

IPA 2009 – CROATIA - PROJECT FICHE

HR2009-03-14-04

1. Basic information

1.1 CRIS Number: IPA/2009/21661

1.2 Title: Reinforcement of the administrative and technical capacity with a view to ensuring efficient performance of the activities of the Croatian Civil Aviation Agency (CCAA) and enhancement of the administrative and technical capacity of the Accident Investigation Body (AIB)

1.3 ELARG Statistical code: 03.14 – Transport policy

1.4 Location: CROATIA

Implementing arrangements:

1.5 Implementing Agency: Central Finance and Contracting Agency

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1.6 Beneficiary (including details of SPO): Croatian Civil Aviation Agency (CCAA) and Accident Investigation Body (AIB)

Senior Programme Officer (SPO)

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Financing:

1.7 Overall cost (VAT excluded): EUR 1 467 000

1.8 EU contribution: EUR 1 300 000

1.9 Final date for contracting: 2 years following the date of conclusion of the Financing Agreement

1.10 Final date for execution of contracts: 2 years following the end date for contracting

1.11 Final date for disbursements: 3 years following the end date for contracting

2. Overall Objective and Project Purpose

2.1 Overall Objective:

To support the Croatian aviation authorities in meeting the demands to improve aviation safety in the Republic of Croatia according to provisions of international agreements to which Croatia is party, especially the Convention on International Civil Aviation, the EU's *acquis communautaire* and further international agreements to which Croatia is party.

2.2 Project purpose:

To increase administrative and technical capacity of the Croatian Civil Aviation Agency and of the Accident Investigation Body.

2.3 Link with AP/NPAA / EP/ SAA

Accession Partnership

On 12 February 2008 Council adopted Decision on the principles, priorities and conditions contained in the Accession Partnership with Croatia and repealing Decision 2006/145/EC. The Accession Partnership which forms an integral part of this decision contains following project relevant priorities:

- “Complete alignment with the EU *acquis* and enhance administrative capacity in the area of road transport (including the implementation of the digital tachograph), aviation and maritime transport and in the area of inland waterway transport, in particular as regards the safety of navigation and River Information Services.”
- “Implement the first transitional phase of the European Common Aviation Area Agreement and ratify it.”

National Plan for the Integration in the European Union (NPIEU)

The National Programme for the Integration of the Republic of Croatia into the EU - 2009 (NPIEU) is the annual program of the Croatian Government which contains: activities to be undertaken on its way towards EU integration, key priorities in harmonization of Croatian legislation with *acquis communautaire* as well as general principles. The NPIEU gives the current sectoral overview, with planned activities to be undertaken in the forthcoming year.

Key Priorities

Activities relating to the start of operation of the Croatian Civil Aviation Agency will continue in 2009. The Agency has eventually started operating in the first quarter of 2009. With regard to administrative capacities, it is expected that a sufficient number of experts is recruited, while the optimal number of experts will be reached till the end of the year.

Croatia 2008 Progress Report says that “some progress can be reported in the area of air transport”. It stresses that “Croatia has also ratified in May 2008 the European Common Aviation Agreement (ECAA), whose first transitional phase remains to be implemented. This will require some efforts and structural changes in the Ministry/Civil Aviation Authority. Furthermore the Civil Aviation Agency capable of effectively enforcing the *acquis* has not yet been operationally established, a supervisory authority for air traffic control has not yet been designated, the Single European Sky legislation has still to be enforced, as well as the ban on Chapter 2 aircraft, legislation on ground handling and slot allocation has not yet been aligned with the relevant Community rules.”

The report concludes that “an action plan for the rapid implementation of the EU aviation legislation including reinforcing administrative capacity is required as well as alignment of the remaining legislation with that of the *acquis*.”

2.4 Link with MIPD

This project is in line with the following priority of the MIPD 2009-2011: "concerning the ability to assume the obligations of membership (third area of intervention), IPA assistance will continue to support the institutional capacity building for *acquis* transposition and implementation according to the priorities identified in the Accession Partnership, the screening reports and subsequent negotiations in the different chapters of the *acquis*.", i.e. including inter alia chapter 14.

Additionally, this project is in line with the third strategic objective under IPA Component I, which is: to further enhance Croatia's ability to assume the obligations of membership by supporting the institutional capacity building for *acquis* transposition and implementation according to the priorities identified in the Accession Partnership, the screening reports and subsequent negotiations in the different chapters of the *acquis*.

Furthermore, this project is in line with objectives and choices for assistance in the third area of intervention under IPA Component I.

2.5 Link with National Development Plan (where applicable)

One of the main priorities of the Strategic Development Framework for 2006-2013 in the air transport sector is to improve safety as necessary preconditions for the achievement of the full economic role of this type of transport. This project will have direct impact on the improvement of the safety oversight quality in Croatia.

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

Not applicable.

3. Description of project

The Croatian Civil Aviation Agency is a newly established Agency which will perform the majority of functions in Croatian civil aviation. Taking into account the fact that international (ICAO, FAA) and European (JAA, EASA) audits have shown deficiencies and differences from accepted civil aviation standards, as well as that meeting those standards is the key element in ensuring the high level of aviation safety in Croatia, it is important to ensure that the CCAA will be able to perform from the outset the tasks it has been mandated to accomplish by law (Air Traffic Act).

In order for appropriate and efficient oversight to be carried out, the CCAA has been established as an independent organisation with its own budget and structure, independent from the State budget and outside the organisation of the Ministry of the Sea, Transport and Infrastructure. Gradually, in a one year course, it will employ about 55 of employees and broaden the scope of its activities for which a significant material expense will be needed in the form of the equipment and technical assistance.

This is even more evident for the Civil Aviation Accident Investigation Body (AIB) which is not established as independent entity as it should be, with the persons responsible now working within the Ministry of the Sea, Transport and Infrastructure. As required by Directive 94/56/EC, the AIB has been established as a 'functionally independent entity' from the Civil Aviation Administration (organizational unit of the Ministry), with the Chief Investigator reporting directly to the Minister. However, the Directive calls for a fully independent accident and incident investigation body independent of the bodies it will probably need to investigate, such as the Ministry and civil aviation entities.

By the mid of March 2009 the CCAA has conducted a number of activities relating to the start of its operation

- Team appointment (DAT-CCAA) – for supervision and coordination of function transfer
 - Definition of personnel list that will be transferred from DAT to CCAA
 - Definition of assets that will be transferred
 - Definition of documentation and records that will be transferred to CCAA
 - Purchase of initial office equipment for CCAA
 - Office accommodation of CCAA (lease of office space)– new location
 - Development of transfer plan (personnel, records and functions)
 - Secure financing of CCAA in the first quarter of 2009
 - CCAA quality system model establishment
 - Define structure of documentation - hierarchy of manuals in CCAA
 - Actual coordinated transfer of personnel, records and functions from DAT to CCAA
- Phase-in closure

It is planned to establish AIB in the near future as completely independent body, in accordance with Directive, with its own budget, but this will also call for additional staff and equipment.

This project will contribute to further implementation of air safety legislation and result in the enhancement of institutional and administrative capacities of the CCAA and the AIB and, among other things, purchase of the equipment required.

3.1 Background and justification:

3.1.1 Aviation safety in Croatia

Present situation regarding administrative capacity in the field of aviation safety shows following deficiencies:

- Insufficient number of personnel within Ministry of the Sea, Transport and Infrastructure/Directorate for Air Transport to carry proper oversight of safety;
- Competence of personnel is not adequate (very few persons with industry experience);
- Not clearly defined responsibilities between Directorate for Transport Inspection and Directorate for Air Transport, lack of coordination in oversight activities;
- Lack of internal procedures and standards, no quality system.

Such system deficiencies do trigger substantial number of findings at each audit of Croatian Authorities done by international bodies like ICAO, FAA or EASA. Consequently, US FAA has listed Croatia as category 2 country (meaning not compliant with ICAO standards) due to above reasons.

3.1.2 Establishment of the Croatian Civil Aviation Agency

By change of its Air Traffic Act in 2007, the Republic of Croatia has created the Croatian Civil Aviation Agency with the aim to address all major detected system deficiencies and to achieve desired level of safety in civil aviation as well as full compliance with international ICAO and EASA safety standards. The Agency was registered in April 2008 and started its initial operation on 1 November 2008. It is scheduled to take over aviation safety administration and oversight functions from existing administration and become operative at the end of March 2009.

The Agency is an independent organization reporting to the Government of the Republic of Croatia, not being the organizational part of Ministry of Sea, Transport and Infrastructure. The Agency is financed primarily by the aviation industry which enables adequate salaries for Agency employees, which makes jobs in Agency attractive to experienced personnel from the industry.

By offering attractive jobs, the Agency is able to recruit experts from the industry, which will result in improved human resources potential as compared to existing situation in Ministry of Sea, Transport and Infrastructure. By structuring of internal processes and procedures, followed by intensive training, rapid deployment of this new potential is expected in 2009 and 2010. The short term goal of the Agency is to make significant improvements in the area of civil aviation safety oversight in 2009, and to fortify these improvements in 2010.

Per Air Traffic Act (revision 2007) the Agency has the following authorities and responsibilities:

1. Overall responsibility for safety standards application in civil aviation including among others:
 - Certification & licensing activities and safety oversight of all stakeholders in civil aviation (operators, airports, service providers, ATM, general aviation, licensed personnel);
 - Issuing of exemptions;
 - Issuing of Airworthiness Directives;
 - National registers (aircraft register, licensed personnel register...);
 - Approvals of commercial flights, flight schedules...

2. In the role of NSA it is responsible for certification and safety oversight of ATM service provider.
3. Represents Republic of Croatia in ICAO and other international organizations and institutions. It cooperates with foreign bodies in charge of civil aviation transport.
4. In the role of expert body it prepares basis for safety regulation proposals.
5. Perform inspections and investigation of undertakings under the regulatory control and oversight of Croatia, including those to which it has delivered a certificate, licence or approval according to Croatian legislation.

In order to fulfil its duties and satisfy its regulatory obligations, the Agency will employ about 25 existing employees from Ministry of Sea, Transport and Infrastructure that are currently working on safety administration tasks and will have to increase such capacity in following aspects:

- Employment of additional 20 to 30 experts, with total staff number of about 55 by the end of 2009 and further increase of manpower in 2010 up to total of 70 employees;
- Establishment of quality system followed by definition of personnel experience and knowledge standards and development of procedure manuals covering all safety administration activities carried by the Agency;
- Intensive training of all personnel to bring manpower resources to adequate knowledge standards and education about Agency internal procedures;
- Assuring adequate material resources: office accommodation, information system, office furniture and equipment, service vehicles for oversight work in field, special equipment for archives etc.

3.1.3 Air transport legislation

Transposition of the related *acquis* is progressing in Croatia. In the mid 2008 the ECAA Agreement was ratified.

The new Air Traffic Act is aligned with the ECAA Agreement *acquis* and ICAO. The Act is largely harmonized with the ICAO Convention, EASA rules and standards and other key EU Regulations and Directives which regulate the main aspects of civil aviation (competent authorities, operative licence, continued aircraft airworthiness, inspections...). The work on the Act was carried out with the help of an EU expert through the TAIEX programme and at the end it was sent to the EC for comments before sending it to the Parliament for promulgation procedure.

On the basis of the new Act a remaining secondary legislation will be adopted in order to transpose the relating EU *acquis*.

Parallel to the state legislative activities, the CCAA will perform, among others, the safety oversight activities, in accordance with the Act, secondary legislation adopted on the basis of the Act and ECAA Agreement Annex I *acquis*.

In this respect, the current needs are mainly:

- to ensure that transposition is completed and adequate,
- to ensure an operational and efficient implementation (enforcement).

Legislative framework:

The field of air transport in the Republic of Croatia has been regulated by following laws:

- the Air Traffic Act (OG 132/98, 178/04, 46/07 and 69/09);
- the Act on obligatory and proprietary legal relations in air traffic (OG 132/98 and 63/08);
- the Act on establishing of the Croatian Air Traffic Control (OG 19/98).

The acts which have partial implementation on the field of air transport, and which additionally stipulate the issues of air traffic operations and safety are:

- the Transport of Hazardous Substances Act (OG 97/93, 34/95, 151/03 and 79/07) which also comprises international provisions regulating safe transport of hazardous goods by aircraft - ICAO Annex 18 and the provisions of Technical Instructions for Safe Transport of Hazardous Substances in Air Traffic (ICAO Doc 9258);
- the Compulsory Transport Insurance Act (OG 151/05) which is harmonized with the Regulation 785/2004 on insurance requirements for air carriers and aircraft operators.

The key secondary legislation having direct impact on air safety is:

- the Ordinance on the Conditions and the Way of Issuing the Air Operator Certificate (OG 65/06);
- the Ordinance on common technical requirements and administrative procedures applicable to commercial transportation by aeroplane (OG 3/09);
- the Ordinance on maintenance, reconstruction and modifications on an aircraft and aircraft device and technical control of quality of performed works (OG 63/01);
- the Ordinance on continuing airworthiness of aircraft and aeronautical products, parts and appliances and on the authority of organisations and personnel involved in these operations – Subpart M, 9A-JAR-66, 9A-JAR-147 and 9A-JAR-145 (OG 136/06, 32/08 and 132/08);
- the Ordinance on certification of aircraft, design and production organizations (OG 40/08);
- the Ordinance on reporting on and investigation of air security risks, aviation accidents and incidents (OG 139/05).

In addition, there is a series of bilateral agreements on air transport.

Most of EU safety regulations are covered by Croatian legislation. However, there are differences that need to be eliminated throughout 2009. Among highest priorities is the Air Traffic Act that needs to be changed with the goal to clearly define responsibilities between State entities involved in air traffic, modify status and scope of authority of the Croatian Civil Aviation Agency and Accident Investigation Body in order to assure full independence of mentioned bodies and full authority of CCAA to carry on adequate safety oversight. Such modification should assure good legal basis for proper safety oversight and administration.

3.1.4 Institutional structure and administrative capacity in the air transport sector

Per current Air Traffic Act (OG 69/09), there are following State entities that have role in safety of air transport:

- Croatian Civil Aviation Agency (CCAA)
- Ministry of the Sea, Transport and Infrastructure/Directorate General for Civil Aviation (DGCA)
- Ministry of the Sea, Transport and Infrastructure / Accident Investigation Body (to be established as Agency for Accident and Incident Investigation (AII))

The Croatian Civil Aviation Agency is the youngest entity that commenced its operation at the end of 2008 and it assumed its public duties as Competent Authority in the first quarter of 2009.

It is planned to establish AIB in the near future as completely independent body by provisions of new Air Traffic Act.

3.1.5 Recent developments regarding aviation in general in Croatia

The Government of Croatia has been undertaking efforts to resolve effectively any problems related to aviation safety and in particular to reform and modernise the Croatian civil aviation authorities. Regarding to that, the new Air Traffic Act has been in place since 17th June 2009 (OG 69/09).

The competent bodies for civil aviation under this Act are:

- Croatian Civil Aviation Agency (CCAA) responsible for aviation safety as regulatory and oversight authority in Croatia
- Ministry of the Sea, Transport and Infrastructure/Directorate General for Civil Aviation (DGCA) responsible in general for the overall civil aviation policy of the Republic of Croatia – presently acting as Directorate for Air Transport
- Agency for Accident and Incident Investigation (AII) responsible for the investigation of accidents and serious incidents in Croatia – presently acting as Accident Investigation Body

The Croatian Civil Aviation Agency is a newly established Agency which has started operating as a body responsible for aviation safety in Croatia from 1 March 2009. In order for appropriate and efficient oversight to be carried out, the CCAA has been established as a functionally, organizationally and financially independent organisation reporting to the Government of the Republic of Croatia, not being the organizational part of Ministry of Sea, Transport and Infrastructure. This development allows the CCAA to fulfil its obligations as regulatory and oversight authority in Croatia as required by international and Community law. According to provisions of the new Air Traffic Act, the Directorate General for Civil Aviation (DGCA) is the organizational unit competent for civil aviation within the Ministry of the Sea, Transport and Infrastructure which shall have the competences in civil aviation as delegated by the Minister; provided, however, that the Minister shall remain overall responsible for ensuring that the DGCA properly and lawfully exercises any duty or power that has been so delegated. The Agency for Accident and Incident Investigation (AII) is foreseen to be established as a functionally and organisationally independent body responsible for the investigation of accidents and serious incidents, according to provisions of the same Act. By Decree, the Government of the Republic of Croatia shall establish the AII as legal person with public authorities, in which will be determined place, organisation, financial sources and other issues for the operations of the AII.

3.1.6 Link with EU acquis

The proposed project will help in implementation of the following EU Regulations and Directives and in setting the correct organizational and working base and arrangements in accordance with internationally accepted standards from ICAO Convention, ICAO Annexes 1, 6 and 8 and related ICAO Documents, through efficient performing of the safety oversight and other activities by the CCAA and the AIB:

- Regulation (EC) No 1008/2008 of the European Parliament and of the Council of 31 October 2008 on common rules for the operation of air services in the Community;
- Commission Regulation (EC) N° 1315/2007 of 8 November 2007 on safety oversight in air traffic management and amending Regulation (EC) No 2096/2005;

- Council Regulation (EEC) No 3922/91 of 16 December 1991 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation (as amended by Commission Regulation (EC) No 2176/96 of 13 November 1996 amending to scientific and technical progress Council Regulation (EEC) No 3922/91, Commission Regulation (EC) No 1069/1999 of 25 May 1999 adapting to scientific and technical progress Council Regulation (EEC) No 3922/91, Commission Regulation (EC) No 2871/2000 of 28 December 2000 adapting to scientific and technical progress Council Regulation (EEC) 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation, 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, European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC, Commission Regulation (EC) No 1899/2006 of the European Parliament and of the Council of 12 December 2006 amending Council Regulation (EEC) No 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation, Regulation (EC) No 1900/2006 of the European Parliament and of the Council of 20 December 2006 amending Council Regulation (EEC) No 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation, Commission Regulation (EC) No 8/2008 of 11 December 2007 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane, Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane);

- Commission Regulation (EC) No 1702/2003 of 24 September 2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organizations (as amended by Commission regulation (EC) No 381/2005 of 7 March 2005 amending regulation (EC) No 1702/2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations, Commission Regulation (EC) No 706/2006 of 8 May 2006 amending Regulation (EC) No 1702/2003 as regards the period during which Member States may issue approvals of a limited duration, Commission Regulation (EC) No 335/2007 of 28 March 2007 amending Regulation (EC) No 1702/2003 as regards the implementing rules related to environmental certification of aircraft and related products, parts and appliances, Commission Regulation (EC) No 375/2007 of 30 March 2007 amending Regulation (EC) No 1702/2003 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations, Commission Regulation (EC) No 287/2008 of 28 March 2008 on the extension of the period of validity of referred to in Article 2c(3) of Regulation (EC) No 1702/2003, Commission Regulation (EC) No 1057/2008 of 27 October 2008 amending Appendix II of Annex to Regulation (EC) No 1702/2003 concerning the Airworthiness Review Certificate (EASA Form 15a);

- Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (as amended by Commission

Regulation (EC) No 707/2006 of 8 May 2006 amending Regulation (EC) No 2042/2003 as regards approvals of a limited duration and Annexes I and III, Commission Regulation (EC) No 376/2007 of 30 March 2007 amending Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks, Commission Regulation (EC) No 1056/2008 of 27 October 2008 amending Regulation (EC) No 2042/2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks);

- Commission Regulation (EC) No 736/2006 of 16 May 2006 on working methods of the European Aviation Safety Agency for conducting standardisation inspections;
- Commission Regulation (EC) No 593/2007 of 31 May 2007 on the fees and charges levied by the European Aviation Safety Agency;
- Council Directive 94/56/EC of 21 November 1994 establishing the fundamental principles governing the investigations of civil aviation accidents and incidents;
- Directive 2003/42/EC of the European Parliament and the Council of 13 June 2003 on occurrence reporting in civil aviation;
- Commission Regulation (EC) No 1321/2007 of 12 November 2007 laying down implementing rules for the integration into a central repository of information on civil aviation occurrences exchanged in accordance with Directive 2003/42/EC of the European Parliament and of the Council;
- Commission Regulation (EC) No 1330/2007 of 24 September 2007 laying down implementing rules for the dissemination to interested parties of information on civil aviation occurrences referred to in Article 7(2) of Directive 2003/42/EC of the European Parliament and of the Council;
- Commission Regulation (EC) No 768/2006 of 19 May 2006 implementing Directive 2004/36/EC of the European Parliament and of the Council as regards the collection and exchange of information on the safety of aircraft using Community airports and the management of the information system;
- Council Directive No 91/670/EEC of 16 December 1991 on mutual acceptance of personnel licences for the exercise of functions in civil aviation.

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

The project will have a significant impact on the integration of the Croatian civil air transport in the EU system and it will enable full compliance with ECAA Agreement with respect to the aviation safety. It will increase the safety standards in aviation industry of Croatia; therefore it is expected to have a very good final-effect on the future development of the civil aviation industry or the sector. Also, the impacts of this project are the most suitable instrument for development of the administrative capacities and promotion of legislative changes within the Croatian civil air transport community. The results of this project – especially the developed procedures and manuals, give the basis for the CCAA's and AIB/AII's functioning and will be used in the foreseeable future; thereby assuring project's sustainability

3.3 Results and measurable indicators:

Results and measurable indicators in relation with Activity 1 (Twinning)

Results - Component I (CCAA)

1. Developed coherent system of the CCAA procedures and manuals, all in accordance with applicable EU aviation acquis and the ICAO Standards and Recommended Practices (SARPs)
2. Improvement of the effectiveness and efficiency of the CCAA personnel in the performance of their tasks related to licencing, certification, approval and inspection

Indicators

1. Procedures and manuals developed in line with EU aviation regulations
2. Number of the CCAA personnel trained in the areas of competences

Results - Component II (AIB)

1. Improvement of the effectiveness and efficiency of the AIB personnel in the performance of their tasks related to accident and incident investigation

Indicators

1. Number of the AIB personnel trained in the areas of competences

Results and measurable indicators in relation with Activity 2 (Supply)

Results - Component I (CCAA)

1. Improved and upgraded technical capacity of the CCAA to perform safety oversight activities

Indicators

1. All equipment purchased and in place to enable operation of the CCAA by the end of 2010

Results - Component II (AIB)

1. Improved and upgraded technical capacity of the AIB to perform accident and incident investigation

Indicators

1. All equipment purchased and in place to enable operation of the AIB by the end of 2010

3.4 Activities (including Means)

Activities in relation with Activity 1 (Twinning)

Activities - Component I (CCAA)

1. Development of Procedures and Manuals
 - 1.1. Make revisions and/or further development of the CCAA Quality Manual
 - 1.2. Make revisions and/or further development of the State Safety Program
 - 1.3. Make revisions and/or further development of the CCAA existing procedures and manuals together with the elaboration of new tools (procedures, manuals, inspector handbooks, data bases, IT systems etc.), specifically:
 - 1.3.1. NSP Certification and Inspection Procedures Manual

- 1.3.2. Operations Certification and Inspection Procedures Manual
 - 1.3.3. Maintenance and Airworthiness Certification and Inspection Procedures Manual
 - 1.3.4. Personnel Licensing Procedures Manual
 - 1.3.5. Administrative Procedures Manual
 - 1.3.6. General Aviation Inspection Procedures Manual
 - 1.3.7. Aviation Training Certification and Inspection Procedures Manual
2. Implementation and Training
- 2.1. Contribute to the CCAA activities for adopting and implementing mechanisms to enforce the newly developed procedures and manuals in order to have them fully applied by the CCAA
 - 2.2. Provide training for the CCAA inspectors on subjects that should cover supervision methodology and auditing techniques including: review of documentation, review and approval of operating/training manuals, training programmes, preparation of inspections, use of check lists and forms, registration and reporting of findings and deficiencies etc.
 - 2.3. Make revisions of actual knowledge and experience of the CCAA personnel against set standards and make gap analysis in order to:
 - 2.3.1. Develop system of inspector`s special scopes and authorizations
 - 2.3.2. Develop knowledge and experience requirements for each inspector`s scope
 - 2.3.3. Introduce developed scope system into CCAA Quality Manual
 - 2.3.4. Initially assign scopes and authorizations where requirements are fulfilled
 - 2.3.5. Develop common training programmes for each particular scope
 - 2.3.6. Develop initial training plan for the CCAA personnel with the aim to meet personnel standards
 - 2.3.7. Provide initial training of the CCAA personnel with respect to theoretical and practical training (such as short courses, coaching on the job, workshops) with the new elaborated tools
 - 2.3.8. Work Secondments of 5-10 key inspectors for on the job training (OJT) in the administration of the MS

Means

- 1. Long term expert - the Resident Twinning Advisor (RTA)
- 2. Short term experts
- 3. Study visits

Activities - Component II (AIB)

- 1. Training
 - 1.1. Work Secondments of 3 inspectors for on the job training (OJT) in the competent authority of the MS

Means

- 1. Study visits

Twinning contract total – 1.000.000 EUR

Activities in relation with Activity 2 (Supply)

Activities - Component I (CCAA)

- 1. Supply of equipment, as follows:
 - 1.1. Procurement of IT equipment for internal training

- 1.2. Procurement of IT equipment for employees
- 1.3. Procurement of IT networking and security equipment
- 1.4. Procurement of the standard software for Civil Aviation Authorities

Means

Supply contract – 427.000 EUR

Activities - Component II (AIB)

1. Supply of equipment, as follows:
 - 1.1. Procurement of field equipment
 - 1.2. Procurement of IT equipment

Means

Supply contract – 40.000 EUR

Supply contract total – 467.000 EUR

3.5 Conditionality and sequencing

None

3.6 Linked activities

CARDS Regional Aviation Project

The European Commission set up a Regional Aviation Project to assist the Western Balkan Partners in the implementation of the ECAA Agreement. To that effect support will be provided to the civil aviation authorities in the form of long term / short term expert assignments, translation services, training, workshops, seminars and Study visits to similar size national administration in EU Countries, in the fields of aviation legislation, economic regulation, aviation safety, air traffic management and aviation security.

The project will deliver as from early 2009 and its duration is 2 years.

It is essential that the future national twinning project is closely coordinated with the regional program to ensure complementarities and avoid duplication of efforts.

EASA-CARDS Convergence Plan

Technical assistance through EASA-CARDS project has been engaged by the European Commission in order to support the process of awareness and convergence of the Western Balkans countries (also ECAA members States) with the legislation, standards and procedures to be used for regulating civil aviation safety and environmental compatibility.

The specific objective of EASA-CARDS project is to ensure that the Aviation Safety Oversight System of Croatia meets the standards required by the European Community in order to join the EASA system.

Main actions of EASA-CARDS project for the Republic of Croatia cover following areas:

- Regulatory Framework

The continuous support in enforcement and implementation of legal aspects, as well as training courses on legal aspects of the relevant EU *acquis* in aviation.

➤ CCAA Organization Structure

Advice and assistance in the process of establishing a define organization structure with clear definition of the responsibilities of each entity – Directorate for Air Transport/Directorate for Transport Inspection/Croatian Civil Aviation Agency in order to guarantee the efficiency of the Safety Oversight system in accordance with European and international safety standards.

➤ Human Resources

In order to reinforce the safety oversight capacities technical assistance and support in development of an adequate initial and recurrent training programme for the technical personnel (AIRW, OPS and PEL) and establishment of a intensive On-Job-Training programme so to enable the inspectors and technical personnel to gain best practices for the flight safety surveillance.

➤ Guidance and procedures (Guidance Material and Inspector Handbooks)

Technical support in form of inspectors training courses and experts assistance in order to assure improvements and completion of the Inspector Handbooks and checklists in the fields of OPS, AIRW and PEL, and elaboration of the associated Guidance Material regarding flight safety surveillance.

Implementation of EASA-CARDS Convergence Plans will start in February 2009.

ISIS - Regional Project (former SEE-FABA)

In 2005, the EC has initiated with the ECAA countries the SEE FABA project (South East Europe Functional Airspace Block Approach) which aimed to elaborate optimum Functional Airspace Block(s)¹ scenario in the SEE Region. In April 2008, SEE-FABA has been reoriented into ISIS “Implementation of the Single European Sky In South East Europe”, in order to better reflect the new orientation of the Programme.

The programme aims to support the implementation of the Single European Sky in South East Europe, focussing on four priorities areas: capacity building of NSA, establishment of training and licensing legislation, support to transposition of SES legislation and "just culture".

3.7 Lessons learned

The Croatian Civil Aviation Agency had not managed similar projects since it has not been operational yet. Anyhow, the experience gained through the analysis of previous similar IPA projects completed or underway in other sectors could be found as good example. Also the Thematic Interim Evaluation of the European Union Pre-Accession Assistance on twinning in 2008 is a good reference on probable pitfalls in the implementation of the twinning component in this project. Especially important are the following findings:

- *Beneficiaries in Croatia often do not allocate enough resources to twinning projects, meaning that they tend not to anticipate the necessary resources and that the assurance of proper number of staff engaged in the twinning is the most critical point.*
- *A twinning project needs at least one person in the host administration as the driving force.* That is extremely important for implementation or it will face a threat of failing. On the

¹ A Functional Airspace Block is defined in the SES Framework Regulation as “an airspace block based on operational requirements, reflecting the need to ensure more integrated management of the airspace, regardless of existing boundaries”

other hand, committed persons can convince more and more other staff within the beneficiary administration by acting as a personal best practice example

- *Full implementation and sustainability of twinning results depends crucially on high level ownership and commitment to implementation.*

When dealing with the procurement component of the project it is advisable that the description of technical specifications for the planned equipment cannot be too detailed, because technical solutions planned before some time, could become outdated by the time of project implementation due to very fast development of information technologies. For this reason there should be an opportunity for minor changes in specifications of equipment.

4. Indicative Budget (amounts in EUR)

			SOURCES OF FUNDING										
			TOTAL EXP.RE	TOTAL PUBLIC EXP.RE	IPA COMMUNITY CONTRIBUTION		NATIONAL PUBLIC CONTRIBUTION						PRIVATE CONTRIBUTION
ACTIVITIES	IB (1)	INV (1)	EUR (a)=(b)+(e)	EUR (b)=(c)+(d)	EUR (c)	% (2)	Total EUR (d)=(x)+(y)+(z)	% (2)	Central EUR (x)	Regional/ Local EUR (y)	IFIs EUR (z)	EUR (e)	% (3)
Activity 1	x		1 000 000	1 000 000	950 000		50 000		50 000				
contract 1.1	x		1 000 000	1 000 000	950 000	95	50 000	5	50 000				-
Activity 2		x	467 000	467 000	350 000		117 000		117 000				
contract 2.1		x	467 000	467 000	350 000	75	117 000	25	117 000				-
TOTAL IB			1 000 000	1 000 000	950 000	95	50 000	5	50 000				
TOTAL INV			467 000	467 000	350 000	75	117 000	25	117 000				
TOTAL PROJECT			1 467 000	1 467 000	1 300 000	89	167 000	11	167 000				

Amounts net of VAT

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

(2) Expressed in % of the Public Expenditure (column (b))

(3) Expressed in % of the Total Expenditure (column (a))

5. Indicative Implementation Schedule (periods broken down per quarter)

5.1 Start of tendering/call for proposals: May 2010

5.2 Start of project ACTIVITY: January 2011

5.3 Project completion: July 2012

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1.1: Twining	2Q/2010	1Q/2011	2Q/2012
Contract 2.1: Supply	2Q/2010	1Q/2011	3Q/2011

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

6. Cross cutting issues (where applicable)

6.1 Equal Opportunity

Based on the fundamental principles of promoting equality and combating discrimination, participation in the project will be guaranteed on the basis of equal access regardless of sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation.

All contractors shall be requested to provide monitoring data recording the participation of men and women in terms of expert inputs (in days) and of trainees benefiting under the project (in days) as an integral component of all project progress reports.

6.2 Environment

No significant environmental impact.

6.3 Minorities

Based on the fundamental principles of promoting equality and combating discrimination, participation in the project will be guaranteed on the basis of equal access regardless of gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation.

ANNEXES

- 1- Log frame in Standard Format
- 2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
- 3- Description of Institutional Framework
- 4 - Reference to laws, regulations and strategic documents
- 5- Details per EU funded contract where applicable
- 6- Details per CCAA software tool project

ANNEX 1: Logical Framework Matrix

Reinforcement of the administrative and technical capacity with a view to ensuring efficient performance of the activities of the Croatian Civil Aviation Agency (CCAA) and enhancement of the administrative and technical capacity of the Accident Investigation Body (AIB)		Programme name and number IPA 2009	[Cris number]
Croatian Civil Aviation Agency, Accident Investigation Body		Contracting period expires: 2 years upon the signing of the financial agreement	Disbursement period expires: 3 years upon the final date for contracting
		Total budget: EUR 1 467 000	IPA budget: EUR 1 300 000
Overall objective	Objectively Verifiable Indicators	Sources of Verification	
To improve aviation safety in the Republic of Croatia according to provisions of international agreements to which Croatia is party, especially the Convention on International Civil Aviation, the EU's acquis communautaire and further international agreements to which Croatia is party.	- Compliance of State regulatory system with EU acquis - Number and level of audit findings	-EASA audits	
Project purpose	Objectively Verifiable Indicators	Sources of Verification	Assumptions
To increase institutional, administrative and technical capacity of the Croatian Civil Aviation Agency and of the Accident Investigation Body.	- Number of trained personnel - Value of acquired equipment - Whole functional set of specified procedures and manuals - Training programs performed	- Actual personnel records - Financial/accounting reports - EASA audits	- The Government continues its commitment to reform and to accession to the European Union
Results	Objectively Verifiable Indicators	Sources of Verification	Assumptions
<u>Activity 1</u> <u>Component I (CCAA)</u> 1. Developed coherent system of the CCAA procedures and manuals, all in accordance with applicable EU aviation acquis and the ICAO Standards and Recommended	1. Procedures and manuals developed in line with EU aviation regulations	- Agency records to be verified by EC/EASA audit	- Ratification of the new Air Traffic Act

<p>Practices (SARPs)</p> <p>2. Improvement of the effectiveness and efficiency of the CCAA personnel in the performance of their tasks related to licencing, certification, approval and inspection</p> <p><u>Component II (AIB)</u></p> <p>1. Improvement of the effectiveness and efficiency of the AIB personnel in the performance of their tasks related to accident and incident investigation</p> <p><u>Activity 2</u></p> <p><u>Component I (CCAA)</u></p> <p>1. Improved and upgraded technical capacity of the CCAA to perform safety oversight activities</p> <p><u>Component II (AIB)</u></p> <p>1. Improved and upgraded technical capacity of the AIB to perform accident and incident investigation</p>	<p>2. Number of the CCAA personnel trained in the areas of competences</p> <p>1. Number of the AIB personnel trained in the areas of competences</p> <p>1. All equipment purchased and in place to enable operation of the CCAA by the end of 2010</p> <p>1. All equipment purchased and in place to enable operation of the AIB by the end of 2010</p>		
Activities	Means	Specification of costs	Assumptions
<p><u>Activity 1</u></p> <p><u>Component I (CCAA)</u></p> <p>1. Development of Procedures and Manuals</p> <p>2. Implementation and Training</p> <p><u>Component II (AIB)</u></p> <p>1. Training</p>	<p>Twinning</p> <p>RTA STE Study visits</p> <p>Study visits</p>	<p>Total: EUR 1 000 000</p>	<p>- Adequate expertise assigned</p> <p>- No delay in contract procedures</p>

<u>Activity 2</u> <u>Component I (CCAA)</u> 1. Supply of equipment <u>Component II (AIB)</u> 1. Supply of equipment	Supply Supply contract Supply contract	Total: EUR 467 000 CCAA: EUR 427 000 AIB: EUR 40 000 Project total: EUR 1 467 000	
			Preconditions

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

	2010				2011				2012		
Contracted	I	II	III	IV	I	II	III	IV	I	II	III
Contract 1.1					1 000 000						
Contract 2.1					467 000						
Cumulated	0				1 467 000						
Disbursed	I	II	III	IV	I	II	III	IV	I	II	III
Contract 1.1					530 000	74 000	74 000	74 000	74 000	174 000	
Contract 2.1					280 000		187 000				
Cumulated	0				810 000	884 000	1 145 000	1 219 000	1 293 000	1 467 000	

ANNEX 3. Institutional framework

There are following State entities that have role in safety of air transport:

- Ministry of the Sea, Transport and Infrastructure/Directorate for Air Transport (presently acting as Civil Aviation Authority until Croatian Civil Aviation Agency assumes its public duties)
- Croatian Civil Aviation Agency (CCAA) - at the beginning of 2009 is still in phase of preparation for full scale activities
- Ministry of the Sea, Transport and Infrastructure/Directorate of Transport Inspection
- Ministry of the Sea, Transport and Infrastructure/Accident Investigation Body

The beneficiaries of the twinning project will be the Croatian Civil Aviation Agency and the Accident Investigation Body.

Contact persons for implementation of the project:

1. Omer Pita, Director, Croatian Civil Aviation Agency, omer.pita@ccaa.hr
2. Marin Puh, Deputy Director, Croatian Civil Aviation Agency, marin.puh@ccaa.hr
3. [Damir](#) Mika, Project Manager, Croatian Civil Aviation Agency, damir.mika@ccaa.hr
4. Dinko Vodanović, Head, Accident Investigation Body, Ministry of the Sea, Transport and Infrastructure, dinko.vodanovic@caacro.hr

Recent developments regarding aviation in general in Croatia

The Government of Croatia has been undertaking efforts to resolve effectively any problems related to aviation safety and in particular to reform and modernise the Croatian civil aviation authorities. Regarding to that, the new Air Traffic Act has been in place since 17th June 2009 (NN 69/09).

The competent bodies for civil aviation under this Act are:

- Croatian Civil Aviation Agency (CCAA) responsible for aviation safety as regulatory and oversight authority in Croatia (to be fully achieved after the formal adoption of the new Act)
- Ministry of the Sea, Transport and Infrastructure/Directorate General for Civil Aviation (DGCA) responsible in general for the overall civil aviation policy of the Republic of Croatia – presently acting as Directorate for Air Transport
- Agency for Accident and Incident Investigation (AII) responsible for the investigation of accidents and serious incidents in Croatia – presently acting as Accident Investigation Body

The Croatian Civil Aviation Agency is a newly established Agency which has started operating as a body responsible for aviation safety in Croatia from 1 March 2009. In order for appropriate and efficient oversight to be carried out, the CCAA has been established as a functionally, organizationally and financially independent organisation reporting to the Government of the Republic of Croatia, not being the organizational part of Ministry of Sea, Transport and Infrastructure. This development allows the CCAA to fulfil its obligations as regulatory and oversight authority in Croatia as required by international and Community law. According to provisions of the new Air Traffic Act, the Directorate General for Civil Aviation (DGCA) is the organizational unit competent for civil aviation within the Ministry of the Sea, Transport and Infrastructure which shall have the competences in civil aviation as delegated by the Minister; provided, however, that the Minister shall remain overall

responsible for ensuring that the DGCA properly and lawfully exercises any duty or power that has been so delegated. The Agency for Accident and Incident Investigation (AII) is foreseen to be established as a functionally and organisationally independent body responsible for the investigation of accidents and serious incidents, according to provisions of the same Act. By Decree the Government of the Republic of Croatia shall establish the AII as legal person with public authorities, in which will be determined place, organisation, financial sources and other issues for the operations of the AII.

ANNEX 4. Reference to laws, regulations and strategic documents:

Legislative framework:

The field of air transport in the Republic of Croatia has been regulated by following laws:

- the Air Traffic Act (OG 132/98, 178/04,46/07 and 69/09), the adoption of the new Air Traffic Act is expected by the end of May 2009;
- the Act on obligatory and proprietary legal relations in air traffic (OG 132/98 and 63/08);
- the Act on establishing of the Croatian Air Traffic Control (OG 19/98).

The acts which have partial implementation on the field of air transport, and which additionally stipulate the issues of air traffic operations and safety are:

- the Transport of Hazardous Substances Act (OG 97/93, 34/95, 151/03 and 79/07) which also comprises international provisions regulating safe transport of hazardous goods by aircraft - ICAO Annex 18 and the provisions of Technical Instructions for Safe Transport of Hazardous Substances in Air Traffic (ICAO Doc 9258), and
- the Compulsory Transport Insurance Act (OG 151/05) which is harmonized with the Regulation 785/2004 on insurance requirements for air carriers and aircraft operators.

as well as a series of multilateral and bilateral agreements on air transport to which the Republic of Croatia is a signatory.

Documents and Strategies:

National Programme for the Integration of the Republic of Croatia into the European Union
2009

ANNEX 5. Details per EU funded contract

3.4 Activities (including Means)

Activities in relation with Activity 1 (Twinning)

Activities - Component I (CCAA)

1. Development of Procedures and Manuals
 - 1.1. Make revisions and/or further development of the CCAA Quality Manual
 - 1.2. Make revisions and/or further development of the State Safety Program
 - 1.3. Make revisions and/or further development of the CCAA existing procedures and manuals together with the elaboration of new tools (procedures, manuals, inspector handbooks, data bases, IT systems etc.), specifically:
 - 1.3.1. NSP Certification and Inspection Procedures Manual
 - 1.3.2. Operations Certification and Inspection Procedures Manual
 - 1.3.3. Maintenance and Airworthiness Certification and Inspection Procedures Manual
 - 1.3.4. Personnel Licensing Procedures Manual
 - 1.3.5. Administrative Procedures Manual
 - 1.3.6. General Aviation Inspection Procedures Manual
 - 1.3.7. Aviation Training Certification and Inspection Procedures Manual
2. Implementation and Training
 - 2.1. Contribute to the CCAA activities for adopting and implementing mechanisms to enforce the newly developed procedures and manuals in order to have them fully applied by the CCAA
 - 2.2. Provide training for the CCAA inspectors on subjects that should cover supervision methodology and auditing techniques including: review of documentation, review and approval of operating/training manuals, training programmes, preparation of inspections, use of check lists and forms, registration and reporting of findings and deficiencies etc.
 - 2.3. Make revisions of actual knowledge and experience of the CCAA personnel against set standards and make gap analysis in order to:
 - 2.3.1. Develop system of inspector's special scopes and authorizations
 - 2.3.2. Develop knowledge and experience requirements for each inspector's scope
 - 2.3.3. Introduce developed scope system into CCAA Quality Manual
 - 2.3.4. Initially assign scopes and authorizations where requirements are fulfilled
 - 2.3.5. Develop common training programmes for each particular scope
 - 2.3.6. Develop initial training plan for the CCAA personnel with the aim to meet personnel standards
 - 2.3.7. Provide initial training of the CCAA personnel with respect to theoretical and practical training (such as short courses, coaching on the job, workshops) with the new elaborated tools
 - 2.3.8. Work Secondments of 5-10 key inspectors for on the job training (OJT) in the administration of the MS

Means

1. The Member State organisation should provide a long term expert (for a period of 18 months) - the Resident Twinning Advisor (RTA), experienced in the civil aviation policy formulation and regulations, and organisation management. The RTA will work on a day to day basis with the beneficiary.

2. In order to review and develop specified procedures and manuals and for the assistance to RTA in implementation and training, 6 short term experts for at least 30 man months should be engaged.
3. Study visits for the purpose of the work secondments in the administration of the MS

Activities - Component II (AIB)

1. Training

- 1.1. Work Secondments of 3 inspectors for on the job training (OJT) in the competent authority of the MS

Means

1. Study visits for the purpose of the work secondments in the competent authority of the MS

Twinning contract total – 1.000.000 EUR

Activities in relation with Activity 2 (Supply)

Activities - Component I (CCAA)

1. Supply of equipment, as follows:

- 1.1. Procurement of IT equipment for internal training
- 1.2. Procurement of IT equipment for employees
- 1.3. Procurement of IT networking and security equipment
- 1.4. Procurement of the standard software for Civil Aviation Authorities

Means

Supply contract CCAA – 427.000 EUR

Procurement of IT equipment for internal training will enable Training and Licensing Department to organize, maintain and perform computer-based trainings (CBT) and exams to employees and other interested parties from the area of responsibilities.

Procurement of IT equipment for employees is necessary for successful performing of everyday work related activities. Employees who come from the Civil Aviation Authority, Ministry of the Sea, Transport and Infrastructure bringing IT equipment that has already been outdated.

Server PCs and network equipment are required for local area network which will enable employees to share resources. Restricted access equipment connected to working hours tracking equipment will enable security procedures and costs restrictions. Phone switch will allow all employees to use office telephones.

The standard software for Civil Aviation Authorities helps aviation authorities manage and check national and international regulations of ICAO, EC, EASA, Eurocontrol and JAA. This is a complete package of software modules, highly integrated but open solution for the management of licences, certificates, permissions, educations, trainings, audits etc. for pilots, aircrafts, maintenance staff and companies, flight schools, operations, obstacles etc. It is the intention of the CCAA to develop a special project regarding the introduction of the mentioned software which is very important for the reinforcement of the administrative capacity of the CCAA. (more details in Annex 6.)

Activities - Component II (AIB)

1. Supply of equipment, as follows:

1.1. Procurement of field equipment

1.2. Procurement of IT equipment

Means

Supply contract AIB – 40.000 EUR

Procurement of field equipment for AIB is necessary for successful performing of on-site accident investigation activities.

Procurement of IT equipment for AIB employees are necessary for successful performing of everyday work related activities. Current IT equipment has already been outdated.

Supply contract total – 467.000 EUR

ANNEX 6. Details per CCAA software tool project

1. Scope of Project:

It is the intention of the Croatian Civil Aviation Agency (hereinafter: CCAA) to appoint a suitably qualified application software designer and/or supplier (and provider of associated services including user and administrator training and support) in the Aviation Safety Regulation field, for the configuration, supply, delivery, installation, commissioning and support of an Integrated Software Application Suite for the Safety Regulation Division of the Croatian Civil Aviation Agency.

2. Project Objectives:

The main objective of this project will be to provide the CCAA with an integrated operations data application suite that is best suited to its role as a National Supervisory Authority and, with the commissioning of this System as a Commercial software off the shelf (hereinafter: COTS), data entry and management tool with an integrated single entry system software suite for CCAA's safety oversight functions, to deliver and facilitate:

- (i) A secure and manageable integrated regulatory data infrastructure,
- (ii) A modern, interactive, easily navigable, user friendly user interface that will enable the easy entry of regulatory data, and
- (iii) The analysis of critical data and the provision of management performance monitoring tools.

The key operational and performance objectives of the CCAA in the procurement of an integrated COTS application suite will be to provide the following benefits:

- (i) Provide for management information and performance measures for use by CCAA senior management,
- (ii) Streamline the personnel licensing system,
- (iii) Provide for streamlined data entry and access to the knowledge base held by the Authority,
- (iv) Streamline operation of the Technical Library,
- (v) Provide integrated access to the regulations, guidance material and support material to personnel in the field and in the office, and
- (vi) Provide for on line data entry in the field thus dramatically streamlining the entry of audit findings and the tracking and closure of findings.

3. The main characteristic of CCAA Software Tool

The system shall:

- i. accommodate the assessment, audit and certification of organisations,
- ii. the licensing of personnel,
- iii. the certification of individual aircraft or aviation products
- iv. and the storage of data.

It shall record and control all of the associated data to facilitate risk assessment and the adaptation of the safety oversight programme. The system shall deliver a:

- i. secure and manageable integrated regulatory data infrastructure and
- ii. a modern, interactive, easily navigable, intuitive, user friendly interface
- iii. that will enable the easy entry of regulatory data and
- iv. facilitate the analysis of critical data and
- v. the provision of management performance monitoring tools.

The system shall allow for the import of documents, including scanned documents, as part of a file. The system shall allow for the tracking and closure of CCAA Safety and Security Audit findings.

The system shall allow easy development, by the user, of queries and reports of the dataset. The results should be printable or exportable to PDF files, Excel-list or label print. The System must be able to produce all formats and sizes of licences and certificates eg: A4, A5, accordion style and credit card size, directly from the System. The system shall be able to produce advice notifications to customers up to 2 months in advance of renewal date, detailing fee due as per defined criteria. The system must be modular and have modules covering:

- i. the Flight Operations,
- ii. Personnel Licensing,
- iii. Aeromedical and
- iv. Airworthiness functional requirements.

4. Functional Requirements

The functional requirements described in the following sections are defined by the needs of the operational departments within CCAA and cover:

- a) Flight Operations Department:
 - Organisational Approval and Surveillance
- b) Regulatory Performance and Personnel Licensing Department:
 - Personnel Licensing – Pilots,
 - Maintenance and Air Navigation Personnel Licensing and
 - Aeromedical Management
- c) Airworthiness Department:
 - Aircraft Registration,
 - Certification,
 - Airworthiness Directives and
 - Continuing Airworthiness
- d) Aeronautical Services Department:
 - Obstacle Data.

4.1 Organisation Approval and Surveillance

The system shall provide an Organisation Approval and Surveillance module to manage the safety and security obligations of the CCAA in respect to all organizations approved by the Civil Aviation Authority (hereinafter: CAA).

The Organisation Approval and Surveillance module shall:

- i. Schedule audits
- ii. Create audit checklists
- iii. Record and track audit findings
- iv. Facilitate management and closure of audit findings
- v. Issue standard letters based on three categories of letter namely results of audits, audit findings and closure of audit findings.

The organisations to be included in the system are, but are not limited to the following:

- i. AOC holders

- ii. Aerial Work Operators
- iii. General Aviation /Sport Aviation representative bodies
- iv. Flight schools (JAR-FCL) (TRTOs, FTOs, RTFs)
- v. EU Commission (EU-OPS)
- vi. EU (JAR) OPS 1 through OPS 4
- vii. JAA (JAR FCL)
- viii. JAA (JAR FSTD – simulators)
- ix. EASA Part 21 or national equivalent
- x. EASA Part M, all subparts
- xi. EASA Part 147
- xii. EASA Part 145
- xiii. EASA DOA or EASA POA
- xiv. ICAO Annex 14 (Aerodromes)
- xv. ANS Providers

The data held for an individual organisation shall include, but is not limited to, the following:

- i. Company name, address
- ii. Management contacts, including form 4 holders
- iii. Overview capabilities of complex organisations holding more than one approval
- iv. Document repository including amendments of expositions
- v. Details on Standardisation visits (e.g. MAST visits)
- vi. Foreign approvals held.

The Organisation Approval and Surveillance module shall manage audits and produce certificates including, but not limited to:

- i. Air Operator Certificates (JAA Form 100 and 101)
- ii. Operation Specifications
- iii. Certification and Approval of FTOs, TRTOs.
- iv. Certification and User approvals of FSTD Devices (simulators and FNPTs)
- v. EASA Part 145: Approval Certificate, Approval Schedule, Form 6.
- vi. EASA Part 147 Approval Certificate (Form 11)
- vii. Application for Maintenance Training Organisation Approval (Form 12)
- viii. EASA Maintenance System Approval Statement (Form 14) etc
- ix. Recommendation Report (Form 22)
- x. EASA Part 21: Form 3, Form 6, Form 56, Form 55
- xi. Aerodrome Licences
- xii. Certification of Air Navigation Service Providers

The Organisation and Approval module must also manage data necessary for audit of the CCAA by external regulatory bodies e.g. ICAO, EASA and Department of Transport.

4.2 Personnel Licensing General

The system shall be capable of accepting and managing details of 35.000 licence/ certificate holders with capability to expand in the future.

System checks shall be built in to validate data prior to issuing a licence. If data does not pass a validation check then a screen should appear:

- i. advising the user and
- ii. prompting a review of the entry prior to issuing the licence.

Scanned documents shall be capable of being linked to an individual licence file. The system must store and make available details of the current fee for a particular licence, rating or

renewal. Data take on of all current data, held on the existing Data Base licensing, into the new system must be provided. System must provide data exchange facilities with:

- i. the CCAA Financial Management System (FMS) – Progress Database
- ii. the Examinations System.

The user must be able to define the layout of the licence. The system must be able to accommodate different licence layouts. The system should have a print preview option and ability to print draft copies of a licence. All elements required on a licence must be included in the printed version. User must be able to amend / update a licence and then have an option to print either:

- i. the entire licence or
- ii. an individual page or
- iii. specified page numbers.

The system must be capable of producing licences in various formats and sizes eg. A4, A5, credit card size. Users must be capable of printing licences from a number of desk top printers simultaneously. The system must be able to run user generated queries and produce reports e.g.

- i. Number of licences
- ii. Type ratings
- iii. Validity dates
- iv. Number of EASA licences issued in the previous 6 months.

Pilot Licensing

User must be able to search on any piece or partial piece of information e.g. name, date of birth, licence type, flight school, ratings or expiry date of medical and then retrieve the entire pilot file and history. The system shall be capable of producing EASA, JAA and national licences utilising the same input. The system must store:

- i. all current details of licence holder and history of licence
- ii. exam results including date of pass
- iii. details of flight school(s) attended
- iv. details of validity date, expiry date and class of medical certificate held and show this information when queried by user.

Maintenance Personnel Licensing

The aircraft maintenance licensing system shall facilitate the management and control of EASA Part -66 licences and National Aircraft Maintenance Engineer Licences, as well as the management and control of licence holder's personal data.

- i. The system shall be future proofed in so far as possible, to at least accommodate currently proposed "Notices of Proposed Amendment".
- ii. The system must be able to provide user defined queries and reports, (various report formats options shall be available).
- iii. The system shall provide a history of each data entry including a record of deleted or over written data.
- iv. Each data entry person shall be individually identified and a record retained and controlled of each action.

General personal data required to be held in respect of Licence holders shall include:

- i. Surname
- ii. Forename

- iii. Address
- iv. Nationality
- v. Place of birth
- vi. Date of birth
- vii. Hyperlink to a copy of passport (or other ID document)
- viii. Hyperlink to copy of birth certificate (if required)
- ix. General Remarks
- x. Licence no. Unique numerical index (Primary Key link to licence details).

The necessary Data to be retained in relation to The EASA Part – 66AML shall include:

- i. Licence no. Unique numerical index (Primary Key link to personal details)
- ii. Hyperlink to EASA Form 19, (shall have the ability to retain history files)
- iii. Category (including future proofing)
- iv. Sub Category (including future proofing)
- v. Type Ratings (ability to add/remove/amend type ratings)
- vi. Group Ratings (manufacturer or full group)
- vii. Limitations (currently more than 400 different limitations)
- viii. Review Date
- ix. Date of issue
- x. History of issue, of each amendment, of each review and of each re-issue
- xi. Hyperlink to copy of current signed licence
- xii. Hyperlink to police report for lost or stolen licence
- xiii. Hyperlink to Part – 66 Module certificates
- xiv. Hyperlink to Type training, theory certificates
- xv. Hyperlink to Type training, Practical certificates and training/assessment records
- xvi. Hyperlink to experience records
- xvii. Type examination record (written, oral, MCQ or any combination of these)
- xviii. Experience credits / allowances
- xix. Exam credit reports
- xx. Conversion reports
- xxi. Payment details and history

The necessary Data to be retained in relation to National Aircraft Maintenance Engineer Licences, should include fields similar to those required for EASA Part – 66 AML above.

Air Navigation Licensing

System should be capable of producing ICAO, EASA and national ATCO, AFISO and Radio Officer licences. System must store:

- i. all current details of licence holder and history of licence including personal details such as name, address and date of birth
- ii. experience
- iii. endorsements
- iv. ratings
- v. English language proficiency
- vi. details of validity date, expiry date and class of medical certificate held and show this information when queried by a user.

Scanned documents should be capable of being linked to an individual licence file. The user must be able to define the layout of the licence. System must be able to accommodate different licence layouts. System should have a print preview option and ability to print draft copies of a

licence. All elements required on a licence must be included in the printed version. User must be able to amend / update a licence and then have an option to print either:

- i. the entire licence or
- ii. an individual page or
- iii. specified page numbers.

The system must be capable of producing licences in various formats and sizes eg. A4, A5, credit card size. Users must be capable of printing licences from a number of desk top printers simultaneously.

4.3 Aeromedical Management System (hereinafter: AMS)

JAR-FCL Part 3 (medical) sets out the requirements for the medical certification of flight crew personnel. It also requires the establishment of an AMS within the CCAA. Student / Private pilots require a Class 2 Medical Certificate, professional licence holders require a Class 1 Medical Certificate. The CCAA AMS is responsible for the initial issue of Class 1 Medical Certificates and for the initial review of any limitation, variation, suspension or denial of a Class 1 or 2 Medical Certificate. Reports on all medical examinations carried out on Croatian-licensed flight crew, including those conducted by JAR-FCL AeroMedical Examiners outside Croatia, will be submitted to the CCAA AMS for assessment for medical certification purposes. In cases of doubt, or incomplete information of a particular matter, the AMS may require further specialist information to be provided by an applicant. The Aeromedical system shall manage and control the issuing of medicals (reports and certificates) for all personnel within the aviation licensing system.

The system must:

- i. Allow online completion of forms by Medical Examiner or applicant.
- ii. Allow external Medical Examiners to enter the personal details of the applicant.
- iii. The system should then generate the required medical form for the Medical Examiner. Once the Medical Examiner has completed the assessment the medical report should be transmitted to the Aero Medical Section of the CCAA.
- iv. Store past and present medical history of each licence holder.
- v. Be capable of producing user defined reports.
- vi. Should allow auditing of all transactions.
- vii. Be capable of printing medical certificates and medical reports in various formats and sizes eg. A4, A5, credit card size.
- viii. Encrypt all medical data.
- ix. Allow validity date, expiry date and class of medical to be viewed by persons using the personnel licensing section.

4.4 Aircraft Certification

The system shall store basic data on all Type certificates, either EASA/State of Design certificates or CCAA national Type certificates for Annex II aircraft. The data should include, but is not limited to:

- i. the holders
- ii. the aircraft manufacturers
- iii. the identification number, issue number and date
- iv. issuing country
- v. engine
- vi. propeller
- vii. aircraft category (airplane, glider, piston engine, jet engine, ...)

- viii. serial number
- ix. ICAO identification
- x. maximum weights
- xi. EASA categories (EASA aircraft, EASA Annex II aircraft, Largeaircraft)
- xii. validation data
- xiii. standard categories like normal, transport, utility, experimental, home built, restricted
- xiv. Synonyms
- xv. Environmental certificates, including import of EASA NoiseType certificate data.

4.4.1 Airworthiness Directives

The system shall store basic data on all airworthiness directives, either EASA/State of Design or CCAA national airworthiness directives for Annex II aircraft. The data shall include, but is not limited to:

- i. description of the problem
- ii. responsible authority
- iii. national and original ID
- iv. revision type and number
- v. Aircraft applicability
- vi. mandatory compliance dates.

It must be possible to link airworthiness directives to type certificates or groups of type certificates. The system must have a facility to circulate airworthiness directives to interested parties such as owners, operators or registered users by email, or by mail using labels and be able to generate mailing lists.

4.4.2 Continuing Airworthiness System

An airworthiness system is required to maintain details of each aircraft certificate of airworthiness (and associated certificates) throughout its life cycle, from each yearly application receipt, through the airworthiness process to issue of certificates or suspension of same. An Airworthiness system shall hold details of aircraft including the following:

- i. Registration Mark
- ii. MSN
- iii. Make & Type of Aircraft
- iv. Make, Type & number of Engine(s)
- v. Make & Type of propellers
- vi. Registered Owner / Address
- vii. Maximum Take off and Maximum Landing weights
- viii. What category aircraft belongs to: AOC / GA / Delegated etc.
- ix. Intended scope of operation
- x. Main base of operation
- xi. List of what the aircraft is configured for: ETOPS / RVSM etc.
- xii. Information on any previous accidents.

Assign a unique Certificate of Airworthiness number to an aircraft. Hold details of C of A history for each registration mark, eg: C of A renewal dates. Airworthiness Review Certificates renewal date. System shall have the capability of associating scanned documents to a registration mark, eg: scans of application received / insurance documents / radio license / export certificates etc. System shall be able to produce all required Airworthiness Certificates in accordance with regulatory requirements. System shall be able to produce a Permit to Fly document as required in accordance with appropriate EU and national regulatory requirements.

System shall have definable checkpoints on the airworthiness life-cycle eg: if no payment has been received renewal cannot proceed. System shall allow auditing of all transactions.

5. *Security (of the software tool)*

i. Access control - Mandatory Requirements

- System access must be controlled by the use of individual user names and passwords.
- Passwords must expire automatically after a period of time defined by the System Manager.
- The system must be capable of enforcing a strong password policy.
- Application Software Passwords must be able to be generated and changed by the users.
- When passwords are entered they must not display on the screen.
- Application Users must not have access to the operating system.
- The system manager must be able to monitor system access and usage.
- User access must be definable at the following levels and combination of them:
 - ✓ Read
 - ✓ Write
 - ✓ Execute
 - ✓ Delete

It must be possible for the system manager to set individual user's access levels at the following levels within the system:

- i. Access to particular modules and menus
- ii. Restriction of individual menu items
- iii. Access to discrete sections of the database
- iv. Access to individual functions/screens
- v. Access to particular fields.

The system must keep a history of previous passwords and prevent users from utilising them again. These words must be stored in encrypted format.