STANDARD SUMMARY PROJECT FICHE

1. Basic Information

1.1 CRIS Number: 2005/017-462.01.03

1.2 Twinning light: SI05-IB-AG-03

1.3 Title: Strengthening the Disease Notification and control System in Slovenia

1.3 Sector: Agriculture

1.4 Location: Slovenia

2. Objective(s)

2.1 Overall Objective(s):
Effective system of surveillance and notification of animal contagious diseases in Slovenia

2.2 Project purpose(s):
Strengthening of reporting, control and notification of animal contagious diseases in Slovenia. Introduction of geographical information system (GIS) technologies with the aim to support the spatial analysis, development and comparison of models for the introduction of effective measures. This would also support effective and quick decision-making process in a case of the outbreak of disease.

2.3. Justification
Comprehensive Monitoring Report - Regarding animal disease control measures, national contingency plans on foot and mouth disease, classical swine fever, Newcastle disease and avian influenza remain to be provided. Transposition of legislation in this area is almost complete. Slovenia has joined the Animal Disease Notification System (ADNS).

3. Description

3.1 Background and justification:
Republic of Slovenia has aligned the system of the control of animal contagious diseases with the systems valid at present in the EU member states. Slovenia is now obliged to notify disease outbreaks through the ADNS since the date of accession. Slovenia has submitted contingency plans for FMD, CSF, Avian influenza and Newcastle disease and the Commission has approved these plans. However, during the past years Slovenia was not able to prepare an effective up-to-date computerised system for tracing and managing of contagious diseases.

New computerised reporting system has to be introduced as well as utilisation of the GIS (geographical information system) and GPS (global positioning system) system for better control over the spread of disease and to support disease control measures. According to the EC legislation disease outbreaks have to be investigated and reported in space and time. A prerequisite is the recording of the exact position of all farms and at least on municipality level by wildlife diseases
using GIS. Existing systems has to be validated and improved. The proper basic structure is in place.

The central register of bovines, porcines, small ruminants and beekeepers which are the basis for management of the disease outbreaks are not connected with the central register of farms, which could enable rapid alert system for disease control measures to be performed in the critical situation such as establishing of protection and surveillance zones, all the farms to be included in those zones and for which the stand-still should apply... as well as all other necessary measures to be implemented to prevent the spread of the disease.

The prerequisite to be imported into the central register of farms was also the data of the exact position of the farm \((x,y)\), so the geographical management of the data would be feasible.

During the preparation of simulation exercise in the case of an outbreak of the contagious disease it was clearly identified the importance of having the system of geographical computerized data management.

Apart from this, the existing disease control and reporting system in Slovenia is rather old. It is still based on the DOS operation system which is not compatible with the central registers mentioned above which represent the basis for decision making process in the case of the outbreak of the disease. In general it doesn't support the modern way of handling the data and nor the spatial analysis of it.

One of the components of the rabies eradication programme is also the bait distribution system which is based on the GPS. All the data about bait laying is stored (already from 1995) but we can not analyze it since the extended computerised system is missing.

The system should also enable the communication of the information with the ADNS system of the EC.

Veterinary staff has to be further trained in the new techniques, with the aim to improve the functioning of the whole computerised system.

3.2 Linked activities:

Phare National Programme 1997, Veterinary Control (98-5084.00) - technical assistance on Classical Swine Fever control and diseases of pigs.

Phare MCVP programme (Programme number ZZ 94 29; Project number B5-96-001): prepared evaluation of the control of contagious diseases in the country, contingency plans, surveillance and control in regional laboratories.

Phare Twinning SL99/IB-AG01-a (HACCP, establishments)

Bilateral co-operation with the Netherlands – workshop on CSF for Slovene veterinarians in April 2000.

Phare – Twinning Light SI0201. 03 “Monitoring of Classical swine fewer in wild boar”

Phare – Twinning Light and Equipment Supply SI0301.01 "Upgrading of Information System within IACS and Phytosanitary and Veterinary Information System"
3.3 Results:

- A report will give an overview concerning the available GIS data and the integration of the monitoring and control software within the already established information technology infrastructure in the Republic of Slovenia.
- The already established and new introduced software is connected with the disease reporting system of the EU (ADNS), the cattle, sheep and pig database and the applications in the national crisis centre.
- GIS applications and disease notification software adopted to the Slovenian situation.
- GIS software also in connection with disease notification software installed and the local staff trained by the experts.
- The results presented during the workshop and meetings during the visit of the foreign experts.
- The veterinary experts acknowledged during the study tour an existing modern GIS and disease notification system in an European member state.
- Altogether in the Republic of Slovenia a EU efficient computerised programme to monitor and control of contagious diseases and modern disease notification system established.

3.4 Activities:

- Assessment of the present disease reporting and computerised programme with the proposal for upgrading and strengthening.
- Strengthening surveillance and notification of computerised programme for disease control in Slovenia in compliance with the EU recommendations.
- Software applications for the surveillance and notification computerised programme in Slovenia
- Implementation of the prepared programme
- Presentation of the results and writing reports.
- Training of Slovenian staff (study tour for veterinary experts and workshop for veterinarians).

**Study visits:**

- Introduction study tour: 3 Slovenian experts, 6 days; representatives of VARS HQ – 2 AH department, 1 IT department – getting the overview of the modern disease reporting and disease management system fully operational in practice
- Study visit (training): 10 Slovenian experts, 6 days; 2 veterinary practitioners, 2 experts from NVI, 4 OV from regional offices VARS and 2 experts from VARS HQ

**Workshop:**

- Introductive workshop: in Slovenia; 2 days; 5 STE; presentation of the modern disease reporting and disease management system fully operational in practice and its importance
  - Final workshop: in Slovenia; 2 days; 5 STE; the outcomes and recommendations defined during the project presented.

The training, study tours and workshops should include representatives on different levels concerning farm registration and disease reporting as private practitioners, VARS (HQ, Regional Offices), NVI and IRS.

3.5 Lessons learned:
• Phare National Programme 1997, Veterinary Control (98-5084.00) - technical assistance on Classical Swine Fever control and diseases of pigs.
• Phare MCVP programme (Programme number ZZ 94 29; Project number B5-96-001): prepared evaluation of the control of contagious diseases in the country, contingency plans, surveillance and control in regional laboratories.
• Phare Twinning SL99/IB-AG01-a (HACCP, establishments)
• Bilateral co-operation with the Netherlands – workshop on CSF for Slovene veterinarians in April 2000.

The common recommendations in IE reports of all the above mentioned projects were in line with the existing EU legislation at that time. The Republic of Slovenia has implemented the following recommendations given in the frame of all the abovementioned projects:
- cessation of vaccination against CSF
- ban on swill feeding
- strengthened monitoring on CSF in domestic pig population;
- preparation of FMD contingency plan;
- supply of laboratory equipment – for regional labs, central lab;.
• Phare – Twinning Light SI0201. 03 “Monitoring of Classical swine fever in wild boar”

Overall evaluation of the project:
The Veterinary Administration of the Republic of Slovenia (VARS) initiated, implemented and established an efficient monitoring and surveillance programme for CSF in wild boar based on scientific analysis of the referring population data and the geographical environmental data. Within this programme, a risk-based concept is also taken into consideration. The persons involved in the monitoring and surveillance programme are trained and capable at all levels of administration to ensure an appropriate sampling, testing and evaluation of the results.
Part of the recommendations was intense trans-border cooperation and permanent information and training of all parties evolved.

6. Phare – Twinning Light and Equipment Supply SI0301.01 "Upgrading of Information System within IACS and Phytosanitary and Veterinary Information System”
The project is not running at the time being.

4. Institutional Framework

The competency over the implementation of the veterinary legislation in Slovenia lies with the Veterinary Administration of the Republic of Slovenia (VARS), which is the body inside the Ministry of Agriculture, Forestry and Food.

National Veterinary Institute is a diagnostic institution used by the central veterinary competent authority (Veterinary Administration of RS) for the diagnosis of the contagious diseases, zoonoses and other agents with the main objective to monitor the disease situation in the state, to fulfil the international standards, legal requirements and criteria for the animal and human protection against the spread of contagious diseases and any harmful effects or food poisoning transmitted by the animal products or live animals.

For the implementation of the project both experts from VARS and NVI will be available.

Beneficiary of the project is VARS, as well as NVI veterinarians and private practitioners involved in disease control.
5. Detailed Budget

<table>
<thead>
<tr>
<th>£</th>
<th>Transition Facility support</th>
<th>Co-financing</th>
<th>Total cost (TF plus co-financing)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment Support</td>
<td>Institution Building</td>
<td>Total Transition Facility (=I+IB)</td>
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<tr>
<td><strong>year 2005</strong></td>
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<td></td>
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<tr>
<td>contract 1</td>
<td>75,000</td>
<td>150,000</td>
<td>225,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>75,000</td>
<td>150,000</td>
<td>225,000</td>
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</tbody>
</table>

(*) contributions form National, Regional, Local, Municipal authorities, FIs loans to public entities, funds from public enterprises

(**) private funds, FIs loans to private entities

In this project investment support is needed, because a special GIS, development software for adoption of the animal disease notification software including the translation and GIS data have to be bought for the veterinary administration.

The project will be co-financed by the Republic of Slovenia in an amount of 75,000 Euro in the year 2005. These funds are earmarked in the budget and will be used for the costs related to training (conference room for workshop, interpretation, study tour travel costs for Slovenian participants to the member states, working post and material for the expert).

6. Implementation Arrangements

6.1. Implementing Agency

Ministry of Finance - CFCU
Mr. Peter Škofič, PAO
Beethovenova 11
SI - 1000 Ljubljana
Tel.: +386 1 369 6520, fax: +386 1 369 6539
E-mail: peter.skofic@mf-rs.si

The Contracting Authority:

Ministry of Agriculture, Forestry and Food of RS
Dunajska 56
SI - 1000 Ljubljana

Contact person:
Mr. Marko Verbič,
Phone: + 386 1 478 9116, fax: + 386 1 478 9155
E-mail: marko.verbic@gov.si

6.2 Twinning:
6.3 Non-standard aspects
Not foreseen.

6.4 Contracts
There will be two contracts for this project – one Twinning Light contract with the selected Member State for Twinning Light component for 150,000 € and one supply contract with selected supplier for Investment component of project for 75,000 €. The Twinning Light contract will be signed for the maximum duration of eight months. Signed contract for investment component is a precondition for the start of TWL component.

7. Implementation Schedule

7.1 Start of tendering/call for proposals
3rd quarter 2005.

7.2 Start of project activity:
4th quarter 2005

7.3 Project Completion
2nd quarter 2006

8. Sustainability
For Institution Building component of project the beneficiary guarantees that adequate staff and financial resources to maintain administrative function will be provided by the time of the start of project.
9. **Conditionality and sequencing**
   Availability of national co-funding.
ANNEXES TO PROJECT FICHE

1. Logical framework matrix in standard format
2. Detailed implementation chart
3. Contracting and disbursement schedule by quarter for full, duration of programme
4. List of relevant Laws and Regulations (optional)
Annex 1: TF log frame

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX FOR Project</th>
<th>Programme name and number</th>
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<tbody>
<tr>
<td>STRENGTHENING THE ANIMAL DISEASE NOTIFICATION AND CONTROL SYSTEM</td>
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<tr>
<td><strong>Contracting period expires:</strong></td>
<td><strong>Disbursement period expires:</strong></td>
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<tr>
<td>15 December 2007</td>
<td>15 December 2008</td>
</tr>
<tr>
<td><strong>Total budget:</strong></td>
<td><strong>TF budget:</strong></td>
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<td>300,000</td>
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</table>

**Overall objective**

Effective system of surveillance and notification of animal contagious diseases in Slovenia.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unified reporting system (in place by the end of the project)</td>
<td>• Regular reports under EU requirements</td>
</tr>
<tr>
<td>- Information system (ready-to-use by the end of the project)</td>
<td>• Implementation Status Report</td>
</tr>
<tr>
<td></td>
<td>• Twinning Light Contract</td>
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<tr>
<td>Project purpose</td>
<td>Objectively verifiable indicators</td>
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</tbody>
</table>
| Strengthening reporting, control and notification of animal contagious diseases in Slovenia. Introduction of geographical information system (GIS) technologies with the aim to support the spatial analysis, development and comparison of models for the introduction of effective measures. Support of effective and quick decision-making process in a case of the outbreak of disease. | - Unified reporting procedures  
- Easy decision making in the case of an outbreak  
- Protection and surveillance zones  
- Census of holdings in protection and surveillance zones  
- Control over state aids and EU co-financing | - Annual reports  
- Final reports in the frame of 90/424  
- Budget revisions  
- Project Interim, Quarterly and Final Report(s)  
- Mission Reports  
- | - Cooperation of IRS  
- Information system linked with IRS databases  
- Relevant staff available for the project  
- |
<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A report will give an overview concerning the available GIS data and the integration of the monitoring and control software within the already established information technology infrastructure in the Republic of Slovenia.</td>
<td>Reports on monitoring and control System is tested and operational by the end of the project, in order to monitor and control the contagious disease in Slovenia in accordance with EU requirements</td>
<td>- Annual reports</td>
<td>- Information system linked with IRS databases</td>
</tr>
<tr>
<td>• The already established and new introduced software is connected with the disease reporting system of the EU (ADNS), the cattle, sheep and pig database and the applications in the national crisis centre.</td>
<td>Local staff properly trained by the end of the project</td>
<td>- Final reports in the frame of 90/424</td>
<td>- Appropriate twinning partner is available and contract is concluded on time.</td>
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<tr>
<td>• GIS applications and disease notification software adopted to the Slovenian situation.</td>
<td></td>
<td>- Budget revisions</td>
<td></td>
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<tr>
<td>• GIS software also in connection with disease notification software installed and the local staff trained by the experts.</td>
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<td>- Monitoring reports for the SMSC</td>
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<tr>
<td>• The results presented during the workshop and meetings during the visit of the foreign experts.</td>
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<td>- Implementation Status Report for the Joint Monitoring Committee</td>
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<tr>
<td>• The veterinary experts acknowledged during the study tour an existing modern GIS and disease notification system in a European member state.</td>
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<tr>
<td>• Altogether in the Republic of Slovenia a EU efficient computerised programme to monitor and control of contagious diseases and modern disease notification system established.</td>
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<tr>
<td>Activities</td>
<td>Means</td>
<td>Assumptions</td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>- Assessment of the present disease reporting and computerised programme</td>
<td>- Short term expertise</td>
<td>- Good co-operation</td>
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<tr>
<td>with the proposal for upgrading and strengthening.</td>
<td>- Technical assistance contract</td>
<td>with short-term experts</td>
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<tr>
<td>- Strengthening surveillance and notification</td>
<td>- Purchase of equipment (software, hardware)</td>
<td>- Full involvement of VARS staff</td>
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<tr>
<td>of computerised programme for disease control in Slovenia in compliance</td>
<td>- Workshops</td>
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<td>with the EU recommendations.</td>
<td>- Study tours</td>
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<tr>
<td>- Software applications for the surveillance and notification</td>
<td>- Manuals</td>
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<td>computerised programme in Slovenia</td>
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<tr>
<td>- Implementation of the prepared programme</td>
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<tr>
<td>- Presentation of the results and writing reports.</td>
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<tr>
<td>- Training of Slovenian staff (study tour for veterinary experts and</td>
<td></td>
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<tr>
<td>workshop for veterinarians).</td>
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<table>
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<tr>
<th>Preconditions</th>
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<tr>
<td>Contract for investment component of project signed before start of TWL</td>
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<td>component.</td>
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Annex 2: Detailed Implementation chart

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<th></th>
<th>2004</th>
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<th>2006</th>
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<tr>
<td>Twinning Light Investment Support</td>
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### Annex 3a – Contracting schedule

**CUMULATIVE CONTRACTING SCHEDULE (EUR million)**

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<th>Date</th>
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<th>3/31/05</th>
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<th>6/30/07</th>
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<tr>
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<td>Contracted IS</td>
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</table>
Maps have always played a huge role in the notification and management of disease emergencies. Historically, different-coloured pins stuck into large-scale paper maps or handmade dots in road maps allowed strategists and the Commission to track a given epidemic and debate the various control options. Geographic information systems (GIS) and spatial epidemiology playing more and more an important role in animal disease control. Since considerable time district veterinary offices and laboratories in EU member states (e.g. Germany, Netherlands, United Kingdom, Denmark) uses GIS in applied disease control. The construction of disease maps has been a central part of descriptive epidemiology throughout its history. The integration of GIS and remote sensing into epidemiological studies allow us to understand and model more realistically the spatial and temporal structure of disease patterns. GIS also permit to proof and develop new hypotheses regarding factors affecting the spread of the disease. Mainly in the cases of an outbreak of notifiable animal diseases GIS support the national crisis centre and district veterinary offices by the definition of restriction areas, planning of control measures and eradication strategies. Routine jobs, as herd statistics and calculation of sample sizes, is much more easily using GIS.

GIS are computer-based tools that can store, analyse and display both, spatial and non-spatial data. The software for geographical information systems may be split into three functional groups: (i) Geographical information systems in a more narrow sense with the ability to generate, modify, transform and analyse geographically referenced data. (ii) Mapping software to visualise the spatial data without the possibility to manipulate the geometric feature database. (iii) Database management systems (DBMS) as general-purpose software products, which can store but also analyse small up to extreme large geographical datasets without visualisation. The traditional distinction between the different groups is vanishing through the hardware and software revolutions in the last decade. Particularly, desktop GIS software, geographically-enabled programming languages and the mapping on the internet allows using a broad spectrum of analysis and visualisation techniques on spatial epidemiological data. Nevertheless, it is necessary to narrow the purpose of the analysis to determine the appropriate GIS tool.

In principle the notification, visualisation, analysis and management of outbreaks and spatial data can be realised in two ways depending on the information technology infrastructure and structure of the veterinary service (e.g. centralised vs. regionalised). Firstly, the notification and desktop mapping software are locally installed on a PC at each veterinary administrative level and the information is transmitted to the national crisis centre. The second type of notification and mapping on the Internet is analogous to placing the geographical and attribute data and GIS software in a client/server configuration. The actual software and the data reside on a server, which the user accesses via the Internet. The users (clients) request data via the Internet browser and the information are returned to them. Many of the GIS user tasks, such as opening tables and formatting the layers, are performed by the server. Both variants are successfully implemented within member states of the European Union (e.g. United Kingdom – RADAR – internet based; Germany – TSN – local software installation). Furthermore, the selection of the GIS component depends on the type of existing geographical data. The development of a national geo-referenced database requires
considerable time and resources as was demonstrated in the cases of New Zealand and the Netherlands. But the availability of a national spatial farm or village database and digitized maps, which are vital for any electronic animal disease notification and control system, is guaranteed in Slovenia.