Standard Summary Project Fiche for the Transition Facility

1. Basic Information

1.1 CRIS Number: 2004/006-270.03.01
Twinning Light EE04-IB-TR-01

1.2 Title: Creation of Flight Safety Supervision System for Estonian Civil Aviation Administration

1.3 Sector: Transport

1.4 Location: Estonia

2. Objectives

2.1 Overall Objective:

High level of flight safety ensured in Estonia through efficiently functioning civil aviation flight safety supervision.

2.2 Project purpose:

Estonian Civil Aviation Administration (ECAA) has a flight safety supervision system enabling effective implementation of state supervision in compliance with all the requirements of the International Civil Aviation Organisation (ICAO), the Joint Aviation Authorities (JAA) and the European Aviation Safety Agency (EASA).

2.3 Justification (reference to Monitoring Report and other)

Comprehensive Monitoring Report from the Commission, November 2003: “Estonia is meeting the majority of commitments and requirements in the area of air transport, where legislative alignment remains to be completed. Estonia needs to accelerate its efforts to become a full member of the Joint Aviation Authorities before accession.”

- “The organisation has an immediate need for experienced inspector personnel and State budget that is more responsive to its needs”
- “Although annual inspections of air operators and approved maintenance organisations (AMO) are being conducted, the ECAA has not developed a formal surveillance programme and is not performing ongoing surveillance of air operators, AMOs, maintenance arrangements, leased aircraft and work performed by subcontractors”
- “Additional funds are required for additional inspection personnel, implementation of an inspector training programme, and salaries commensurate with industry. With the
current limitations, the ECAA does not have the resources it needs to provide proper oversight of the aviation industry.

- “The number of technical and administrative staff employed in the Licensing Department is not adequate in relation to the scope of civil aviation activities in Estonia”
- “The ECAA has not established an effective system to acquire mandatory continuing airworthiness information from air operators and approved maintenance organisations in Estonia”

JAA Maintenance standardisation Team (MAST) audit report (July 2003):
- “The responsibility for maintenance policy, planning, granting of approvals, renewal of Certificates of Airworthiness, approval of MELs and Maintenance Programmes clearly show that the ECAA resource is insufficient to perform these effectively.

3. Description

3.1 Background and justification:

Estonian Civil Aviation Administration (ECAA) is the governmental agency under the Ministry of Economic Affairs and Communications that exercises state supervision of aviation activities with an aim to ensure flight safety.

Under the EU Council regulation 3922/91 (on the harmonisation of technical requirements and administrative procedures in the field of civil aviation), the civil aviation authorities must meet the conditions of membership of the Joint Aviation Authorities (JAA), which involve the implementation of Joint Aviation Requirements JAR and the associated Joint Implementation Procedures. The latter are based on the standards of International Civil Aviation Organisation (ICAO).

The working procedures of the ECAA in flight safety oversight are based on Estonian legal acts which are in compliance with the standards and requirements of International Civil Aviation Administration (ICAO), European Joint Aviation Authorities (JAA) and as of the accession to EU, on standards and requirements of European Aviation Safety Agency (EASA) that will gradually take over the JAA functions (see REGULATION (EC) No 1592/2002 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 July 2002 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency (Text with EEA relevance)) ..

Gap assessment:
The first two organisations (ICAO and JAA) have carried out audits in ECAA to oversee the implementation of the above-mentioned requirements:

- JAA Fact Finding visit (23-30 October 2000);
- ICAO Universal Safety Oversight Audit (8-15 December 2000);
- JAA Maintenance Standardisation Team (MAST) audit (7-12 July 2003)

As main shortcomings, the reports of the audits (see 2.3 above) pointed out the following problems:
- limited human resources;
- limited financial resources;
- inadequate qualifications and training of flight safety inspectors.

During the period following the audits, ECAA has hired additional staff and carried out a structural change that enables better to carry out its safety oversight functions.

After structural change on 1 February 2004, ECAA structure comprises 7 departments: Operations Department, Technical Department, Air Traffic Services and Airfields Department, Aviation Security Department, Regulations Department and Development Department and Financial and Administrative Department. 4 of the departments with the overall staff of 16 are directly involved in carrying out supervision of organisations involved in aviation activities (air operators, airfields, aircraft maintenance organisations, air traffic services), in processing applications for and issuing of different certificates, licenses, approvals permissions etc. as well as in collecting and analysing the relevant information and data.

The budget of ECAA for 2004 has increased by 25%. However, no further rise in budgetary nor human resources is envisaged, since the resources of state budget will remain limited. It is still very difficult, with the existing number of inspection staff in ECAA, to cover all the functions in the field of safety oversight up to the standards of ICAO, JAA and EU. The main problem is the inefficiency of the ECAA flight safety supervision system, considering the number of different procedures and operations the ECAA staff has to carry out and the amount of information and data which are to be processed.

In 2002, the ECAA inspectors carried out 44 inspections of different organisations. Circ. 500 operations (issuing, revalidation, renewal) were carried out with licenses and 244 theoretical knowledge examinations of aviation personnel were carried out. The number of aircraft registered in Estonian Civil Aircraft register is 144. There are 11 Air Operators and 9 Maintenance Organisations in Estonia. The number of licensed aviation personnel is circ.600.

The inefficiency of the ECAA flight safety supervision system derives from the following factors:
- insufficient exchange of information within ECAA, with organisations involved in aviation activities and with the Ministry of Economic Affairs and Communications;
- the inefficient processing of information and data and low level of computerisation of ECAA procedures;
- inadequate training of inspecting staff in auditing techniques and supervising methodology.

Exchange and processing of information:

The access to and processing of data concerning flight safety is not flexible enough. Inspecting staff does not have easy access to ECAA data basis (registers of aircraft, aviation personnel, licenses and certificates) and there is not enough exchange of information between different departments and the Ministry because of the separation of different registers and data.

Due to the above-mentioned reasons the planning of inspections and other activities related to flight safety state supervision is time consuming at management as well as at department level, the monitoring of follow-up activities is complicated and the exchange of
information between ECAA and different organisations involved in aviation activities (air operators, airfields, aircraft maintenance organisations, air traffic services) is not efficient enough.

The technical procedure of issuing licenses, certificates, authorisations etc is time consuming due to amount of information that has to be processed and evaluated for that purpose and the low level of computerisation.

In order to make the planning of safety oversight activities, processing of data, exchange of information and issue of different documents more efficient and flexible, the present project foresees the development of Internet-based flight safety supervision information system. It would be a full management system for use of ECAA inspectors and supporting staff that will support all safety oversight-related functions of ECAA.

The system would enable to interconnect all the registers, data, regulations and information at the disposal of ECAA. It will facilitate the planning of inspections and other activities at management and department level and communication between different departments. The system would monitor and support the ECAA quality system, monitor the implementation of inspections follow-up activities by persons and organisations as well as the validity periods of licenses, certificates, authorisations etc. It would offer ECAA inspectors more possibilities for mobility, since it is accessible via Internet. It would facilitate the exchange of information with the Ministry of Economic Affairs and Communications and give easy access to the ECCAIRS system of occurrence reporting. Part of the system would also be accessible to air operators and other organisations which must provide ECAA with their airworthiness, maintenance, operational and organisational information. The system would facilitate and accelerate the technical process of issuing directives, licenses, certificates, authorisations, permissions etc. by offering a high level of computerisation.

Training of inspectors:

Another factor of inefficiency of the present flight safety supervision system is the insufficient training of inspecting staff in auditing techniques and supervising methodology. The availability of trained and skilled inspectors would be an important component of achieving the efficiency that would enable ECAA to cover all flight safety oversight functions by the resources currently at its disposal.

ICAO, JAA and EU requirements describe the procedures of safety oversight. However, ECAA inspecting staff lack knowledge and skills in implementing the procedures in everyday working practices. In this context, both theoretical knowledge in supervision methodology and practical experience in working practices acquired in MS Aviation Authority are equally important.

Theoretical training on supervision methodology and practical on-job training of inspecting staff in auditing techniques as foreseen under the project activities would be complementary to the application of EU and JAA working procedures by ECAA and training received under different projects supported by EU and Member States. (see 3.2 “linked activities).

PHARE project 2002/000-579.02.01 “Creation of the system of licensing and supervision of aviation personnel in compliance with EU and JAA requirements” concentrates on training of flight inspectors and flight examiners/check pilots to acquire professional standards required by Joint Aviation Authorities with the aim to provide higher examination level and supervision of the professional skills of the pilots.
The responsibilities of flight inspectors and flight examiners involve examination and inspection (evaluation of professional skills) of pilots on aircraft in flight for the issue, renewal or revalidation of pilot licenses. Under the Joint Aviation Requirements JAR-FCL, the Aviation Authorities may authorise pilots working in aviation companies to perform the duties of inspecting and examination on behalf of the Aviation Authority (i.e. Civil Aviation Administration), which is also the case in Estonia. The training of flight inspectors and flight examiners under Phare 2002 project is focused on training those ECAA inspectors and flight examiners from outside ECAA who conduct the examination and evaluation of pilots in flight. Inspection of pilots in flight is, however, only one of the many oversight functions the ECAA inspecting staff must cover. The remaining areas are airworthiness of aircraft, personnel licensing, airfields, air traffic services and aviation security. The mentioned areas involve inspection of air operators airfields, flying training organisations, providers of air traffic services etc with regard to their compliance with the requirements of Estonian regulations, ICAO and JAA requirements on management, personnel, personnel training, equipment, procedures, quality system, maintenance arrangements, technical requirements etc.. General training of ECAA inspectors in the ICAO and JAA (EASA) requirements is carried out under the bilateral assistance project in the framework of Netherlands Pre-accession Programme (PPA 2003) (see 3.2 “Linked Activities”). The requirements, however, do not cover practical instructions for inspecting staff in specific auditing techniques and inspection practices. Training in these practices and techniques that have been developed in EU Member States are the target of the present project.

Inspections and safety audits of aviation organisations form an essential part of ECAA functions in ensuring flight safety are the primary responsibility of ECAA staff. The practical implementation of inspections and audits include several stages: the preparation of inspection, inspection/audit visit, preparation of report, monitoring of follow-up activities etc. The training will involve both general theoretical training in Estonia as well as practical on-the-job training in working practices for specific field of inspection in MS Aviation Authority.

By the start of the activities of the present project, ECAA will develop its quality system and working procedures that are in accordance with JAA and EU (EASA) requirements. In its activities ECAA will be supported by expert assistance offered by Netherlands Pre-accession Programme (see 3.2 “Linked activities”). The working procedures, registers and other data necessary for ECAA to carry out its flight safety oversight function would form a basis for developing an Internet-based flight safety supervision information system as one of the results of the present project.

Views of NGOs

Considering the nature of the project, no NGOs were consulted during the project preparation process. The project aims at institution at the central government level and the NGOs are not seen as directly benefiting or having a role in the project.

3.2 Linked activities:

The present project is complementary to the following projects:
- Phare Multi-Country Transport Programme “Modernisation of the Air Transport Sector in the 10 Central European Countries” (project No B5-98-023), carried out in 1999-2000

The general objective of the project was to assist the ten Central European Countries in the preparation for accession to the European Union through a program of technical assistance. Particular objectives of the project were concentrated on institutional structures and safety oversight, legislation and regulations, airport infrastructure and development of air traffic management. Recommendations for elaborating and completing the developments that had been started within the project were developed for each participating country. Areas of activity requiring further assistance were specified.

- PHARE project 2002/000-579.02.01 Creation of the system of licensing and supervision of aviation personnel in compliance with EU and JAA requirements. The project is aimed at evaluating the qualifications and experience of ECAA flight inspectors (both ECAA staff and flight examiners authorised by ECAA to conduct proficiency checks and skill tests to pilots for the issue of revalidation or renewal of pilot licenses), developing training programmes and training methodology and at carrying out training with an objective to bring their qualifications in conformity with JAR-FCL requirements. The project concerns only those inspectors of ECAA staff whose responsibilities are to check pilots’ professional knowledge and skills in flight (to conduct so-called check flights). The project activities will start late in 2003.

The need for practical training aimed at acquiring definite standards will be partly met by the PHARE project 2002/000-579.02.01 “Creation of the system of licensing and supervision of aviation personnel in compliance with EU and JAA requirements”. However, the project concentrates on the training of flight inspectors and flight examiners. Examination and inspection of pilots in flight is only one of the many oversight functions the ECAA inspecting staff must cover. The remaining areas are airworthiness of aircraft, personnel licensing, airfields, air traffic services and aviation security, where the ECAA inspectors lack knowledge and skills in general as well as specific auditing techniques and inspection practices.

- Bilateral assistance project in the framework of Netherlands Pre-accession Programme (PPA 2003) Strengthening the administrative capacity of the Estonian Civil Aviation Administration and Ministry of Economic Affairs in the implementation of acquis communautaire and the International Air Transport Law in the EU. The project is aimed at strengthening legal and institutional basis for supervision on Estonian air transport sector in the fields of safety, security and economy. As the result of the project, ECAA and the Ministry of Economic Affairs and Communications will have the knowledge, strategies, plans and procedures necessary to implement the acquis communautaire and the requirements of ICAO, JAA and EASA. The analysis of legal acts regulating air transport sector and the training of ECAA inspecting staff will be carried out.

- PHARE multi-country project “Modernisation of the Air Transport Sector in the 10 Central European Countries” was first of all meant to give a clear picture of the aviation situation in 10 countries in the process of accession and to point out the areas that need further development. Under the projects some general theoretical training has been received in aircraft accident investigation, crew resource management, requirements in flight crew licensing, implementation procedures for JAR-OPS and JAR-145, the transport of dangerous goods, the implementation of JAR-OPS Quality Assurance Programmes, in EU regulations and in their implementation.
The theoretical training received addressed the legislation and the relevant requirements.

3.3 **Results**: 

3.3.1 ECAA working procedures for carrying out state supervision elaborated and revised in accordance with JAA and EU standards.

3.3.2 ECAA inspectors qualified in auditing techniques and supervising methodology in their respective field of responsibility (The fields to be covered include airworthiness of aircraft, flight operations, personnel licensing, airfields, air traffic services and aviation security)

3.3.3 Electronic Internet-based flight safety supervision information system has been developed and installed. ECAA personnel can operate the system.

3.4 **Activities**: 

In order to achieve the above results the project will involve the following activities:

**3.4.1. Under Contract 1: Twinning Light (150 000 EUR) – Duration of 8 months**

The project activities include the analysis and assessment of all ECAA working procedures for carrying out state supervision (incl inspecting manuals) to ensure compliance with the requirements of ICAO, JAA and EU. This will allow the development of an Internet-based flight safety supervision information system (IT system) under activity 3.4.3.

3.4.1.1. MS Project Leader – to ensure and support the completion of results 3.3.1, 3.3.2 and 3.3.3 (8 000 EUR, 8 calendar days)

Tasks:
- Coordination of project activities with regard to MS input;
- ensuring efficient implementation of the project.

Profile:
- Senior civil servant of MS with min 5 years working experience in MS National Civil Aviation Authority or other MS government agency regulating civil aviation;
- experience in project management is advisable;
- good general knowledge on aviation sector and the functioning of state supervision system in the area of civil aviation;
- good leadership skills;

3.4.1.2. Short Term Expert 1 – to contribute to completion of results 3.3.1 and 3.3.3 (54 500 EUR, duration 3 calendar months)

Tasks:
- Assessment and revision of ECAA flight safety supervision system and working procedures against EU and JAA requirements
- Mapping the structure of ECAA functions and the ways of exchange and processing of information in carrying out flight safety supervision.
- developing basic structure and functions of Internet based flight safety supervision information system (IT-system);
- defining components and functions of the system;
- defining outputs of each function and component of the system;
- designing the basic structure and functional structure of the system;
- development of different templates as outputs of the system.

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1 For the indicators please see Annex 1 - Logical Framework Matrix.
Profile:
- Minimum 5 years working experience in MS civil aviation authority;
- good working knowledge on management and functions of civil aviation authorities, ICAO, JAA and EASA requirements;
- knowledge on the working order of authorities of different MS is advantage;
- experience with computerised systems supporting the functions of civil aviation authority;
  - good communication skills;
  - fluent in English;
  - computer skills.

3.4.1.3. Short Term Expert 2 (STE 2) in supervision methodology and auditing techniques to contribute to completion of result 3.3.2 (7 000 EUR, duration 10 working days over 1 calendar month)

Task:
- Training of ECAA inspectors in general auditing and inspection techniques and practices (for 10 persons) and development of training materials.

Profile:
- Min. 5 years experience as inspector in MS National Civil Aviation Authority;
- fluent in English;
- good communication skills;
- computer skills;
- experience in training of inspectors is advisable.

3.4.1.4. On-the-job training for ECAA inspectors in MS aviation administration (Result 3.3.2).

Under activity 3.4.1.3, 10 ECAA inspectors will be trained in their respective field of responsibilities. The training supports the achievement of the purpose of the project, to create flight safety supervision system, which involve the availability of skilled and qualified inspecting staff.

Study tour to MS Civil Aviation Authority for 10 persons, 5 days to contribute to result 3.3.2 (7 500 EUR- included in the twinning light)

On-the-job training/traineeship for inspectors in specific fields:

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<thead>
<tr>
<th>Field</th>
<th>Number</th>
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<tbody>
<tr>
<td>Flight Operations Inspector</td>
<td>2</td>
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<tr>
<td>Airworthiness inspector</td>
<td>2</td>
</tr>
<tr>
<td>Licensing inspector</td>
<td>1</td>
</tr>
<tr>
<td>Airfields inspector</td>
<td>2</td>
</tr>
<tr>
<td>Air Traffic Services Inspector</td>
<td>2</td>
</tr>
<tr>
<td>Aviation security inspector</td>
<td>1</td>
</tr>
</tbody>
</table>

The study tour will include the participation of ECAA inspectors in the preparation of inspecting visits/audits in MS Civil Aviation Authority and carrying out of inspections/safety audits in MS organisations involved with aviation activities. This
involves personal familiarisation of ECAA inspectors with supervising and auditing techniques and practices of MS.

The study visit includes per diems for Estonian experts who provide the on-the-job training for the inspectors in specific fields. The Phare 2002 project concentrates on training of flight examiners, control pilots and flight instructor to acquire professional standards required by JAA with the aim to provide higher examination level and supervision of the professional skills of the pilots. The training in the frames of the present project is focused on Estonian CAA inspectors who are responsible for inspections and safety audits (of aviation organisations, airoparators, airfields, flying tarianing organisations, air traffic services etc).

Training materials (5000 EUR)

The Short Term Expert 2 (STE 2) will be responsible for development of general training materials of supervision and inspecting methodology for theoretical training of inspecting staff.

3.4.1.5. Service sub-contract 1 under twinning light (42 000 EUR, 2 calendar months) – to contribute to completion of result 3.3.3

Tasks:
- Collection and preparation of detailed data on the basis of the functional structure of the IT-system, preparation for software design and programming;
- assessment of technical requirements of the IT system, preparation of specifications for the software development and hardware procurement;
- ensuring that the system complies with the requirements of Directive of the European Parliament and of the Council No 2003/42/EC (on occurrence reporting in civil aviation) and is compatible to the ECCAIRS system developed by the JRC in ISPRA.

Profile:
- Minimum 5 years experience of working with preparation and implementation of IT projects;
- good knowledge on the architecture and structure of IT systems;
- experience in the preparation and implementation of IT projects in the field of civil aviation is advisable;
- knowledge of English language and Estonian language;
- good communication skills;
- computer skills

3.4.1.6. Service Sub-Contract 2 under twinning light (125 000 EUR)

This service sub-contract can be either implemented by MS experts, consultants or tendered subcontracts by the CFCU as part of the Twinning Light. Final implementation arrangements will be specified on the basis of the results of the feasibility study.

Development and installation of Internet-based flight safety supervision information system and the development of user instructions and instructing of ECAA staff on the usage of the system (Result 3.3.3)
The development process includes programming and design of the software on the basis of the structure and specifications developed under Twinning contract, testing and installation of the system. By the end of project activities Internet based system (IT-system) will be developed and installed that will form a part of the flight safety supervision system and will support all ECAA functions and facilitate its everyday work. The system will be adapted for ECAA needs in carrying out its safety oversight functions. The system will be based on the ECAA working procedures and include data bases, data and information exchange and processing functions and means for processing different documents issued by ECAA. The system will comply with the requirements of Directive of the European Parliament and of the Council No 2003/42/EC (on occurrence reporting in civil aviation) and is compatible to the ECCAIRS system developed by the JRC in ISPRA.

A Cost-benefit analysis for the Investment Component of the project (Contract 2) will be completed by May 2004. Terms of Reference for the cost-benefit analysis have been developed and submitted to CFCU. On that basis budget for contract 2 might be revised.

The IT-system will consist of a data basis including:
1) ECAA registers (aircraft, pilot etc licenses, different certificates, radio navigation aids, meteorological equipment etc);
2) National and International legal acts, regulations, requirements
3) ECAA procedures, forms and check-lists;
4) register of aviation incidents, malfunctions and failures (with facilities of access for air operators, maintenance organisations etc.);
5) inspection reports, precepts and of follow-up activities;
6) training plans and materials;
7) timetables and meeting schedules.

The system must have the following functions:
1) Communication between ECAA staff, between ECAA and organisations involved in aviation activities and the Ministry of Economic Affairs and Communications;
2) Interconnection between different data basis;
3) Monitoring the effective dates and validity periods of regulations, requirements, licenses, certificates etc, and the deadlines of action plans with alerting functions;
4) submission of applications, the processing of applications and issuance of licenses, certificates, approvals etc.;
5) preparation of inspections, the processing of information relating to reports of previous inspections and their follow-up actions;
6) processing of information relating to accidents, incidents and malfunctions;
7) development of action, inspection and training plans with the calendar functions;
8) supervision of the processes of ECAA activities (e.g. processing of applications, implementation of plans etc).
3.5 Lessons learned:

The experience from previous Phare projects implementation has shown that the most important is to compile a logical project proposal (identifying the problems, set realistic objectives, results, activities, management organisation, objectively verifiable indicators, monitoring). After the proposal has been considered acceptable the tendering should be carried out in realistic time-frames as smooth as possible. Therefore the preparatory work (as drafting tender documents) should be done on time.

Lessons learned have been incorporated in the project preparation and would be taken into account in project management, implementation arrangement and monitoring.

According to the lessons learned the special attention will be paid on following aspects:

- ensuring the preparation of project documentation in specified time-frames
- ensuring effective co-operation and communication between all involved parties.
- full commitment of both MS and Estonian experts is necessary for effective implementation of the project

4. Institutional Framework

The beneficiary institution of the project is Estonian Civil Aviation Administration (ECAA). ECAA is the government agency under the Ministry of Economic Affairs and Communications (MoEAC) carrying out state supervision of flight safety. Indirect beneficiaries will be the Ministry of Economic Affairs and Communications and organisations involved in aviation activities as well as aviation personnel.

The project will directly involve the operations, technical, air traffic services and airfields departments as well as aviation security department (see the structure of ECAA, appendix to the Project Fiche) which are responsible for oversight function and receive the training under twinning contract.

All the departments of ECAA will benefit from the introduction of the Internet-based flight safety supervision information system and will give their input to the development of the system. The software developed and the hardware procured in the framework of the project will remain the property of ECAA after project completion.

5. Detailed Budget

<table>
<thead>
<tr>
<th>Transition Facility Support</th>
<th>Institution Building</th>
<th>Total TF(=I+IB)</th>
<th>National Cofinancing *</th>
<th>IFI*</th>
<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td>Contract 1 Twinning Light</td>
<td>254 000</td>
<td>254 000</td>
<td>35 000</td>
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<td>289 000</td>
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<tr>
<td>MS Project Leader</td>
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<td>8 000</td>
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<td>8 000</td>
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<tr>
<td>STE 1 (assessment of ECAA flight safety supervision system, mapping EAA)</td>
<td>54 500</td>
<td>54 500</td>
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<td>54 500</td>
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Additionally the following costs will be financed on co-financing:

- procurement of hardware to operate the IT system (50 000 EUR)
- project administration costs (10 000 EUR)
- project manager (20 000 EUR)

Sub-Contract 2 will be jointly co-financed.

The amounts for co-financing indicated in the table correspond to joint cash co-financing. In addition, in-kind contributions from the Estonian administration for effective implementation of the twinning/TA may be further detailed in the twinning covenant/Terms of references.

The co-financing expenses will be monitored by the beneficiary and the NAO. For the earmarked co-finance, a clear and verifiable set of costs will be provided (ex ante confirmation by the MoF of exact budget lines and re-confirmation before each contract within either of the two components) and ex post for each project and at an aggregate level for each budget line. Flow and stock data on co-finance will be submitted quarterly for steering committees and to the CFCU and on a half-yearly base to the Sector Monitoring Working Group.

The beneficiary, together with the NAO, commits to sound financial management and control.

The cost figures of contract 2 are based on estimation. Definite cost will be established by the cost-benefit analysis.

The co-financing is planned from the 200 to 2006 budget of ECAA as follows:
### 6. Implementation Arrangements

#### 6.1 Implementing Agency

Implementing agency is the Ministry of Finance, Central Financing and Contracting Unit (CFCU). The CFCU will be responsible for tendering and contracting. The responsibility for project preparation, implementation and control will remain in the recipient institution.

The programme Authorising Officer / PAO is:
- **Name:** Renaldo Mändmets
- **Title:** Deputy Secretary General
- **Institution:** Ministry of Finance
- **Phone:** (+372) 6 113 545
- **Fax:** (+372) 6966 810
- **e-mail:** renaldo.mandmets@fin.ee

Programming Officer/ PO:
- **Name:** Ms Signe Ratso
- **Title:** Deputy Secretary General
- **Institution:** Ministry of Economic Affairs and Communications
- **Phone:** (+372) 625 63 11
- **Fax:** (+372) 631 36 60
- **E-mail:** signe.ratso@mkm.ee

Project leader from the beneficiary institution is:
- **Name:** Mr. Tiit Soorm
- **Title:** Head of the Development Department
- **Institution:** Estonian Civil Aviation Administration
- **Phone:** (+372) 694 96 66
- **Fax:** (+372) 694 96 67
- **E-mail:** tiit.soorm@ecaa.ee

A Steering Committee will be established, which will be responsible for the monitoring the implementation of the project and it will meet once in a quarter. The Steering Committee will include the representatives of:

- Ministry of Economic Affairs and Communications,
- Estonian Civil Aviation Administration,
- EC Delegation in Estonia
- Ministry of Finance

#### 6.2 Twinning

Beneficiary institution: Estonian Civil Aviation Administration

Contact:
Name: Mr. Tiit Soorm  
Title: Head of the Development Department  
Phone: (372) 694 96 66  
Fax: (372) 694 96 67  
E-mail: ecaa@ecaa.ee

6.3 Non-standard aspects  
No non-standard aspects are foreseen.

6.4 Contracts  
Contract 1: Twinning Light and TA sub-contracts  
(total budget 289 000 EUR)  
Transition Facility Support: 254 000 EUR  
National Co-financing: 35 000 EUR

Contract 2: Service sub-contract (Development and installation of Internet-based flight safety supervision information system total budget 150 000 EUR)  
Transition Facility Support: 125 000 EUR  
National Co-financing: 25 000 EUR

7. Implementation Schedule  
7.1 Start of tendering/call for proposals  
August 2004  
7.2 Start of project activity  
January 2005  
7.3 Project Completion  
December 2005

8. Sustainability  
As the project is focused on improving the administrative capacity of Estonian Civil Aviation Administration, the sustainability of the project results will be ensured by the continuity of working procedures and inspection practices in ECAA. The flight safety supervision information (IT) system will remain at the disposal of ECAA as an important tool supporting the oversight functions and no additional financing or human resources are required for maintaining the system.

To ensure the sustainability of the project results, ECAA will procure necessary hardware to operate the IT system that will meet the requirements of the information system in terms of capacity and also offer the best ways to use the system in ECAA office as well as outside.

The specification of the hardware will be determined in course of the preparations for software development under the technical assistance contract subcontracted under twinning contract. The procurement of hardware will be financed by the Republic of Estonia.

ECAA will make arrangements with the trainees in which they commit themselves to remain in their positions in ECAA for a reasonable period. ECAA working procedures foresee disseminating the knowledge obtained in training courses, study tours and seminars.

9. Conditionality and sequencing  
The project will consist of two activities that are complementary to each other.
Conditionality

- The service subcontract is conditional upon prior development in ECAA of its main working procedures that comply with EU and JAA requirements. Technical specifications for the procurement of hardware will be prepared under the twinning light contract.

- A further evaluation of the necessary budget (up to the maximum foreseen in the fiche) for the software component (sub-contract 2) will be carried out on the basis of the results of a feasibility study when available. Any additional cost will be borne on national co-financing. The TF budget will be reduced if any of the listed components are not included in the final contract. The launch of the subcontracts is conditional upon the results of the feasibility study.

Cost-benefit analysis for the Investment Component of the project (Contract 2) will be completed by May 2004. Terms of Reference for the cost-benefit analysis have been developed and submitted to CFCU.

Sequencing:

Terms of Reference for the TWL will be prepared and submitted to the ECD before May 2004.

Project activities will start with the assessment and gap analysis of ECAA administrative functions and working procedures and, if necessary, making improvements to the latter. The procedures form the basis for mapping the functions and information flows within, to and from ECAA. The functional structure prepared by STE will be used as a starting point for making preparations for the software programming under TA subcontracted under twinning.

The activities of the training component will start with the seminars in general auditing techniques and supervision methodology for all the participants. Study tour will follow, which is concentrated on practical training in special fields of responsibility of inspectors. This stage of on-the-job training/traineeship may be carried out individually for every inspector under the instruction of MS expert.

ANNEXES TO PROJECT FICHE

1. Logical framework matrix in standard format (compulsory)
2. Detailed implementation chart (compulsory)
3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period) (compulsory)
4. Organisational structure of Estonian Civil Aviation Administration.
## Log frame

### LOGFRAME PLANNING MATRIX FOR

**Project:** Creation of Flight Safety Supervision System for Estonian Civil Aviation Administration

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total budget: 289 000 EUR</td>
<td>TF budget: 254 000 EUR</td>
</tr>
</tbody>
</table>

### Overall objective:

Estonian civil aviation flight safety supervision is functioning in compliance with all the requirements of International Civil Aviation Organisation ICAO, Joint Aviation Authorities (JAA), European Aviation Safety Agency (EASA).

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonian civil aviation flight safety supervision system meets all EU (EASA) and ICAO requirements by the end of 2006</td>
<td>• International Civil Aviation Organisation (ICAO) and European Aviation Safety Agency (EASA) audit reports</td>
</tr>
<tr>
<td></td>
<td>• Working procedures of ECAA</td>
</tr>
</tbody>
</table>

### Project purpose

Estonian Civil Aviation Administration (ECAA) has flight safety supervision system enabling effective implementation of state supervision under EU and JAA requirements, that takes maximum use of ECAA human and technical resources.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECAA covers all its safety oversight functions under EU, JAA and ICAO requirements by using the personnel and other resources at its disposal</td>
<td>• Project reports</td>
</tr>
<tr>
<td></td>
<td>• Annual reports of ECAA to the Ministry of Economic Affairs and Communications</td>
</tr>
</tbody>
</table>

### Results

ECAA has developed flight safety oversight procedures under EASA (EU) requirements by the start of the project activities.

<table>
<thead>
<tr>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECAA has developed flight safety oversight procedures under EASA (EU) requirements by the start of the project activities.</td>
<td>ECAA has developed flight safety oversight procedures under EASA (EU) requirements by the start of the project activities.</td>
</tr>
</tbody>
</table>
### 3.3.1 ECAA working procedures for carrying out state supervision elaborated and revised in accordance with JAA and EU standards.

- ECAA working procedures and inspection manuals completed by June 2005
- Project reports
- Annual reports of ECAA to the Ministry of Economic Affairs and Communications

### 3.3.2 ECAA inspectors qualified in auditing techniques and supervising methodology in their respective field of responsibility (The fields to be covered include airworthiness of aircraft, personnel licensing, airfields, air traffic services and aviation security.)

- 10 inspectors trained by the end of 2005

### 3.3.3 Electronic Internet-based flight safety supervision information system has been developed and installed. ECAA can operate the system.

- The system has been developed and installed and is operating by 10 inspectors of ECAA by the end of the project activities in 2005

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Cost (EUR)</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract 1: Twinning Light</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4.1.1. MS Project Leader – to ensure and support the completion of results 3.3.1, 3.3.2 and 3.3.3 Tasks:</td>
<td>MS Project Leader - 4 calendar months</td>
<td>8 000</td>
<td></td>
</tr>
</tbody>
</table>
- ensuring efficient implementation of the project.

<table>
<thead>
<tr>
<th>3.4.1.2. Short Term Expert 1 – to contribute to completion of results 3.3.1 and 3.3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Assessment and revision of ECAA flight safety supervision system and working procedures against EU and JAA requirements</td>
</tr>
<tr>
<td>- Mapping the structure of ECAA functions and the ways of exchange and processing of information in carrying out flight safety supervision.</td>
</tr>
<tr>
<td>- developing basic structure and functions of Internet based flight safety supervision information system (IT-system);</td>
</tr>
<tr>
<td>- defining components and functions of the system;</td>
</tr>
<tr>
<td>- defining outputs of each function and component of the system;</td>
</tr>
<tr>
<td>- designing the basic structure and functional structure of the system;</td>
</tr>
<tr>
<td>- development of different templates as outputs of the system.</td>
</tr>
<tr>
<td>STE 1 - 4 calendar months</td>
</tr>
<tr>
<td>Activity Description</td>
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<tr>
<td>----------------------</td>
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</tbody>
</table>
| **3.4.1.3. Short Term Expert 2 in supervision methodology and auditing techniques to contribute to completion of result 3.3.2**  
Task:  
- Training of ECAA inspectors in general auditing and inspection techniques and practices (for 10 persons) and development of training materials.  
STE 2 - 10 working days over 1 calendar month | | 7 000 |
| **3.4.1.4. On-the-job training for ECAA inspectors in MS aviation administration. Study visit (Result 3.3.2).**  
Study visit for 10 persons, 5 days | | 7 500 |
| **3.4.1.5. Service sub-contract under twinning light to contribute to completion of result 3.3.3**  
Tasks:  
- Collection and preparation of detailed data on the basis of the functional structure of the IT-system, preparation for software design and programming;  
- Assessment of technical requirements of the IT system, preparation of specifications for the software development and hardware procurement;  
- Ensuring that the system complies with the requirements of Directive of the European Parliament and of the Council No 2003/42/EC (on occurrence reporting in civil aviation) and is compatible to the ECCAIRS system developed by the JRC in ISPRA.  
2 calendar months | | 42 000 |
The Short Term Expert 2 (STE 2) will be responsible for development of general training materials of supervision and inspecting methodology for theoretical training of inspecting staff.

<table>
<thead>
<tr>
<th>Training materials</th>
<th>5000</th>
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</table>

| Audit | 3000 |

3.4.2 Development and installation of Internet-based flight safety supervision information system and the development of user instructions and instructing of ECAA staff on the usage of the system (Result 3.3.3)
The development process includes programming and design of the software on the basis of the structure and specifications developed under Twinning contract, testing and installation of the system.

| Contract 2: Service | 125 000 | 25 000 |

| Reserve | 2000 |

| Total | 254 000 | 35 000 | 289 000 |

Preconditions
Cost-benefit analysis for the Investment Component of the project (Sub-Contract 2) will be completed by May 2004. Terms of Reference for the cost-benefit analysis have been developed and submitted to CFCU.
ANNEX 2

Time Implementation Chart

Project No: Creation of Flight Safety Supervision System for Estonian Civil Aviation Administration

<table>
<thead>
<tr>
<th>Contract 1</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Twinning</td>
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<tr>
<td>3.4.1.1. MS Project Leader – to ensure and support the completion of results 3.3.1, 3.3.2 and 3.3.3</td>
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<td>3.4.1.2. Short Term Expert 1 – to contribute to completion of results 3.3.1 and 3.3.3</td>
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<tr>
<td>3.4.1.3. Short Term Expert 2 in supervision methodology and auditing techniques to contribute to completion of result 3.3.2</td>
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<tr>
<td>3.4.1.4. On-the-job training for ECAA inspectors in MS aviation administration (Result 3.3.2).</td>
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<tr>
<td>3.4.1.5. Service sub-contract under twinning light – to contribute to completion of result 3.3.3</td>
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<tr>
<td>Contract 2</td>
<td>Service contract (development of software and procurement of hardware)</td>
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</table>
ANNEX 3A
Cumulative Contracting Schedule

Project No:
Project Title: Creation of Flight Safety Supervision System for Estonian Civil Aviation Administration

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
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<th>2005</th>
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</table>
ANNEX 3B
Cumulative Disbursement Schedule
Project No:
Project Title: Creation of Flight Safety Supervision System for Estonian Civil Aviation Administration

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
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<th>2006</th>
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<td>31.03</td>
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<td>31.12</td>
<td>31.03</td>
<td>30.06</td>
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<td>31.12</td>
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<tr>
<td>Contract 1</td>
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<td>129 000</td>
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<tr>
<td>Contract 2</td>
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<td>75 000</td>
<td>112 500</td>
<td>112 500</td>
<td>125 000</td>
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<tr>
<td>Service contract (development of software and procurement of hardware)</td>
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<tr>
<td>TOTAL</td>
<td>90 000</td>
<td>129 000</td>
<td>204 000</td>
<td>241 500</td>
<td>241 500</td>
<td>241 500</td>
<td>254 000</td>
<td>254 000</td>
</tr>
</tbody>
</table>
Structure of Estonian Civil Aviation Administration, 01.11.2003

Director General

Assistant to Director General
1

Secretary
1

Lawyer
1

Deputy Director General
1

Operations Department
head of dept., 5 senior inspectors, inspector
7

Technical Department
head of dept., 2 senior inspectors, inspector
4

Air Traffic Services and Airfields Department
head of dept., 3 senior inspectors, inspector
5

Regulations Department
head of dept., senior officer, officer
3

Aviation Security Department
head of the dept., senior inspector
2

Financial and Administrative Department
head of dept.-chief accountant, accountant
2

Development Department
head of dept., senior officer
2