1. Basic Information

1.1 Désirée Number 2003/004-347-01-01

1.2 Title Development of Integrated Administration and Control System (IACS)

1.3 Sector Agriculture

1.4 Location Hungary

2. Objectives

2.1 Overall Objective(s)

• To create the conditions for the absorption of EAGGF subsidies

2.2 Project purpose

• To establish a functioning Integrated Administrative Control System for the management of EAGGF subsidies.

2.3 Accession Partnership (AP) and NPAA priority

The project components are in harmony with the following priorities of AP and NPAA:

AP Annex, article 4: „- reinforce the administrative structures needed for the design, implementation, management, monitoring, control and evaluation of Community-funded rural development programmes,
- continue to upgrade the capacity of the agricultural administration and complete the preparations for the practical implementation and the enforcement of the management mechanisms of the common agricultural policy, in particular market information systems (including price reporting), the integrated administration and control system and the Paying Agency for the management of funds within the common agricultural policy, ...”

NPAA: „...establishing the central institutional functions of IACS (human resources, technical background, training, information network etc.)
- to establish technical background, to increase the number of employees and provide training for them;
- to improve existing information and database systems according to the requirements of IACS, to establish and investigate connections.”
2.4 Contribution to National Development Plan (and/or Structural Funds Development Plan/SDP)

Not applicable.

2.5 Cross Border Impact

Not applicable.

3. Description

3.1 Background and justification

Direct aid to farmers funded by EAGGF-Guarantee Section were introduced in the EU after the reform of the Common Agricultural Policy in 1992. The new scheme not only increased the number of beneficiaries but also the risk of irregularity and fraud. The Integrated Administration and Control System was introduced to meet those risks. Since then Member States’ experiences proved that IACS provides a sound basis for controlling arable crops and animal premium expenditure. IACS became a key tool for the administration and control of EAGGF-Guarantee expenditure and its importance is increasing with time as more measures and expenditure are directly or indirectly managed and controlled through this system.

To fulfil the requirements of an Integrated Administrative and Control System, a new application has to be developed. This application will consist of the following four core elements:

- Identification system of agricultural parcels
- Animal registration and information system
- National farmer registry database
- The IACS core system for aid application management, payments and for administrative controls and field inspections

The first three items will be created from Hungarian national budget. The decentralised hardware and infrastructural requirements will also be secured in this way.

For the whole project, including the development of the four elements above, and the establishment of the organisation of the Paying Agency, an implementation schedule with costs, together with a network diagram has been created. These are annexes of this Project Fiche.
**Implementation schedule**

In the annexed Implementation plan only the activities carried out in Phare projects are priced. The costs of the different parts are defined so that for the Twinning light project 150.000 euros were assigned and for the supply tender 2.500.000 euros were assigned. The Quality Assurance tender is expected for 400.000 euros.

For the technical assistance tender of the software development, all foreseen activities were priced on the basis of the length of the activity and on the number of experts estimated for the implementation. The fee of experts is based on 480 euros/day. This is an average value of the fees in similar Phare projects, for the expected expertise (taking A, B, C and D category local and EU experts into consideration). Neither project management from the contractor’s side, nor quality, configuration and security management are listed on the implementation schedule but are required (these activities have not to be scheduled since they are necessary for the whole project). So the daily fee is increased with 20% to cover these costs. Also an additional 10% is added for unforeseen costs. The cost of each item is calculated with the multiplication of the daily fee, the working days between the item’s starting and ending dates, and the number of experts expected to work on that particular item. The total value calculated this way is rounded up.

The implementation schedule has been developed with the following preconditions:

- Compared to the size of the project, the available timeframe is very short
- At starting time of the system, huge national databases must be operational to support the system’s activity

Based on the above facts, the implementation must be carried out in parallel activities, using as many existing resources as possible. Thus the implementation schedule is split up into five parallel processes:

1. Extension of the existing animal identification/information systems
2. Creation and filling of the agricultural parcel identification system
3. Development and filling of a Farmer registry database
4. Building the organisational structure of the Paying Agency
5. IT development of the IACS system

### 1. Extension of the existing animal identification/information systems

The animal identification/information systems are handled by the National Institute for Agricultural Quality Control (OMMI). The cattle I&R system is fully operational since 1997. Since 5th of November, 2002 both the legislation and the computer system is harmonised with the relevant EU legislation. Sheep and goats identification system is under development in the frame of the 2002/000-180-01-05 Phare project. Linked systems, such as the carcass qualification system, milk quota management system are in the preparation phase of development. Based on these ongoing developments and existing systems, new development projects have not to be started on this field currently. OMMI’s task is to
ensure in 2003 that IACS can access the animal identification/information databases for prescribed checks. This work can be started after the exact definition of requirements, under the management of OMMI. The IACS Development Project Management will make an agreement with OMMI to finalise the requirements and detailed schedule of this developments. For this reason, the IACS implementation schedule contains this development only with its main milestones.

2. **Filling of the agricultural parcel identification system**

Agricultural parcel identification is a key issue at the control of arable crops expenditure. Based on feasibility studies the MARD decided to use the so called physical block scheme. Institute of Geodesy, Cartography and Remote Sensing (FÖMI) is responsible for creating and maintaining the physical block system. Currently the system covers 3% of the country in the frame of a pilot project. The registration of the remaining 97% has been started. Currently ortophotos are applied for the development of physical blocks. Aerial photographs had been taken from March to the end of July in the year 2000. The ortophoto production in the Master Plan thus only means the ortophoto generation procedure not the acquisition of aerial photographs. The Digital Elevation Model and the aerial triangulation had been already produced for more than 60% of the country. The eligible arable area will be clarified during the LPIS creation, based on the aerial photographs from 2000 and the use of multi temporal high resolution satellite images.

First significant milestone of this subproject will be the successful registration of 6 out of the 19 counties in Hungary by the end of the first quarter of the year.

One of the key issues will be to establish the connection between the registered agricultural parcels and the farmers registered in the Farmer registry database.

This subproject, similar to the animal identification subproject, the responsible organisation will execute the activities. The IACS Development Project Management will make an agreement with FÖMI and supervise the execution. For this reason, this subproject is currently expanded only to its main milestones in the Implementation Schedule.

See annex 7 for issues clarified following the Peer Review on LPIS in July, 2002.

3. **Development and filling of the Farmer registry database**

In the past years significant developments were carried out in the field of farmer registration. Both for national subsidy schemes and for animal identification, databases has been developed and filled with farmers’ data. However, according to experts supervised the databases, these systems do not fulfil the requirements set by IACS. A sub-project is being started, financed by Hungarian national budget, to build up a new application and database, and possibly to migrate all existing data into it. After migration, a data confirmation and gathering will be started. Scheduled end of the activity is June, 2003. Since the sub-project will run under the full control of the IACS Development Project Management, it is detailed in the Implementation schedule.
4. Building the organisational structure of the Paying Agency

The process of creating the organisation that will manage IACS consists of two – related – lines of work.

The first line of work is the definition of the payment schemes and the description of the flow of management of the applications and data. One aspect of this is the development of the necessary software, an other is the elaboration of the documents of the procedures.

The second line of work is on one hand the definition and elaboration of the relations, competences and responsibilities between the co-operating bodies, and on the other hand – deriving from the elaboration of the procedures – the establishment of the internal structure, hierarchy of the bodies concerned.

The colleagues involved in the specification of the processing flow (and the related software) will have the best knowledge about the functioning of the system. The number of the project staff will increase according to the multiplication, specialisation of the tasks, the experienced members will educate the new staff. Thus the progress of the project ensures the development of the operating organisation/body.

Management of IACS will be the responsibility of the EAGGF Paying Agency, established by July 31, 2003 through the integration of the SAPARD Agency into the Agricultural Intervention Centre. The Paying Agency will have territorial offices – based on presently existing networks, e.g. the SAPARD Regional Offices – both on regional level (7) and county level (19). These latter will mainly be involved in the (on-the-spot) controls and the lodging of applications. Agricultural Chambers will be involved in giving assistance to farmers in respect of filling in the applications into the computer system and forwarding the applications in electronic form to the 19 county offices. The formal lodging of the applications is with the local offices of the Paying Agency. Farmers will have the right to submit their claims to the Paying Agency directly, without consulting the Chambers of Agriculture.

The role of the County Offices of the Paying Agency will be:

- Receive officially the applications
- Input data of claims from farmers, if not sent in electronic form already by the Chambers
- Carry out the first administrative control, i.e. to check the coherence of the documents received from the applicants
- Carry out on the spot controls

**IT Development of the IACS system**

IT development is split into three main blocks. These are:

- Software development
- Hardware and networking supply
- IT security
For two of these tasks is Phare support required. One is the implementation of the application software, and the other is the hardware supply.

The software development is a very complex task, starting with the specification of requirements. This activity has already been started by the Beneficiary. The team is led by IT experts with the experience of several successful big projects. However the most important players in the team are the future users of the system. This activity expected to be several months long, as to be seen on the Implementation Schedule. By 7th of December, a global specification of requirements has been produced. Parallel with this output, the Terms of Reference for the software development component and the technical specification for the supply component has been delivered. At that point the limits of the system will be clearly defined to provide a sound basis for tendering. Further the system will be specified in more details without changing its global definition. Including this activity, the software development will cover the following main phases:

- Requirement specification
- Software design
- Programming
- Testing
- Installation
- Preparation of documentation
- Training

Also education will be carried out from Hungarian budget, because it will be hardly feasible until the end of disbursement period.

Taking the very short timeframe into consideration, parallelisation of the activities is a must. Parallelisation depends on the kind of activity. Requirement specification can be easily split up into the following sub-tasks, from the users’ point of view:

- Specification of area based subsidy application management
- Specification of animal premium application management
- Specification of area based subsidy payment calculation
- Specification of animal premium payment calculation
- Specification of other payments
- Specification of field inspections and risk analysis
- Specification of workflow and document management, including archiving requirements
- Specification of account keeping
- Specification of statistical reports

These activities can be highly parallel executed. However this splitting is not applicable for software design, where a more technical splitting is necessary. For instance, the database
has to be created as a whole, not split up on the basis of user-side considerations. Splitting up of the software design is as follows:

- Global design of the system
- Database design
- Design of the application management
- Design of the workflow and document management, including the design of archiving
- Design of payment calculation
- Design the communication with the parcel and animal identification databases
- Design of field inspections and risk analysis
- Design of account keeping
- Design of statistical reports

Programming phase will lack the global design activity but will include the activity of “Setting up the environment, menu structure, screen management”.

The activities related to account keeping is necessary also when a “box-off-the-shelf” application will be delivered in the frame of the project. In this case a customisation of the selected application must be carried out. It is important that the “boxed” application must have a batch interface to adequately communicate with the other parts of the application.

Taking traditional system development methodologies into consideration, such as SSADM, the development phases, and their sub-tasks above should be carried out sequentially. The timeframe of this project excludes the application of such methodologies for the software development. Fortunately there are methodologies already used worldwide in the past few years which let heavily parallelise the software development processes (for instance the Rational Unified Process – RUP).

The MARD has already gained experiences in the management of these methodologies. For example, the Phare project for the development of a Pig Identification and Registration System (HU0003-01-02) applies a methodology based on RUP.

On the side of hardware and networking supply, this activity is delivered into two parts. One part, for which the Phare support is asked, is the supply of central servers, the networking elements to connect these servers to the Government WAN, their operating systems and database management (DBMS) software. Also, the delivery of computing equipment for 300 workstations is required from this part. The main concept to have these equipments delivered and installed during the implementation phase of the application software so that it will be able to be tested in a large-scale environment, under the final computing conditions.

IT security will be completely ensured from Hungarian budget since it has to cover all IT activities from the very beginning of the development, even before the implementation phase of the Phare projects.
5. Quality Assurance

It is planned that the quality assurance will begin before the software development PHARE project so that time can be gained for the Consultant to overtake the necessary information and to adequately study the Requirement Specification and other tender documentation.

A Master Plan on the establishment of the Paying Agency and the implementing structure of the IACS has been presented 15 December 2002. A government resolution will be passed at the latest February 28.

3.2 Linked activities

The project is linked with former and ongoing Phare projects:

**HU9505.06 Cattle Registration System**

In a co-operation with the Dutch Ministry of Agriculture, the Hungarian cattle information system (CIS) was established. The development started for a breeding oriented application that is now based on an identification and registration system that meets the EU requirements. The I&R is co-operated by the Animal Health. Total development costs reached € 3.0 million of which € 300.000 were contributed for the I&R hardware by the Phare Programme.

In the CIS project long term development concepts were laid down for further animal species. The main issue is that the common part of all registration systems will be a herd information system that also handles all roles (animal holders, vets, slaughter houses, etc.) and codes, while animal identification subsystems will differ for different species since they are intended to be also the base of breeding activities. Because of this concept, the Herd Information System (HIS), successfully developed in the CIS project, needs only an extension to be suitable for the sheep and goats system.

**HU0003.01 Animal Health and Food Hygiene Control**

The project includes the development of pig identification and registration system and the establishment of a veterinary surveillance network system. During the past year the system description has been developed and pilot-tested. Implementation is on the way for both technical assistance and the supply component has been successfully implemented. Implementation phase is expected to start in February, 2002.

The development of the pig I&R system is being carried out according to the concepts mentioned for the cattle system. The Herd Information System has already been extended for the pilot test.

**2002/000-180-01-05 Sheep and Goat Identification and Registration System**

The system includes the registration of sheep and goat holding and keeper linked to the national animal holding register and farm registration and the individual
identification and registration of sheep and goats from birth to the end products (stable to table).

Operational information and veterinary surveillance network system for sheep and goats set up (one Twinning Light component).
The Twinning Light component is under implementation. Tendering for the supply and technical assistance components is expected in first quarter of 2003.

**HU01/IB/AG-02 Development of the Forestry Information System**

The aim of this Twinning Project Development of the Forestry Information System is to modernise the statistical, registration and information system of the forestry sector in Hungary and to assist in adapting its legal and institutional background to comply with EU requirements. The practical results of the project are the development of processes (regarding forestry inventory, management planning, functions of the forest administration, sector statistics, financial systems and subsidies, forest health monitoring, forest fire protection and national accounting concerning the forestry sector), strategy and structure of standard IT system, tendering documentation for the investment supply contact, implementation of new IT system, data entry to and data supply from the system, appropriate GIS based Information System, designed and implements training schemes and design.

**HU2002/IB/AG/01 Pre-accession Introduction of CMO Procedures**

Project HU2002/IB/AG/01, which is to start at Agricultural Intervention Centre aims at the pre-accession introduction of the procedures of Common Market Organisations (CMOs) of the European Union. The specific objectives of the project are “to prepare the Agricultural Intervention Centre for its task as EU paying agency for the EAGGF Guarantee Section expenditures after accession and to upgrade the capacity of the agricultural administration and complete the preparations for the practical implementation and the enforcement of the management mechanisms for operating CMO schemes (including price reporting and market monitoring).” The concrete result of the twinning project will be the implementation of the procedures of the paying agency ready for accreditation and capable of channelling funds from the EAGGF Guarantee Section to the final beneficiaries; performing controls on the basis of harmonised payment and sanction systems, as well as supporting the implementation of common market organisations and agricultural measures. This Twinning Project elaborates strictly on the results of a previous CAP Implementation Phare Project HU98/IB/AG-01. Emphasis will be laid on transferring the results achieved so far in practical and operational rules, procedures, desk instructions and training for each CMO mechanism.

### 3.3 Results

- Software background and proper conditions of the Integrated Administration and Control System established
• EU Member state experience on the paying agency organisation and the IACS transferred to the MARD and the Paying Agency.
• Central servers, DBMS software and computing equipment delivered and installed, ready for installation and large-scale testing of the application software.

3.4 Activities

The various components of the project will be grouped into

- one twinning-light contract
- two T.A. / Service tenders
- one Supply tender

Based on the Master Plan the tender components might be divided into lots.

3.4.1 Twinning light

The twinning component will focus on organisation development through establishing the link between software development and elaboration of administrative procedures through introduction of audit and quality system standards. Expertise will be transferred through daily collaboration with the project group.

The Twinning Light will last for 6 months. The lead expert shall stay permanently in Hungary for the period of the twinning. Two Short Term Experts (STE) are foreseen, one in the field of audit, the other in the field of IT audit. The STEs are expected visit Hungary 4 times each, staying 5 working days on each visit.

The operational environment is assured by the MARD. The lead expert will work on daily basis in close co-operation with Hungarian counterpart. The PAA will organise the inputs of the STEs.

Expert profile:

- The lead expert shall have wide experience in daily operation of a Paying Agency and IACS, with appropriate knowledge about Community rules.
- Knowledge about audit and quality system standards, setting up of administrative procedures/flows, organisation building, IT development methodology is preferable.

3.4.2 Technical Assistance / Service / Software development

In the framework of technical assistance the selected consultant(s) shall develop the software for aid application management, payment and for administrative controls and field inspections with risk analysis for EAGGF-Guarantee expenditure and supporting activities of the Paying Agency. It covers IACS subsidy expenditures for arable crops and animal premiums and also CAP market intervention measures.

The software will consist of the following elements:

- Application management
- Workflow and document management
- Archiving system
- Calculation program for payments
- Communication interfaces with the animal identification and parcel identification databases
- Full integration of the Farm/farm registry database
- Field inspection programs
- Building or customising of an account management module
- Programming of statistical reports

Required outputs and activities of the development will be:
- System design based on the user requirement specification
- Application programming
- Testing based on test cases, reports based on the tests and the correction of errors based on the test reports
- Installation
- Project management of the development process
- Quality management of the development
- Configuration management
- Security management of the development
- Delivery of full set of manuals for operation and maintenance of the system

3.4.3 Technical Assistance / Service / Quality Assurance

This component will ensure quality assurance for the process of development. The selected experts, besides checking the quality of the delivered products/software, will give advice to project management on actions to be taken, development methodology and processes.

Reporting shall be to both to project management and Community services on a regular, ongoing basis that allows instant reaction.

Service will last for 9 months. The number of experts to be assigned to the task will be determined on the basis of the requirement specification. The experts will work on daily basis in close co-operation with Hungarian counterpart.

Profile:
- Wide experience in IT/SW development quality assurance.

3.4.4 Supply Tender

In the frame of the supply contract we plan to purchase the central computing elements and networking of the system, and 300 workplaces to build up the skeleton of the computer network during the implementation phase of the application software so that it can be installed and tested in a large-scale environment. Technical Specification has been delivered on 15th of December. The supplies will include
• Two enterprise level database servers with operating system and DBMS software;
• Application and web servers;
• Passive and active LAN elements to connect the equipments
• Elements to connect the system to the government WAN
• Workstations and computing equipment for about 300 workplaces Paying Agency.

3.5 Lessons learned

The establishment of the SAPARD Agency and Member State experience has shown the importance of IT development in management of EU funds.

Relevant recommendations of the Annual Assessment Report R/HU/AGR/02053 (hereinafter referred as Report) have been taken into account when formulating the present project fiche.

Findings concerning sustainability (point 3.4.1 of the Report); recommendations on strategy (bullet point 3 of 4.1.2 on p. 17 of the Report); and various recommendations on design (indicators of achievements, objective formulation) have been addressed in the course of project design.

A Master Plan has been elaborated and presented to the Commission Services, embracing all Phare and non-Phare IACS related aspects and expectations, including legislative background, project structure, HR issues, and financial background.

During implementation the experience gained in the course of implementation of related projects (e.g. cattle identification) and the findings of peer review (Peer Review on IACS) shall be highly regarded.

4. Institutional Framework

Technical aspects of implementation shall be the responsibility of the Agricultural Phare Office of the Ministry of Agriculture and Regional Development (MARD). The Central Finance and Contracts Unit (CFCU) will take the responsibility for contracting and payment.

The Project Office for the EU Institutions will manage the professional implementation.

5. Detailed Budget

(million EUR)
<table>
<thead>
<tr>
<th>Phare Support</th>
<th>National Co-financing</th>
<th>IFI</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Investment Support</td>
<td>Institution Building</td>
<td>Total Phare (=I+IB)</td>
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<tr>
<td>Twinning light</td>
<td>0,15</td>
<td>0,15</td>
<td>-</td>
</tr>
<tr>
<td>T.A. Service (SW)</td>
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<td>7,10</td>
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<td>T.A. Service (Q.A.)</td>
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<tr>
<td>Supply</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,75</td>
<td>7,55</td>
<td>9,30</td>
</tr>
</tbody>
</table>

The budget has been calculated with resource estimation based on the Master Plan of the project. The amount is comparable to the development costs of similar member state systems.

Co-financing for the components is to be understood as joint co-financing. The amounts are binding as a maximum for Phare funds and as proportion between Phare and Hungarian funds. National co-financing indicated net of VAT.

Hungarian funds will cover above the co-financing of Phare the setting up of the organisation including infrastructure and staff, development of a national farmer/farm registry database, development of the physical blocks, harmonisation of animal identification systems, assuring the network connection between institutions, hardware, operating system and DBMS software requirements, public information and training, creation of archiving system, quality assurance and control.

6. Implementation Arrangements

6.1 Implementing Agency

The Implementing Agency of the project is the Central Finance and Contracts Unit (CFCU). The CFCU will be the Contracting Authority and in that capacity will issue and evaluate tenders, conclude contracts and authorize the treasury to make contractually related payments. The Director General of the CFCU will act as PAO of the project. Her contacts are:

**PAO:** Ms. Judit Rózsa, director general

CFCU, State Budget Office,
H-1052 Budapest, Deák Ferenc u. 5.
Tel.: +36-1-327-3652, +36-1-327-3650
Fax.: +36-1-327-3572, +36-1-327-3573
e-mail: judit.rozsa@ahh.gov.hu
The Ministry of Agriculture and Regional Development will be responsible for the technical part of the project in terms of design, evaluation follow up and monitoring. The Director General of the Ministry will act as Senior Programme Officer. His contacts are:

**SPO:** Dr. László Vajda, Head of Directorate for Integration Affairs  
Ministry of Agriculture and Rural Development,  
H-1055 Budapest, Kossuth tér 11.  
Tel.: +36-1-331-3578  
Fax.: +36-1-301-4663  
e-mail: VajdaL@posta.fvm.hu

The Head of the Project Office for EU Institutions will act as Deputy SPO. He will be responsible for the professional implementation of the project. His contacts are:

**DSPO:** Dr. Miklós Szoke  
Head of Office  
Project Office for EU Institutions  
Ministry of Agriculture and Rural Development,  
H-1055 Budapest, Kossuth tér 11.

### 6.2 Twinning

In the frame of the project one Twinning Light component will be launched.

### 6.3 Non-standard aspects

During the implementation of the project the Practical Guide for Phare, ISPA and SAPARD contracts will be strictly followed.

### 6.4 Contracts

The Phare project shall be implemented through one Twinning light covenant (0.15 MEUR), two T.A. Service international open tenders (10.75 and 0.4 MEUR), one supply international open tender (2.50 MEUR).
7. Implementation Schedule

<table>
<thead>
<tr>
<th>Contract</th>
<th>Start of tendering/call for proposal</th>
<th>Start of project</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twinning Light</td>
<td>02/2003</td>
<td>07/2003</td>
<td>12/2003</td>
</tr>
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<td>T.A. Service/SW</td>
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<td>06/2003</td>
<td>12/2003</td>
</tr>
<tr>
<td>Supply</td>
<td>02/2003</td>
<td>06/2003</td>
<td>08/2003</td>
</tr>
</tbody>
</table>

8. Equal Opportunity

All participating Hungarian institutions are equal opportunity employer. No discrimination of whatever nature will be applied.

9. Environment

The specifications will take into account the respective standards and norms applicable for IT systems.

10. Rates of return

Not applicable.

11. Investment criteria

11.1 Catalytic effect:

The Phare contribution will accelerate the development of IACS.

11.2 Co-financing:

The recipient will finance 31 % of the total project costs.

11.3 Additionality:

The Phare contribution shall not displace other financiers, especially from private sectors or IFIs.

11.4 Project readiness and size:

Technical specifications and tender documentation will be ready at the time of the signature of the Financing Memorandum.

11.5 Sustainability:

Sustainability of project results is assured through the operation of the EAGGF Guarantee Section Paying Agency, which will be funded from national resources.
All supported investment actions (including supply) are sustainable in the long term beyond the date of Accession. They will comply with the EU norm and standards (accredited), and will be coherent with the sector policies of the EU. Future maintenance, IT developing and operation costs will be covered by the Hungarian national budget, according to the Master Plan.

11.6 Compliance with state aids provisions

All investments will respect the state aid provisions of the European Agreement.

11.7 Contribution to NDP and/or Structural Funds Development Plan/SPD

Not applicable.

12. Conditionality

- The Governmental WAN should be fully operational by the time of installation of IACS network components. Deadline: July 2003
- Decision on the institutional structures by February 28, 2003
- Master Plan for project implementation is presented by November 28, 2002
- For proper implementation of the project, adequate hardware will be installed in time for the application development phase so development can be based on a definite hardware/database environment (Annex C). Deadline. October, 2003
- From national funds the necessary infrastructure will be built up during the project implementation phase. Deadline: October, 2003
- Necessary legislation will be carried out in time Deadline: August 31, 2003
- Decision on the Paying Agency’s organisation. Deadline: July 31, 2003. Paying Agency will be set up during the project implementation. Deadline November 30, 2003
- Parallel databases, such as Farmer Registry, the LPIS and the interfaces for the Cattle I&R system will be set up in time. Deadline: November 2003
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 (including disbursement period)
4. Reference to Government studies and strategies.
5. List of relevant Laws and Regulations
6. Implementation schedule of the whole project
7. Answers to questions left open in the Peer review mission on IACS/LPIS
8. List of necessary equipment
**Programme name and number:** 2003/004-347-01-01 Development of Integrated Administration and Control System (IACS)

**Contracting period expires:** 30/11/2005  
**Disbursement period expires:** 30/11/2006

**Total budget:** 13,80 MEUR  
**Phare budget:** 9,30 MEUR

### Overall objective

1. To create the conditions for the absorption of EAGGF subsidies

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amounts recovered from the IACS schemes under the accounting clearance decision for the financial year 2004 under the average of the amounts recovered from Member States</td>
<td>EU Commission</td>
</tr>
</tbody>
</table>

### Project purpose

- To establish a functioning Integrated Administrative Control System for the management of EAGGF subsidies.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Accreditation of the Paying Agency by February 2004</td>
<td>Accreditation documents, Annual reports</td>
<td>The acts on data protection to be modified by Hungarian Parliament, Continuous commitment by the Government to achieve the Acquis, Financing the continued operation of the IACS ensured</td>
</tr>
</tbody>
</table>

### Results

- Software background and proper conditions of the Integrated Administration and Control System established
- EU Member state experience on the paying agency organisation and the IACS transferred to the MARD
- Central servers, DBMS software and computing equipment delivered and installed, ready for installation and large-scale testing of the application software.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>IACS hardware and software are operational by 31 December 2003, All IACS system operators prepared, Four sub-systems and the fifth backup facility will be located in the appointed places by 31 December 2003, All supplies completed and delivered according to the time table and at the right levels of quality and quantity, as planned and contracted, The system is operational 1 May 2004, No. of events and use-cases defined in the requirement specification programmed according to the time table to be prepared by the contractor of the sw. development contract and agreed by the beneficiary</td>
<td>Physical inspection, Government reports, Commission reports, Handing-over notes, Progress reports, Testing reports, Quality assurance reports</td>
<td>Government Wider Area Network (WAN) is available for data communication</td>
</tr>
<tr>
<td>Activities</td>
<td>Means</td>
<td>Assumptions</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Know how transfer</td>
<td>One Twinning light covenant</td>
<td>Local co-finance contributions available when required.</td>
</tr>
<tr>
<td>Centralised database application with thin-client server architecture</td>
<td>Two T.A. Service tenders</td>
<td>Appropriate number of staff at the Beneficiary assigned.</td>
</tr>
<tr>
<td>established (technical assistance)</td>
<td>One supply international open tender</td>
<td>Complete Technical Specification. Terms of Reference are ready for tendering in April 2003.</td>
</tr>
<tr>
<td>IACS hardware purchased, and installed (supply)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous quality assurance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Preconditions**

- Governmental Resolution on implementation structure by the end of February 2003
- Master Plan for project implementation is presented by the end of December 2002
### Annex 2

#### Detailed implementation chart

<table>
<thead>
<tr>
<th>Component</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twinning light</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>T.A. service/SW</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>T.A. service/QA</td>
<td>T</td>
<td>T</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>Supply</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
</tbody>
</table>

**T**

T: Tendering and contracting

**I**

I: Implementation
## Annex 3

### Contracting and Disbursement Schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td><strong>Contracting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twinning light</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>T.A. service/SW</td>
<td></td>
<td>7.10</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>T.A. service/QA</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td></td>
<td>1.75</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.15</td>
<td>9.30</td>
<td>9.30</td>
<td></td>
</tr>
<tr>
<td><strong>Disbursement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twinning light</td>
<td>0.07</td>
<td>0.11</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>T.A. service/SW</td>
<td></td>
<td>2.28</td>
<td>7.1</td>
<td></td>
</tr>
<tr>
<td>T.A. service/QA</td>
<td>0.10</td>
<td>0.20</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td></td>
<td>1.75</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>0.17</td>
<td>4.34</td>
<td>9.30</td>
<td></td>
</tr>
</tbody>
</table>

* Only Phare contribution
Annex 4

Reference to Government studies and strategies, (pre) feasibility studies


An overview of the IACS in the European Union and recommendation for the establishment of the Hungarian system (Working Paper August 2001, Ministry of Agriculture and Regional Development, Department of Informatics)

Annex 5

List of relevant laws and regulations

Relevant EU Regulations (the most important only)


Commission Regulation No. 3887/1992. (EEC) – laying down detailed rules for applying the integrated administration and control system for certain Community aid schemes


Council Regulation (EEC) No 3508/92 of 27 November 1992 establishing an integrated administration and control system for certain Community aid schemes


Council Regulation (EC) No 1258/1999 of 17 May 1999 on the financing of the common agricultural policy

No. 1259/1999. (EEC) Council Regulation – establishing the common rules for direct support schemes under the common agricultural policy

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 of the clearance of the accounts of the EAGGF Guarantee Section

Council Regulation (EC) No 1251/1999 of 17 May 1999 establishing a support system for producers of certain arable crops

Council Regulation (EC) No 3072/95 of 22 December 1995 on the common organization of the market in rice

Council Regulation (EC) No 1577/96 of 30 July 1996 introducing a specific measure in respect of certain grain legumes

Council Regulation (EC) No 1254/1999 of 17 May 1999 on the common organisation of the market in beef and veal

Council Regulation (EC) No 1254/1999 of 17 May 1999 on the common organisation of the market in milk and milk products

Council Regulation (EC) No 2529/2001 of 19 December 2001 on the common organisation of the market in sheep meat and goat meat
Relevant Hungarian Laws and Regulations (the most important only)

Law No IV of 1957 on general rules of public administration procedure
Law No VI of 1996 on organization of agricultural markets
Law No LV of 1994 on soil
Law No CXLI of 1997 on real estate registry
Law No XXXV of 2001 on electronic signature
Law No LVIII of 1992 on protection of personal data and publicity of data of public utility
Government Regulation No 273/1999 on general conditions of application for agricultural subsidies
Government Regulation No 236/1998 on registration of agricultural producers and data to be communicated by them concerning the application for agricultural subsidies
MARD Regulation No 29/2000 on Single Registration and Identification System of certain animal breeds
Aswers to questions left open in the Peer review mission on IACS/LPIS

4.1.5. Timescale for production of missing data (and possible fall-back options in case of difficulty)

If the necessary decisions on organisation and budget are made now, so that the work can start immediately, the production of orthophotos, including the production of the missing part of the DTM can be finalised for the whole of Hungary by 1\textsuperscript{st} of May 2003 at the earliest.

After the creation of the orthophotos the blocks have to be created from these photos, which is a big task, and the Hungarian authorities have indicated that the task of creating the blocks could be finished at the end of 2003.

The timescale of ortophoto and LPIS production had been finalised until now. The ortophoto will be ready until the end of June 2003, while the LPIS creation will run parallel, and finishes at the 15\textsuperscript{th} of October 2003. The order and deadlines of all 19 counties of Hungary are set up, and the physical block of the LPIS will be finalised for 6/19 counties (30000 km\textsuperscript{2}) until 1 April 2003.

4.1.6. Quality control of the LPIS

\textit{FÖMI is foreseen to undertake the quality control of the technical procedures, but no decision has been taken on this point.}

FÖMI had prepared a multi level quality control (QC) and quality assurance system of building the LPIS (physical blocks on ortho-photo bases). The QC consist of a continuous, multi level internal QC of LPIS-Hu creation, including feedback and adjustments of anomalies, and an external QC made by an agricultural authority (MARD local agricultural officials) also including feedback and adjustments of problems. The last step is to implement field measurement with GPS, where necessary.

\textit{No decision has been taken on whether to involve the farmers at an early stage in verifying the building of the physical blocks.}

The farmers will have the contact with the LPIS-Hu block maps before the 1\textsuperscript{st} operational IACS year 2004, during the 2\textsuperscript{nd} half of 2003, in line with the county level preparation of the blocks. The overview maps (in 1:10000 scale) will be distributed to the IACS local offices, where the farmers can clarify all the blocks where their utilised area is located. They also clarify for each physical block their total area of arable land and permanent
pasture. In this case a pre area administrative control can be done, and the problematic cases can be solved before the 2004 application year. On behalf of this procedure any comments and recommendations on the block borders and the LPIS can be announced.

4.1.9. Pilot project if any

Parallel to development of physical blocks for the whole country a pilot project was started in early 2002 for building up the LPIS involving the farmers, local agricultural officials and MARD county offices in a pilot project (ProMePAR).

The final number of participating farmers in ProMePar was 219. It is estimated that 350,000 applicants will claim for area based subsidy from 2004. Support for farmers, including pre-printed application forms and maps, was included in the pilot project. [Hungarian authorities to include examples of these in Annex if possible]

The formal report on the pilot project is to be submitted by November 2002, but a number of conclusions could be drawn at an earlier stage. No major problems are indicated by this pilot project. Due to the small sample and the voluntary participation the result may not be representative, however.

Although the deadline of the ProMePAR is the 30. November 2002, there are some statistics and results of LPIS building and EU harmonic control. The sample contains all types of holdings, represents the structure of agricultural land use in Hungary, it can be considered as a good indication, and representation of the agricultural area of Hungary. ProMePAR is LPIS + Area Based Subsidy Management: a working model of the full procedure of area aid application and control, EU harmonic, involving the institutional participants (MARD, County Offices of MARD). The ProMePAR pilot project has managed all the procedures under IACS area based scheme, such as building the land parcel identification system on ortho-photo base, using it during the area based application procedure, involving the farmers on voluntary bases, building up the database system running an administrative area control on block level, and controlling the declared area with remote sensing and filed measurement. The pilot project had involved many institutes with IACS building tasks, the local agricultural officials of MARD, and of course the participating farmers. Feedbacks from the farmers are very positive. The remote sensing control and field visit and measurement was accomplished for all the parcels had been claimed in the pilot project. The LPIS was used in printed filed measurements documents and in the GIS system of GPS measuring technique.

Based on the experience and results (3% of LPIS-Hu, 219 farmers) of ProMePAR, FÖMI will build up the LPIS-Hu by the deadlines, for the entire country.

4.1.11. Running/maintaining the system (staffing, organisation, updating the LPIS etc)

Little information has been provided regarding this point. FOMI will probably be responsible for the maintenance of the LPIS. However, no (formal) decision has been taken.
The creation of the LPIS had been officially delegated by MARD to the Institute of Geodesy, Cartography and Remote Sensing (FÖMI), and FÖMI is willing to do the annual maintenance as well. The budgetary background for setting up the LPIS System had been allocated by MARD, and the operational job had been started in FÖMI.

**Budget of LPIS-HU:**

<table>
<thead>
<tr>
<th>TASKS</th>
<th>COST in million FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ortho-photo production</td>
<td>580</td>
</tr>
<tr>
<td>Creation of LPIS - Hu</td>
<td>740</td>
</tr>
<tr>
<td>Data delivery (including printing infrastructure)</td>
<td>340</td>
</tr>
<tr>
<td>HW and SW</td>
<td>230</td>
</tr>
<tr>
<td>Infrastructure improvement</td>
<td>100</td>
</tr>
<tr>
<td><strong>SUM:</strong></td>
<td><strong>1990</strong></td>
</tr>
</tbody>
</table>
List of necessary equipment

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Necessary quantity</th>
<th>Reasonable in the budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Primary database server</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Backup database server</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Archive server</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>File server</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Heavy duty B/W laser printer</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Colour laser printer with integrated scanner and copier</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Application servers</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Web servers</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Database administration workstations</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>Local workstations with desktop applications</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

Central computing equipments

Equipments for 300 workplaces on 20 locations

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Necessary quantity</th>
<th>Reasonable in the budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Local workstations with desktop applications</td>
<td>240</td>
<td>240</td>
</tr>
<tr>
<td>11</td>
<td>Colour laser printer with integrated scanner and copier</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>12</td>
<td>File server</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>