equipment and courier service delivery to Serbian National Reference Laboratories Directorate in food chain;

Indicator for result 1: Technical specification of equipment enables achieving international accreditation according to EN ISO/IEC 17025:2005, EN 45003 and work plan for courier service in force.

Result 2: staff trained in different analytical methods and capable to adopt best EU practice and best available science in food chain;

Indicator for result 2: training certificates

Result 3: Laboratory Information System developed throughout the whole network;

Indicator for result 3: LIMS in use.

Result 4: web based quality and environmental management systems in place;

Indicator for result 4: certificate from internationally recognized certification body

3.4 Activities:

Activity 1

1.1. prepare equipment check list and plan for courier service with detailed technical specifications in line with best available science and standards following recommendations from Twinning project “Institutional Capacity Building of Food Chain Laboratories Administration”;

1. 2. provide equipment delivery;

Activity 2.

2.1. prepare training plan in different analytical methods for staff and perform on job training, study visit, in room training;

Activity 3.

3.1. prepare plan for development LIMS for whole network, evaluate links with other information systems in food chain control and develop software for its implementation;

Activity 4.

4.1. agree strategy for achieving accreditation with definition of the scope of accreditation;

| |
|--|
| This project will be implemented through 1 supply and 1 twinning contract. |
|--|

3.5. Conditionality and sequencing:

Serbian Law on food safety actually is adopted in Parliament and this provide legal basis for establishment of National Reference Laboratories Directorate. Now since the Law is in force Ministry of Agriculture, Forestry and Water Management is preparing budget line for National Reference Laboratories Directorate because it is integral part of Ministry and like other directorates can plan budget for following year. Some of the future staff already works in other Ministries departments and some will be moved from regional laboratories. For some new staff it is expected that recruitment will start in late autumn 2009 through open competition and staff employed will be able to take part in project (attendance on training and participation in accreditation process).

Training can be performed any time in Serbia (using facilities of regional laboratories) even before equipment delivery in Batajnica complex or abroad which is preference in this moment to allow staff from National Reference Laboratories Directorate to work day-by-day with EU experts.

3.6 Linked activities

A Policy Advisory Unit for Agriculture (PAU)

Analysis undertaken by the PAU has been instrumental in raising the awareness of the MAFWM to the need for institutional reform, a priority which has been included in Serbia's Poverty Reduction Paper. PAU also assisted the MAFWM and the Ministry of Health to initiate and manage the upgrading of the veterinary, phytosanitary, seed and food safety laboratory system.

Technical Assistance to the Reform of the Food Chain Laboratories in Serbia (RFL)

(Contract: 02/SER01/06/11)

Through RFL project equipment was supplied in 2003 and technical assistance was provided to improve quality management system within laboratories, mainly regional ones.

Technical Assistance to Serbian Food Chain Safety Laboratories (FCSL)

The role of FCSL was to oversee the reconstruction and refurbishment of the veterinary, phytosanitary and food-safety laboratory system.

CARDS 2005 Twinning project "Institutional Capacity Building of Food Chain Laboratories Administration"

(Contract: SR 2005/IB/AG/04)

Current Twinning Project "Institutional Capacity Building of Food Chain Laboratories Administration" is making necessary preparations in order to well organize Serbian National Reference Laboratories network. Audit of infrastructure after refurbishment is already done which will serve as starting point for project plan for additional refurbishment like replace of tiled floors and walls, separation of some blocks in same building (like separation phytosanitary and seed block) in order to restrict entrance, replace of current benching etc. Experts from this twinning will assist in preparation of equipment check list and its technical specification relevant to fulfil all required standards. Strategic and action plan for commissioning of Serbian National Reference Laboratories Directorate and associated network will be one of the results of this twinning and will make easier performance of this project. Current twinning project will end before this one starts.

Counter part fund

This fund was established in 2002 after sign of Memorandum of understanding regarding laboratories in food chain. So far 8.000.000 EUR was spent and remaining funds (5.000.000 EUR) are already dedicated to be spend for certain purpose (new laboratory infrastructure for exotic diseases from former list A etc). Since there is some possibility for modification this can be well planned since there is a need for additional refurbishment.

National phytosanitary projects

Plant Protection Directorate has funded several projects to support associated regional phytosanitary laboratory network of future National Reference Laboratory in Food Chain in Batajnica complex with almost 1.000.000 EUR for equipment needed to allow performance of all analyses necessary to identify harmful organism (equipment relocated from Batajnica site could not enable full identification), for glasshouse in regional laboratory in Nis and

throughout whole network supply of chemicals, consumables, reference cultures and necessary training. Beside that Plant Protection Directorate has funded projects to develop SOPs that will be used in National Reference Laboratories in Food Chain in Batajnica complex in total of 30,000 EUR. This was necessary because unlike regional veterinary laboratories selected regional phytosanitary laboratories had poor expertise and lack of equipment.

3.7 Lessons learned

CARDS “Technical Assistance to the Reform of the Food Chain laboratories in Serbia (RFL)“ and Technical Assistance to Serbian Food Chain Safety Laboratories project (FCSL) showed that it is very important to carefully plan activities. One of the lessons learned is that selection of experts for equipment check list and its technical specification is that politics cannot interfere in selection of experts because that will result in not satisfactory technical specification. In order to avoid this, EU experts from current twinning project will prepare technical specification.

Training plan need to be prepared very carefully to fulfil requirements from Council Regulation 882, for quality management and environmental management system and need to include not only different analytical methods but also standards management like validation of methods, ring testing etc.

Frequent change of BC steering group members on current Twining project “Institutional Capacity Building of Food Chain Laboratories Administration” has postponed some activities, mainly strategic ones since every new BC project leader or BC RTA needed time to understand role of project. It is very important to provide continuity and the way how it can be provided is to nominate in the Steering Committee of this project members who are permanent employees in Ministry of Agriculture, Forestry and Water Management.

One of the good experiences was involvement of staff from regional laboratories in assisting in creation of some of the terms of references for certain activities which resulted in successful training so their experiences need to be used now to some extent since it is very important in the training plan to address connection between National reference laboratories and its associated network of regional laboratories.

4. Indicative Budget (amounts in EUR)

| | | | SOURCES OF FUNDING | | | | | | | | | |
|--|--------|---------|---------------------------|----------------------------|-------|---------------------------------|-------|-----------------|--------------------------|--------------|----------------------|-------|
| | | | TOTAL EXP.RE | IPA COMMUNITY CONTRIBUTION | | NATIONAL CONTRIBUTION | | | | | PRIVATE CONTRIBUTION | |
| ACTIVITIES | IB (1) | INV (1) | EUR (a) = (b) + (c) + (d) | EUR (b) | % (2) | Total EUR (c) = (x) + (y) + (z) | % (2) | Central EUR (x) | Regional / Local EUR (y) | IFIs EUR (z) | EUR (d) | % (2) |
| Activity related to result 1 | | | | | | | | | | | | |
| Contract 1. (Supply) | - | X | 5.000.000 | 5.000.000 | 100 | | | | | | | |
| Activities related to results 2, 3 and 4 | | | | | | | | | | | | |
| Contract 2. (twinning) | X | - | 1.500.000 | 1.500.000 | 100 | | | | | | | |
| TOTAL IB | | | 1.500.000 | 1.500.000 | 100 | | | | | | | |
| TOTAL INV | | | 5.000.000 | 5.000.000 | 100 | | | | | | | |
| TOTAL PROJECT | | | 6.500.000 | 6.500.000 | 100 | | | | | | | |

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)

| Contracts | Start of Tendering | Signature of contract | Project Completion |
|--|--------------------|-----------------------|--------------------|
| Contract 1. (supplies) (Activity related to result 1.) | N+1Q | N+5Q | N+12Q |
| Contract 2. (Twinning) (Activities related to results 2, 3 and 4) | N+1Q | N+5Q | N+12Q |

6. Cross cutting issues (where applicable)

All rights of minorities and vulnerable groups' concerns will be taken into account during recruitment process of additional staff which is not part of the project directly, but the staff employed after recruitment are going to participate in it.

Open and running of National Reference Laboratories Directorate and its monitoring of associated network will support production of safe and good quality food with higher value on market which will make better condition of life for producers and consumers as well.

6.1 Equal Opportunity

Indicate how equal opportunities and non-discrimination will be respected as regarding gender as well as minorities at the implementation stage.

6.2 Environment

Open and running of all laboratory complexes where National Reference Laboratories Directorate will be located will allow implementation of mechanism to control laboratory waste issue not only for this laboratory but also for associated network since courier service will be in charge for this as well.

6.3 Minorities

All rights of minorities and vulnerable groups' concerns will be taken into account during recruitment process which is not part of the project directly, but the staff employed after recruitment are going to participate in it.

ANNEX I: Logical framework matrix in standard format

| | | | |
|---|---|---|-------------------------------------|
| LOGFRAME PLANNING MATRIX FOR Project Fiche | | Programme name and number | |
| Food chain laboratories | | Contracting period expires after 2 years | Disbursement period expires 5 years |
| | | Total budget : 6,500,000 E | IPA budget: 6,500,000 E |
| Overall objective | Objectively verifiable indicators | Sources of Verification | |
| To put in place a sustainable and confident food chain laboratory network capable of protecting human health, animals, plants and the environment, and promote the state economy through the provision of safe and food of good quality to domestic and international markets | Serbian National Reference Laboratories in line with provisions of Council Regulation 882 (Article 33. and 12, paragraphs 2 and 3) relating National Reference Laboratories | <ul style="list-style-type: none"> - Government report - Act on establishment of Serbian National Reference Laboratories Directorate as single administration of national reference laboratories as legal entity; | |

| Project purpose | Objectively verifiable indicators | Sources of Verification | Assumptions |
|---|---|---|--|
| <p>The purpose of the project is to commission National Reference Laboratories in Food Chain in Batajnica complex and make it fully operational in order to be in line with EU best practice and standards.</p> | <p>Serbian National Reference Laboratories in food chain commissioned and with international accreditation;</p> | <p>EC progress report Serbian National Reference Laboratories established by Government and relevant Management and Governing Board selected; Laboratory staff recruited according to job descriptions prepared by twinning project “Institutional Capacity Building of Food Chain Laboratories Administration”</p> | <p>Commitment towards accession to EU EU and government resources are available for sustainability Agriculture census carried out.</p> |

| Results | Objectively verifiable indicators | Sources of Verification | Assumptions |
|---|---|--|---|
| <p>R 1: Serbian National Reference Laboratories Directorate in food chain supplied with equipment and courier service;</p> <p>R 2: staff trained to adopt best EU practice and best available science;</p> <p>R 3: Laboratory Information System developed throughout the whole network;</p> <p>R 4.: web based quality management system in place.</p> | <p>Indicator for R 1: Technical specification of equipment enable achieving international accreditation according to EN ISO/IEC 17025:2005, EN 45003 and work plan for courier service in force</p> <p>Indicator for R 2.: training certificates</p> <p>Indicator for R 3. LIMS in use.</p> <p>Indicator for R 4.: certificate from Internationally recognized certification body</p> | <p>Quarterly reports on progress</p> <p>Internal documents of Steering committee</p> <p>Audit by International certification body regarding technical issues</p> <p>EC progress report</p> <p>Auditors of the contracted professional agency that will verify quality of training, test LIMS and auditing of achieved accreditation.</p> | <p>- frequent change of members of steering committee</p> |

| Activities | Means & Costs | Assumptions |
|--|---|---|
| <p>A 1. 1. prepare equipment check list and plan for courier service with detailed technical specifications in line with best available science and standards following recommendations from twinning project “Institutional Capacity Building of Food Chain Laboratories Administration”;</p> <p>A 1. 2. provide equipment delivery;</p> <p>A 2. prepare training plan in different analytical methods for staff and perform on job training, study visit, in room training;</p> <p>A 3. prepare plan for development LIMS for whole network, evaluate links with other information systems in food chain control and develop software for its implementation;</p> <p>A 4. agree strategy for achieving accreditation with definition of scope of accreditation.</p> | <p>A 1-Contract 1. 5.000.000 euro for equipment supply including courier service;</p> <p>A 2, A 3, A 4 Twinning Contract 2. – 1.500.000 euro for training, development and implementation of LIMS and web based accreditation</p> <p>Costs for audit in total 14.000 E (20 expert days)</p> | <p>- Staff provided with sufficient support and opportunity to use the acquired skills.</p> <p>- All training arrangements, studies, supplies completed in time and the right levels of quality and quantity, as planned</p> <p>- Timely transfer of the EU funding</p> |

ANNEX II: amounts (in million €) Contracted and disbursed by quarter for the project

| Contracted | N+5Q | N+6Q | N+7Q | N+8Q | N+9Q | N+10Q | N+11Q | N+12Q | Total |
|-------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Contract 1. | 5.00 | | | | | | | | 5.00 |
| Contract 2 | 1.50 | | | | | | | | 1.50 |
| Cumulated | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 | 6.50 |
| Disbursed | | | | | | | | | |
| Contract 1. | 3.00 | | | 2.00 | | | | | 5.00 |
| Contract 2 | 0.30 | | 0.35 | | 0.35 | | 0.35 | 0.15 | 1.50 |
| Cumulated | 3.30 | 3.30 | 3.65 | 5.65 | 6.00 | 6.00 | 6.35 | 6.50 | 6.50 |

ANNEX III Description of Institutional Framework

Council Regulation 882 sets institutional framework for establishment of National Reference and official control laboratories in food safety area.

Other EU legislation more specific to certain areas (plant health, seeds, breeders rights, veterinary residues etc.) still have strong or about to form strong link with Council Regulation 882 and are part of food chain.

Serbian National reference laboratories network are about to be legally established following EU best practice and recommendations from previous EU funded projects: A Policy Advisory Unit (PAU), Technical Assistance to the Reform of the Food Chain laboratories in Serbia (RFL), Technical Assistance to Serbian Food Chain Safety Laboratories (FCSL) and current twinning project Institutional Capacity Building of the Food-Chain Laboratories Administration Contract: SR 2005/IB/AG/04.

Law on food safety will allow establishment of Directorate for National Reference Laboratories which will be integral part of Ministry of Agriculture and legal entity. Law on public administration, Law on civil servants, Law on budget and Rules on systematization of civil servants will apply on it regarding administration and Financing and Law on food safety, Law on Plant Health, Law on Pesticides will be relevant for its tasks.

ANNEX IV Reference to laws, regulation and strategic framework

European Partnership (EP)

Section Agriculture, point 4. “Continue to upgrade veterinary, phytosanitary, wine and sanitary laboratories, inspectorates and controls at external borders”

Stabilization and Association Agreement (SAA)

Article 97 - Agriculture, and the agro-industrial sector

Cooperation between the Parties shall be developed in all priority areas related to the Community *acquis* in the field of agriculture, as well as veterinary and phytosanitary domains. Cooperation shall notably aim at modernising and restructuring the agriculture and agro-industrial sector, in particular to reach community sanitary requirements, to improve water management and rural development as well as to develop the forestry sector in Serbia and at supporting the gradual approximation of Serbian legislation and practices to the Community rules and standards.

National Plan for Integration (NPI). When Serbia becomes candidate country NPI will become National Plan for Adoption of Acquis (NPAA)

Page 362- 3.12.1.2.2 *Institutions*

It is envisaged to continue with the programme for laboratory equipment, training of personnel and development of standard operational procedures, implementation of international standards in veterinary and food safety areas and the development of new methods for diagnostics and food examination.

Page 366. and 373. and 379. - Memorandum of understanding of food chain safety laboratories reform from 2002 and the Annex from 2003.

Page 367- The system for diagnostics and identification of harmful organisms is supported by the ‘network’ of laboratories consisting of 5 regional laboratories (routine analyses are conducted on a great number of samples especially for cereals and pseudo cereals and vegetables without *Solanaceae*, for industrial and fodder plants, for *Solanaceae*, grapevine and small-sized fruit and pip-fruit and stone-fruit) and laboratories at scientific institutes and faculties, which are responsible for expertise and which are authorized by the Ministry of Agriculture, Forestry and Water Management until the Reference Laboratory is set up.

Page 368. 3.12.2.2.2. *Institutions*

Continuation of the programme regarding the equipping of regional laboratories, staff training and standard operation procedures development, implementation of international standards in phytosanitary area and development of new diagnostic methods which were approved and launched in 2007. The aim of the programme realization is to determine and verify standard operation procedures which will be beneficial in many ways both in diagnosing as well as in preparation for the establishment of the National Reference Phytosanitary Laboratory. For these purposes, the amount of RSD 43,000,000 (€ 537,500) has been allocated from the budget.

Page 370. 3.12.3.3.2. *Institutions*

- Setting up of the Reference Phytosanitary Laboratory in complex located in Batajnica, which was reconstructed and equipped under the Technical Assistance for Serbian Food Chain Safety Laboratories Project.

- Continuation of the programme and strengthening of regional laboratories, staff training and standard operation procedures development, implementation of international standards in phytosanitary area and development of new diagnostic methods which were approved and launched in 2007.

- Equipping of regional laboratories and standard operation procedures development

- Establishing the function of the National Reference Laboratory Professional

Page 374. *3.12.3..2.2. Institutions*

Establishment of the Reference laboratory for seed and planting material within the complex located in Batajnica, which has been reconstructed and equipped as part of the Technical Assistance for Serbian Food Chain Safety Laboratories Project.

Page 376. Founding Reference laboratory for seed and planting material within Batajnica complex which has been reconstructed and equipped within the Technical Assistance for Serbian Food Chain Safety Laboratories Project.

Page 384. Establishing the Reference laboratory for post-registration control and PPP residues within Batajnica complex, which has been reconstructed and equipped within Technical Assistance for Serbian Food Chain Safety Laboratories Project and accreditation activities of all laboratories dealing with PPP in line with ISO 17025.

Poverty Reduction Strategy Paper and other sectorial strategies

Page 81 – Agriculture is source of new employment.

Protection of human health and environment, status of country with safe food for republic of Serbia, its consumers and in international trade can be achieved through control of animal health and control of contamination of food, phytosanitary control, by minimizing effects of pesticides, veterinary drugs and additives in food. Principle of full harmonization with EU will be long term priority.

Page 85. the highest level of unemployed are young people and ratio of low education profile employed is high.

Public Administration Strategy

Serbian National Reference Laboratories is going to be integral part of Ministry of Agriculture, Forestry and Water management and at the same time have some independence as separate legal entity. All employes are going to be civil servants and most of the facts from Public Administration Strategy will be addressed for them as well.

Regional Development Strategy

Page 134 - in order to harmonise well with EU standards and improvement with conditions for export attention need to be paid on food safety. This is very important for not developed regions in Serbia. There is 75 laboratories in Serbia which will with new organisation in line with Strategy for Agriculture be formed in 32 regional laboratories and 4 national laboratories for animal health, phytosanitary and food safety.

ANNEX V- Details per EU funded contract

| Modalities of implementation of project | |
|--|-------------------|
| Results | Type of Contract |
| R 1: Serbian National Reference Laboratories Directorate in food chain supplied with equipment and courier service; | Supply Contract |
| R 2: staff trained to adopt best EU practice and best available science; | Twinning Contract |
| R 3: Laboratory Information System developed throughout the whole network; | |
| R 4.: web based quality management system in place; | |

The profiles of the team leader, resident twinning advisor (RTA) and short term experts for the twinning contract must have adequate experience and knowledge in the field of food chain control laboratories. The experts team will constitute: 1 team leader, 1 RTA, number of short-term senior experts from the each component of the project – food microbiology, residues of pesticides, veterinary drugs, mycotoxins, milk, phytosanitary, seed and exotic diseases as well as for training, capacity building and other expertise.

An indicative equipment list within supply contract is shown, please note that this is just a provisional specification, since experts on current twinning project will prepare final one with a detailed technical specifications and number of items.

Equipment and courier service supply and capacity building of Serbian National Referent Laboratories Directorate in food chain

A **Food and feed microbiology laboratory** Partial Cumulated

In general:

autoclaves (for waste, media preparation, dirty materials):

balances (technical and analytical)

incubators (CO₂ etc)

laminar flow cabinets

hotplates

centrifuges

ovens

freezers and refrigerators

conventional and real time

PCR equipment
ELISA testing equipment
Microscopes
Illuminators
Binocular stereo microscope
Water purification system
Safety cabinet
Water bath
Shakers, pipets, pH meters
and other smaller equipment
and consumables

1.100.000 € 1.100.000 €

B Residue laboratory

In general:

Rapid resolution Liquid
Chromograph with DAD and
FLD detector and data station
or UPLC

Gas Chromatography Mass
detector El ion pump and
Turbo molecular pumping
system

Liquid Chromatograph with
QQQ MS/MS mass detector
and data station

Gas Chromatography with
QQQ MS/MS mass detector
and data station

ICP MS system

FT-IR spectrometer

TLC qualitative kit

Atomic absorption
spectrophotometer (flame and
hydride technique)

Atomic absorption
spectrophotometer (with
graphite furnace)

ELISA reader (for mycotoxins
and hormones)

GPC- gel permeation chromatography
System for production of ultra pure water
Accelerated solvent extraction system
UV/visible spectrophotometer
Direct mercury analyser
Nitrogen concentrator
Soxlet extraction unit
Microwave digestion system
Vacuum pump
Mills, blenders, hogenizers, balances, centrifuges, pipettes, water and sand baths, pH meters, furnaces, stirrers, evaporators, shakers, ovens, hot plates etc and other accompanying consumables

2.000.000 € 3.100.000 €

C Phytosanitary laboratory

In general:

autoclaves (for waste, media preparation, dirty materials):

balances (technical and analytical)

incubators

laminar flow cabinets

safety cabinet

hotplates

centrifuges

ovens

freezers and refrigerators

conventional and real time PCR equipment

ELISA testing equipment

IF microscope and light microscope

Binocular stereo microscope
Cabinet for keeping chemicals
Water purification system
Soil extraction system
Hybridisation oven
PAGE gel system for western blot
Sequencer
Freezer on -80°C
Water bath
Shakers, stirrers, pipets, pH meters and other smaller equipment and consumables

700.000 € 3.800.000 €

D Seed laboratory

In general:
germinators
balances
mills
sample dividers
seed counters
seed moisture equipment
electrophoresis system
stereo zoom microscope
microscope
sampling tubes
incubators
pippets, pH meters and other smaller equipment and consumables

500.000 € 4.300.000 €

E Exotic diseases from former list A laboratory

Balances
BUNSEN burners

Centrifuges
CO2 incubators
Digester – stomacher
Dissecting kit
Electrophoresis system
ELISA reader
Equipment for PCR
Fiber optic illuminator
Laminar flow cabinet (class II
and biohazard)
Autoclaves
Freezers and refrigerators
Baths, hot plates, centrifuges
etc

500.000 € 4.800.000 €

F Courier service (for vans for
delivery of samples)

200.000 €

| |
|-----------------------------------|
| 5.000.000 € (total A-F) |
|-----------------------------------|