E-CAB
PUBLISHABLE FINAL ACTIVITY REPORT

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Summary

This publishable Final Activity Report cumulates and summarises the E-Cab results over the full project duration. Section 1 provides an insight into the project objectives, the partners involved, and the work performed by the project team. It also briefly describes the employed methodologies and approaches and explains the impact of the project outcomes on the aerospace industry and on the research community.

Section 2 of the report concentrates on the dissemination and exploitation activities. The included statistics give an indication of the immense dissemination work being performed by the E-Cab consortium. As a result, E-Cab has gained high recognition within the aerospace industry and the scientific community.

The final evaluation of the Top Level Benefits proved that E-Cab has significantly contributed to the technical and scientific objectives of the FP6 framework programme, that it has well complied with the goals of the Strategic Research Agenda of the European Commission and that E-Cab has substantially yielded added value for the European Community. Further project information is available on the E-Cab website at www.e-cab.eu.

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Revision table

Version	Date	Modified Pages	Modified Sections	Comments
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1 PROJECT EXECUTION

1.1 INTRODUCTION

E-Cab is a project dedicated to “E-enabled Cabin and Associated Logistics for Improved Passenger Services and Operational Efficiency”.

The E-Cab Logo

All documents generated in the context of E-Cab can easily be identified by the project logo.

E-Cab is an Integrated Project funded under the 3rd Aeronautics Call 3A of the 6th Framework Programme listed under selected subject number 2 – Integrated approach to an e-enabled cabin and associated logistics for improved passenger services and operational efficiency. As such it responds primarily to the objectives of the Thematic Priority 1.4 Aeronautics and Space, Work Programme 2002-2006, but also to a wider set of objectives set out in the Strategic Research Agenda 2nd edition (SRA2) issued by the Advisory Council for Aeronautics Research in Europe (ACARE).

General information and training material about E-Cab, about involved partners, references to major project events and achievements are maintained and presented on the E-Cab website at www.e-cab.eu.

1.2 PROJECT OBJECTIVES

Air transportation has tremendously grown over the last decades. The increased volume of passengers and freight and the high complexity of airports have reached a point where transportation efficiency and travel quality is considerably affected. To keep up with the growing volume of air transport, a highly streamlined and automated passenger handling system is essential, which makes arrival at the airport, checking-in, baggage surrender and passage to the departure gate as swift, smooth and automatic as possible. The key enabler to such seamless travel logistics is information. Thus, the project objective was to establish an electronically enabled paperless information management system that encompasses all logistics processes of a “gate-to-gate” journey and that allows airlines, airports, other service providers and handling agents to operate more time and cost efficiently and to offer their costumers the services they want.

The project targeted at setting-up the technical framework of technologies, architectures, functions and associated services, in order to generate added value for all involved in the air travel logistics:

- Provide passengers with more choices to select from when booking on-line. Shorten their travel time by providing efficient guidance through the airport terminal to the gate and, if necessary, utilize fast track facilities. Allow the passenger to stay seamlessly connected throughout his journey by offering office and home like on-board services, leaving it up to the passenger to connect also with their own personal electronics devices, e.g. mobile phones and laptop computers.
- Provide airports with a streamlined and automated passenger handling system that moves the passengers efficiently through the airport. Through reliable prediction of late-show and no-show passengers, the system shall support a disciplined gate management.
- Provide airlines with cabin and cargo information management tools using air-to-ground communications, which seamlessly integrates the aircraft into the ground based IT infrastructure, thus enabling improved on-schedule aircraft management at reduced direct operating costs.
- Provide the cabin crew with efficient and flexible means for improving the on-board handling services logistics. The cabin crew’s workload shall be reduced via new paperless content management applications.
- Last but not least reduce aircraft development costs by definition of an on-board communication architecture capable of being easily scaled and adapted to customer needs.

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1.3 CONSORTIUM COMPOSITION

A consortium of 30 partners from 13 countries across Europe - including European global players, small and medium-sized enterprises, research institutes and universities - offered all necessary complementary skills and competencies to achieve the project objectives and to improve the European competitiveness in the global avionic industry.

Two aircraft manufactures Airbus and Dassault Aviation took part in the consortium. The partners in the group of large industrial companies were Ascom, Diehl Aerospace, EADS Innovation Works, Giunti Labs, Rheinmetall Defence Electronics, SELEX Communications, Siemens, SITA, Terma A/S, Thales Avionics UK, Thales Avionics SA, and ULTRA Electronics Airport Systems. The participating small and medium sized enterprises (SMEs) were B&W Engineering, Bucher Leichtbau, CeBeNetwork France, Dansk Teknologi, Identec Solutions, Jettainer, Microtech International, OnAir, and TriaGnoSys. Also involved were the research centres Centro IBERLog, CNRS, Fundacion Robotiker, and TNO, supplemented by the University of Malta, the University of Cranfield, and the University of Bremen.

Airbus Operations GmbH coordinated the project.

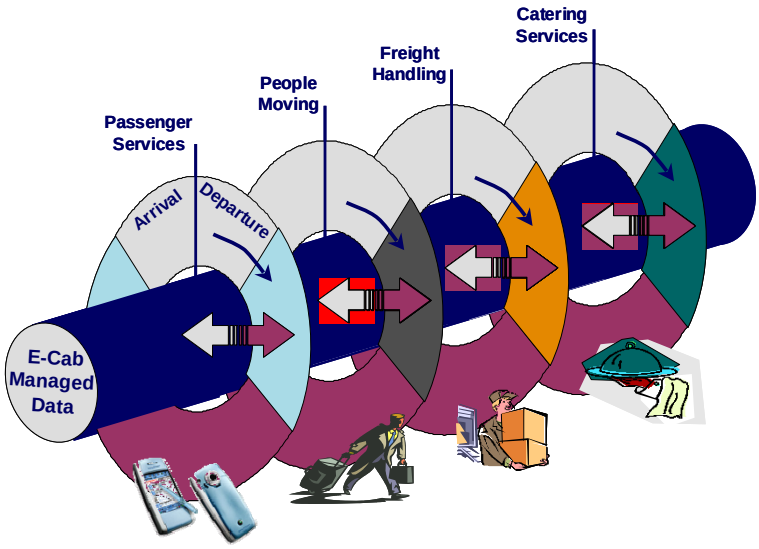
1.4 THE E-CAB APPROACH

In order to achieve the ambitious goals, E-Cab as an Integration Project followed a holistic approach to reconsider the complete logistics of a passenger's journey from gate to gate. To make its complexity manageable, the complete logistic chain was split into four parallel and interconnecting end-to-end service chains:

- "People Moving" focussed on providing airports and airlines with passenger status information, including a reliable prediction of late-show or no-show passengers, and to offer guidance to the passengers to help him to proceed to the gate.
- "Passenger Services" concentrated on services on-board by seamlessly connecting the passenger to the outside world, both for entertainment and business in the sky offering TV and audio/video on demand, e-mail and internet access, conferencing and IP based 3G telephony.
- "Freight Handling" addressed seamless, automated baggage and freight management solutions, mainly based on Radio Frequency Identification (RFID). It also covered wireless monitoring of the container contents, so that airlines are continuously receiving reliable status information about luggage and freight throughout the flight.
- "Catering Services" focussed on newly designed RFID supported logistic covering both off-board logistics before flight as well as on-board services for the passengers during flight.

The End-to-End Service Chains of E-Cab

E-Cab generates synergies by using an integrating approach to the different end-to-end service chains.



For each of these four end-to-end service chains a separate sub-project was dedicated, which developed the necessary architectures, technologies and functions. To ensure a close alignment between all end-to-end service chains, all work performed within the individual sub-projects was put on the basis of a common process model, encompassing all involved stakeholders and derived from common top level requirements.

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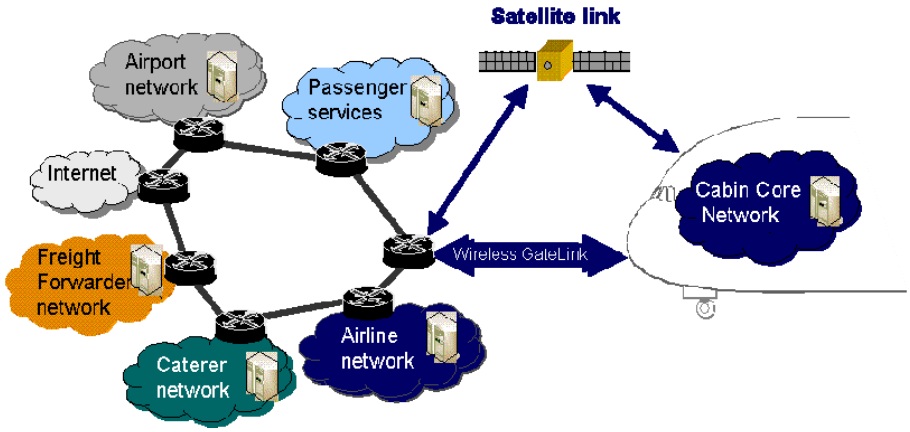
Key enabler for the seamless interaction between the four end-to-end-service was the development of an common integrated communication infrastructure, which allows airlines, airports, service providers and other handling agents to efficiently exchange and manage all passenger and flight process related information via web services and intelligent data brokers.

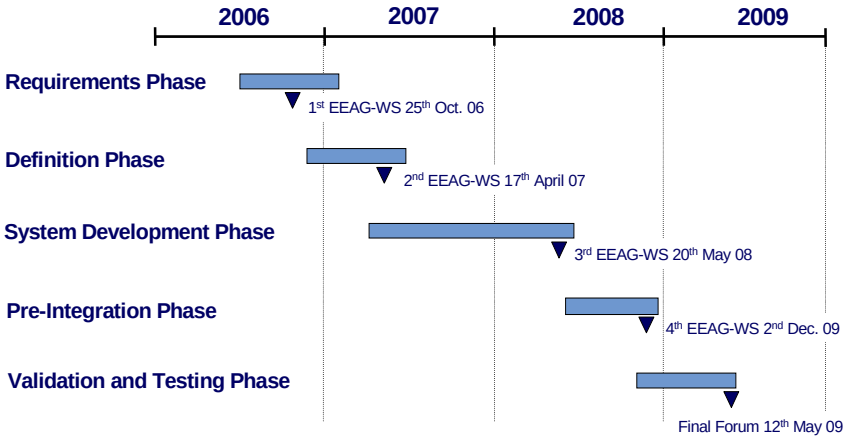


E-Cab Integrated Communication Infrastructure

Key enabler for seamless intercom-nection of all stake-holders involved

1.5 SUMMARY OF THE WORK PERFORMED

The E-Cab master schedule was subdivided in five major project phases. Near the end of each phase a quality gate review was performed for insuring proper maturity levels before entering the next phase. The quality gates were established by presenting the last project phase's achievements to a group of experts from the operational aeronautics community and by analysing their feedback and recommendations. This group – the "E-Cab External Advisory Group" (EEAG) - was constituted by selected representatives from the main E-Cab stakeholders. At each quality gate the achieved project phase results were scored by the EEAG members via key performance indicators, each of which demanded to be measurable and quantified.



The E-Cab Project Phases

The E-Cab schedule is broken down into five major project phases. Near the end of each phase quality gates were installed for insuring proper maturity levels before entering the next phase.

The first project year was dedicated to the requirement phase that started right from project kick-off and finished end of January 2007, followed by the definition phase commencing in November 2006 and running to end of April 2007. The system development phase was launched with some overlapping to the definition phase in May 2007 and continued to nearly the end of the second reporting period. In parallel to the requirement engineering activities, process modelling for all four end-to-end chains and for the communication infrastructure was performed, analysing and depicting the general organisational charts, the overall E-Cab processes, the service chain applications and the technical infrastructure. One driving force for the teams was to get prepared for the first E-Cab External Advisory Group (EEAG) workshop held on the 25th October 2006. The workshop was well perceived by the industry representatives and the EEAG members provided most valuable feedback to guide the teams closer to market expectations.

The time frame from T0+6 to T0+12 was governed by developing sophisticated end-to-end service concepts. The concepts were presented and scored at the second EEAG workshop held on the 17th April 2007. Air France hosted this workshop at their headquarters at the CDG airport in Paris. The number of involved stakeholders had more than doubled at this workshop compared to the first meeting in October 2006. The E-Cab teams and the participating stakeholders shared their expertise in an open-minded discussion and both the organising partners and the stakeholders considered the workshop as a successful and fruitful win-win event.

The second year was fully dedicated to the development of the various systems. The soft- and hardware architectures of all four end-to-end service chains were specified, the scope of applications to be realized in each chain were defined and all system developments were finalised. For developing the network infrastructure, special attention was given to the new Integrated Data Management concept and the set-up of coherent data profiles and sets. With regard to the inter-domain integration and testing, the test platform architecture together with the required test means and tools were defined, and the development of the test environment progressed well.

Again, the driving force for the teams in this time frame was to get prepared for the third E-Cab External Advisory Group (EEAG) workshop, which was held on 20th May 2008. The number of involved stakeholders more than doubled in comparison to the second meeting one year earlier. Invitees who could not attend received the workshop outcome in a compressed form via the workshop minutes. Those minutes included the statistical evaluation of a feedback campaign, which accompanied the 3rd workshop.

The third year period focused on pre-integrating the systems on a test bench level, which started in May 2008 and according to project schedule was planned to be completed by end of October 2008. Due to the before mentioned delays the pre-integration work continued until end of 2008, while in parallel the development of the test environment, i.e. the cabin and cargo integration and test mock-ups at Airbus Hamburg and Bremen, were completed in preparation of the following Validation & Testing Phase. This last phase continued until the Final Dissemination Forum on 12th May 2009. All efforts were focussed on having all systems tested and available for demonstrating the final project results at this dissemination forum and again at the Final Project Review meeting in June 2009.

In terms of Evaluation, Dissemination & Exploitation the final outcome of the project was evaluated. Aim of the exploitation work was to capture all technological results, with details about the share of intellectual property and an outlook on the readiness for entering into the market. Profound project documentation is available and a summary of the publishable part available on the E-Cab website.

1.6 PROJECT DEVELOPMENTS

1.6.1 Requirements, Concepts and Standards

E-Cab is a process and technology oriented project with the main objective to improve logistic processes and to offer an ample spectrum of new functionalities for the benefit of the major stakeholders such as passengers, airlines, airports and caterers.

Initially, for each of the stakeholder environments the various operational process models were defined using a story-board methodology. This led to the development of an overall operational process model which clearly showed the complex interactions between the different end-to-end chains.

The process modelling work included the logistical and operational aspects and also the major technical parameters. A centralised management approach was developed and linked to the process modelling work.

The requirement structures, top-level requirements and the functional and operation requirements were defined by sub-projects and these were then fed into a common database for requirements, for tracking, for tracing and documentation, with the aim of high transparency between the various requirement clusters.

A compatibility matrix was developed in order to achieve harmonisation between the different service chains. Different technologies, types of protocols or wireless communication models were evaluated and the complex data exchanges which would be required were validated by different data flow models. The passenger service applications and data ownerships of the different service chains were also harmonised.

In a standardisation guide all applicable standards for E-Cab were identified and analysed. Suggestions about how to deal with new standards were elaborated and contact points in E-Cab for the various standardisation boards were defined.

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In summary, the SP team “Requirements, Process Modelling, and Standardisation” significantly contributed to the project benefits by making complex operational processes visible, by providing traceability & availability of all requirements, by harmonising the concepts of the different end-to-end chains in order to obtain coherent and seamlessly interacting processes, and by ensuring that the research work considered existing standards.

1.6.2 End-to-end service chain “People Moving”

Central to the ‘People Moving’ sub-project was the value added (opt-in) service for passengers that built upon tracking of their location in the terminal building. Based on that information, passengers receive notifications on the status of their baggage, time left for lingering before boarding and route-information to their appointed gate. The same location information is used to inform airline and airport crew about the status of their passengers. Carrying a new mobile Decision Support System, the crew is alerted to the passengers that are becoming late. Through the device, they are able to contact these passengers, and see where they are.

The direct benefits for the operators are most obvious: accelerated passenger throughput to the gates, less delays due to late or no-show passengers and convenient travel experience for passengers through enhanced passenger notification and guidance support. The new baggage services and the better decision support function in case of late or no-show passengers decrease the delays of aircraft.

The People Moving concepts benefit passengers in the sense that they experience a more hassle free journey and are better informed, while airlines and airports are able to shorten turnaround times, and prevent delays by anticipating on passengers becoming too late. Towards realisation in a market-situation however, many implementation choices still remain. Passenger privacy and autonomy regarding tracking control will be a big issue to guarantee acceptance when progressing to the next steps.

1.6.3 End-to-end service chain “Passenger Services”

This sub project was based on the concepts defined during the initial E-Cab requirements project phase. The key features were business and entertainment in the sky, wireless communication in the cabin, device independent access to services, open application integration framework, and smart content management.

The SP team provided a wide range of functionalities like sophisticated communication connectivity and the use of 3G mobiles on-board the aircraft. New wireless communication technologies for the benefit of decreasing the Direct Operating Costs by reducing system weights were introduced.

Special attention was given to the development work on the Power Line Communication (PLC) system, which was aimed at adapting this technology to the special requirement profiles for aircraft applications. In addition, new Digital Video Broadcasting-Handheld (DVB-H) technologies for future cabin products were evaluated and can be included.

Key targets for the sub project developments were the scalability of system architecture and the system maturity and reliability. Service Oriented Architecture (SOA) solutions are a general trend in the IT business and new and dedicated software architectures for the In-flight Entertainment (IFE) and are based on the implementation of the SOA through web services.

In summary, the major benefits will be decrease in Direct Operating Costs (reduced weight, less cooling requirements, reduced turn-around time), decrease in Maintenance Costs (easy installation) and increase of system flexibility and re-configurability through the realised open integration framework. In addition, new technologies like Power Line Communication reduce system size and weight and improve passenger comfort by providing more legroom for passengers.

1.6.4 End-to-end service chain “Freight Handling”

The many features developed included new hardware and software solutions and also new services for the handling processes including new airport and aircraft handling services for freight and baggage. New system developments inside the aircraft cargo included a new ULD identification feature at aircraft cargo door, ULD tracking and localisation inside the aircraft, new evaluation routines to determine the aircraft loading status, and wireless freight surveillance during flight for e.g. perishable goods. Other new features to mention are optimised baggage tracking at airports, guided baggage offload from aircraft and new services like baggage collection at home.

The main enablers are standardised RFID technology for freight and baggage and the use of a standardised data management concept throughout all logistic end-to-end chains.

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The major benefits in terms of cost and time saving will be paperless and transparent processes for freight and baggage handling, provision of correct aircraft loading, reduction of aircraft loading time and reduction of mishandled and misguided freight and baggage.

1.6.5 End-to-end service chain "Catering Services"

The main features will be improved inventory management, new passenger and crew applications, asset tracking and tracing, and consumption monitoring. The physical flow of goods, along with the flow of pertinent data among many involved stakeholders (e.g. airlines, airports, caterers and passengers both on ground and on-board the aircraft), are a characteristic for the catering logistic processes.

A new galley monument with improved ergonomics has been developed for the integrated on-board platform for catering. The integrated RFID technology is one of the key enablers for the new catering functionalities along with a new seamless and therefore paperless data management system. The wired or wireless user interfaces are based on HTML.

A new ergonomic solution for serving and selling during flight includes a foldable service cart with an attached crew mobile device. A new system for the worldwide localisation of trolleys provides a break-through in asset tracking.

The benefits of the improved catering services includes the optimisation of catering planning and therefore weight, time and cost savings, optimised space utilisation, reduced workload for cabin crew, and an increased number of choices of merchandise and catering alternatives for passengers.

1.6.6 Communication Infrastructure and Integrated Data Management

This system became of necessity extremely complex, and is based on a worldwide operating web service and data management concept.

Key features of this concept had to be that the data owned by each stakeholder can be exchanged on a need-to-have basis using a message passing approach. The integrated communication infrastructure developed in E-Cab opens airlines, airports and service providers to the possibility of the efficient exchange of traveller and flight handling information via web services. Important drivers for the development of the communication infrastructure was the scalability and modularity of its architecture based on open standards.

A system was developed in order that business processors could be analysed and new modelling tools applied. This enables stakeholders to obtain an inside view of the complex world of an air transportation in order to optimise their economic efficiency.

The novel Integrated Data Management System allows, for the benefit of airports and airlines, to integrate new as well as legacy systems and databases into the new communication infrastructure on-ground and on-board. The seamless and paperless interactions between all stakeholders in real-time decreases the direct operating costs for all involved partners.

1.6.7 Live demonstration of E-Cab project results

The test facilities and the complex communication infrastructure were made operational in order to demonstrate all of the developed E-Cab systems. New experimental processes and tools were developed by the "Validation & Testing" team along with associated software support to verify the inter-operability between systems and services and by such increase the reliability and maturity of the new systems. The central element was the aircraft cabin mock-up containing the infrastructure for Passenger Services and on-board Catering Services. The cabin core network included the newly developed cabin crew applications and was linked to the communication network on ground.

The on-ground infrastructure had several RFID gates to support the People Moving demonstration and the Catering Services at the airport and at the caterer premises. The communication ground network was linked with the SITA hub server in Atlanta, Georgia (USA) in order to demonstrate web-based communication between different stakeholders worldwide using the newly development Type-X messaging protocol.

The final stage of the research program involved two live demonstrations of all systems in the Airbus Cabin and Cargo Innovation and Research Centre, one during the Final Dissemination Forum in front of selected experts from the E-Cab External Advisory Group (EEAG), the second time during the Commission's Final Review meeting. A virtual flight from Munich via Amsterdam to Singapore was used to demonstrate the newly developed functionalities and tangible benefits for passengers, airlines, airports, freight forwarders and caterers of the new systems. The live demonstration lasted for approximately one and a half hours. After the

live performance the participants had the opportunity to visit the market stands of all sub projects and to talk with the experts from the different research teams. The following photo gives an impression of the conducted live demonstrations.

E-Cab Final Disseminaton Forum at the Airbus Cabin Innovation Center

The end-to-end teams demonstrated the functionality of their developments. The galley operations inside the cabin were recorded live and displayed on the large screen on the right.

1.6.8 Project Evaluation

In addition to the verification activities aiming at checking the compliance of the project developments with their specifications, a project evaluation was performed, too. The evaluation aimed at judging the project results against the expected benefits, i.e. against the 26 Top Level Requirements (TLR) that had been defined before project launch, which - after further breaking them down into Functional and Operational Requirements (FOR) – had built the starting point for the developments of all service concepts and systems.

The evaluation focussed on the new end-to-end chain concepts at global system level, on a specific end-to-end chain level by means of operational scenarios, and – located at the highest right tail of the “V” model – also on societal level. For the latter, the evaluation team judged the outcome from the “society” perspective, represented by the end-user and his/her improved travel quality. Therefore the evaluation process made a clear separation between the components verified on a limited mock-up against their test requirements and the concepts evaluated against the expected benefits on operational scenarios.

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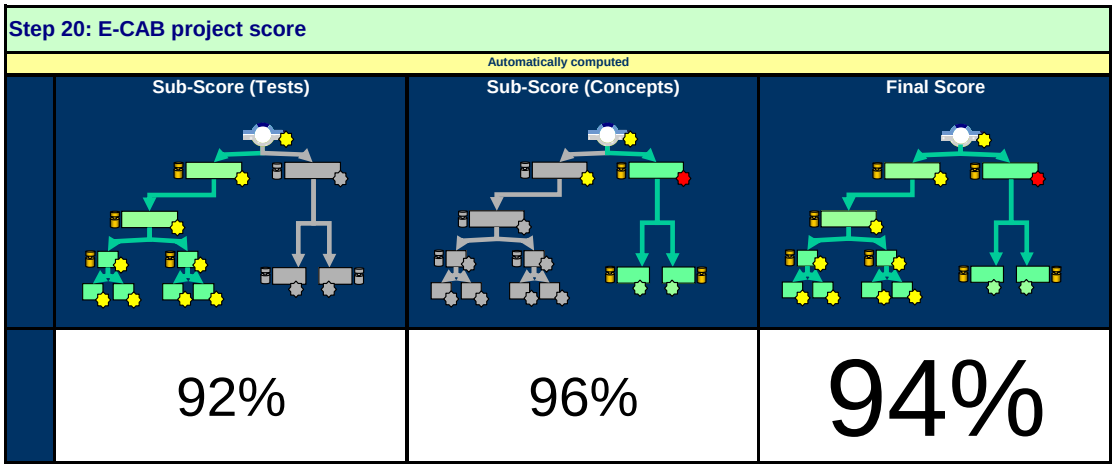


The analysis of the Top Level Benefit achievements indicated, that emerging technologies, for which no well accepted standards are available, generally achieved lower scores. Examples for these are all concepts, in which novel technologies like DVB-H, wireless USB or Powerline communication were deployed. On the other hand, concepts with quite mature technologies like RFID in general achieved better results.

The overall E-Cab outcome scores at 94%, resulting from the sub-scores of 92% for the achieved test results and 96% for the realised E-Cab concepts. This final E-Cab scoring is impressively high and reflects the comprehensive efforts in terms of management, engineering, quality and EEAG support that were put into the project by all contributing partners. The final evaluation of the announced Top Level Benefits proved, that E-Cab has substantially yielded added value for the European Community.

1.6.9 Conclusion

With the overall positive project results and the good coverage of the Top Level Benefits it can be stated that E-Cab has substantially contributed to the technical and scientific objectives of the FP6 framework programme and has well complied with the goals of the Strategic Research Agenda of the European Commission.

The social objectives in terms of improving the Quality of Life and the offer for a more Healthy Workplace for the cabin crew have been well achieved. The overall high scoring of the top level benefits deliver ample evidence that the policy objectives in terms of a higher independence of the European equipment industry has been satisfied and has reinforced their competitiveness.

The continuous involvement of the E-Cab External Advisory Group (EEAG) provided very valuable feedback from the operational perspective, which was essential for closely aligning all project work to market needs. Through the EEAG, E-Cab also achieved a high industry-wide awareness and has fostered new and rewarding business contacts between project partners and stakeholders.

The recommendation for the involved partners and their way ahead is to use their gained knowledge to affect the standardisation work that is relevant for their field of expertise.

2 DISSEMINATION AND USE

2.1 DISSEMINATION OF KNOWLEDGE

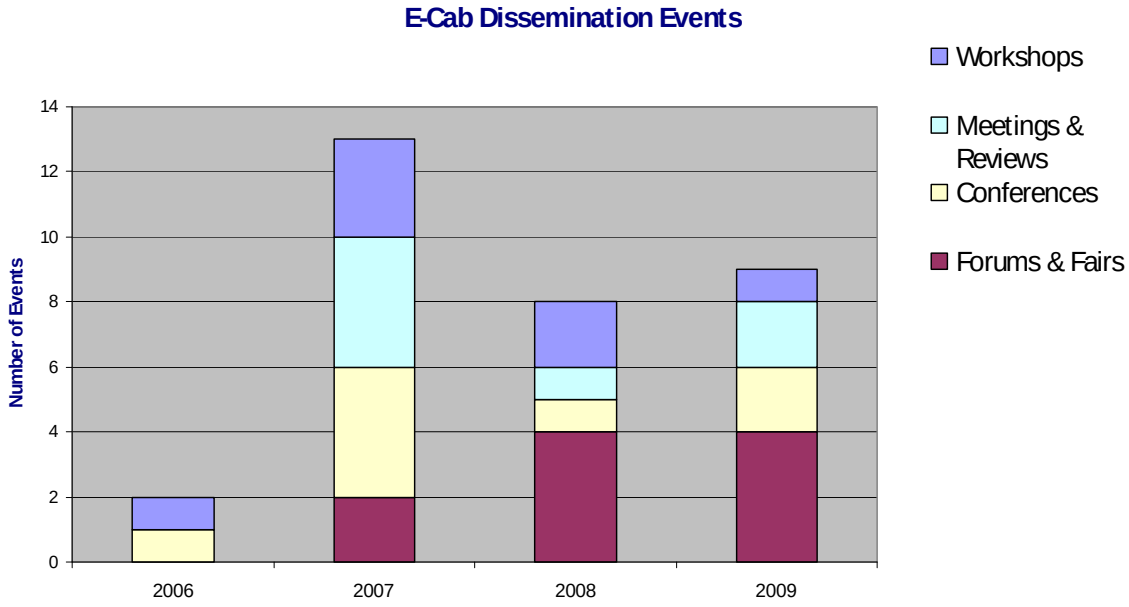
Dissemination status accounting is broken down into clusters. The first one is related to dissemination events like workshops, user forums, conferences, exhibitions etc. The next major cluster is related to the general public and includes press releases, media contacts e.g. with TV stations, presentation of video clips and the presence in the World Wide Web via the E-cab website or via links to and from partner websites. The last block is assigned to training activities and includes training of the E-Cab team and training to stakeholders. An e-learning site as part of the E-Cab website is available to a world wide audience.

All dissemination work to external audiences is of special sensitive nature and requires a good documentation. The bar charts on the next pages summarise all public dissemination work and provide supplemental information. The charts for dissemination events, press releases, media, public relation, and training activities are in most cases partner related.

2.1.1 Dissemination Events

The bar chart below highlights the general dissemination approach of E-Cab over the whole project duration. The first and second project years were dominated by workshops, in order to collect valuable market feedback and to fine tune the project to market demands, whereas the focus in 2008 and even more in 2009 was in conferences and forums in order to disseminate the outcome of E-Cab to a wide audience.

Contributions to conferences and scientific forums were mostly made by members from the universities and research institutes. All dissemination events were supported by comprehensive sets of dissemination material like posters, leaflets, presentations, the official E-Cab project flyer and last but not least the E-Cab video clip. Some of the posters, the project flyer and the video clip are available on the E-Cab website at www.e-cab.eu.



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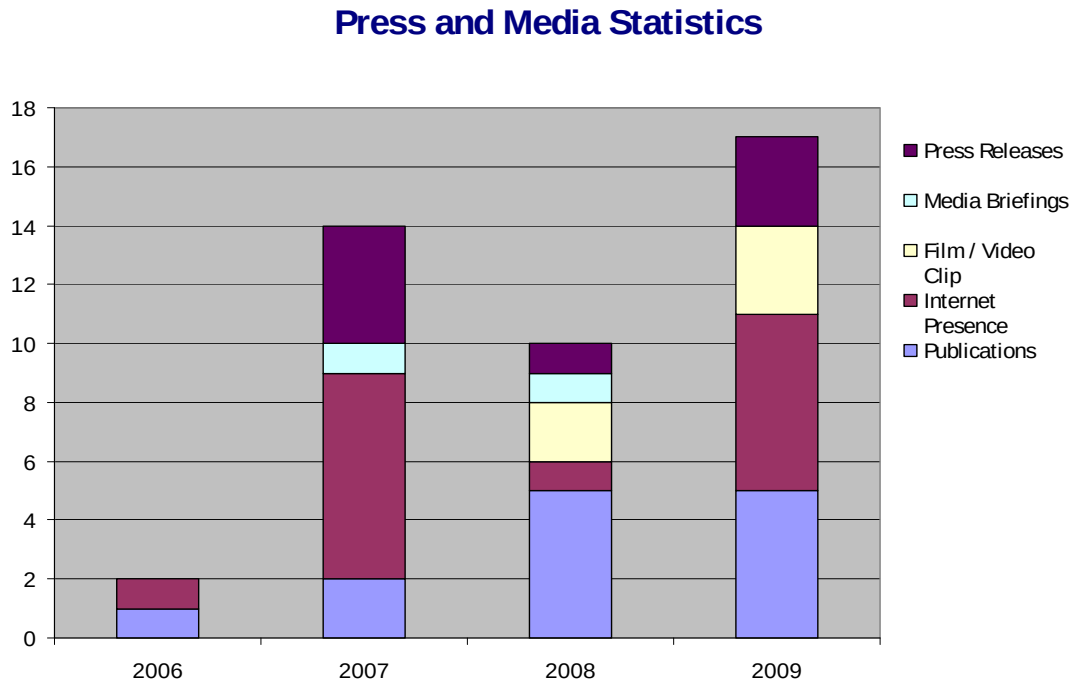
2.1.2 Press Releases, Media, Public Relations

In terms of “Press Releases, Media, Public Relations” the leading role of the university partners within E-Cab deserves special mentioning. The statistics below shows the large portion of internet presence, scientific publications and involved media.



The producer of the E-Cab video clip informed the project team that he submitted the clip to the WorldMediaFestival 2010. The WorldMediaFestival fosters global competition for modern media and acknowledges outstanding solutions in corporate film, TV, web and print productions. It inspires creativity and innovation, supports the exchange of professional ideas and fosters international contacts within the industry. Today it is the forum for leading communication professionals from around the world. It is also the only forum of its kind in Europe. For more details see http://www.worldmediafestival.org/en/welcome.

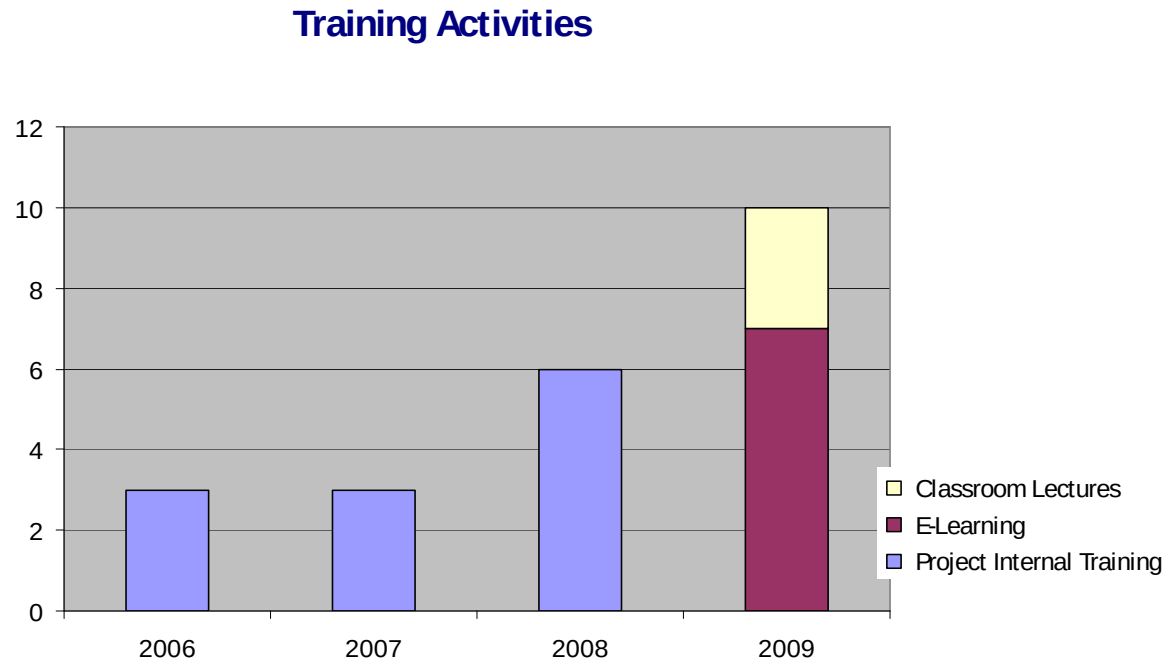
The E-Cab video clip is available on the E-Cab website at
http://www.e-cab.org/index.php?option=com_wrapper&Itemid=61

2.1.3 Reported Training Activities

Third major part of the E-Cab dissemination work package was related to numerous training activities either in the form of project internal trainings, or as part of the eLearning feature offered on the E-Cab website, or as class room training sessions mainly organized by the participating universities.

The next bar chart illustrates the training policy deployed in E-Cab. Emphasis in the first two project years was to adapt the classical project management tools including the methodologies for constructing business cases and preparing market acceptability studies to the needs of E-Cab. The project management team and the sub project teams were trained on how to use those tools and methodologies in an E-Cab coherent way.

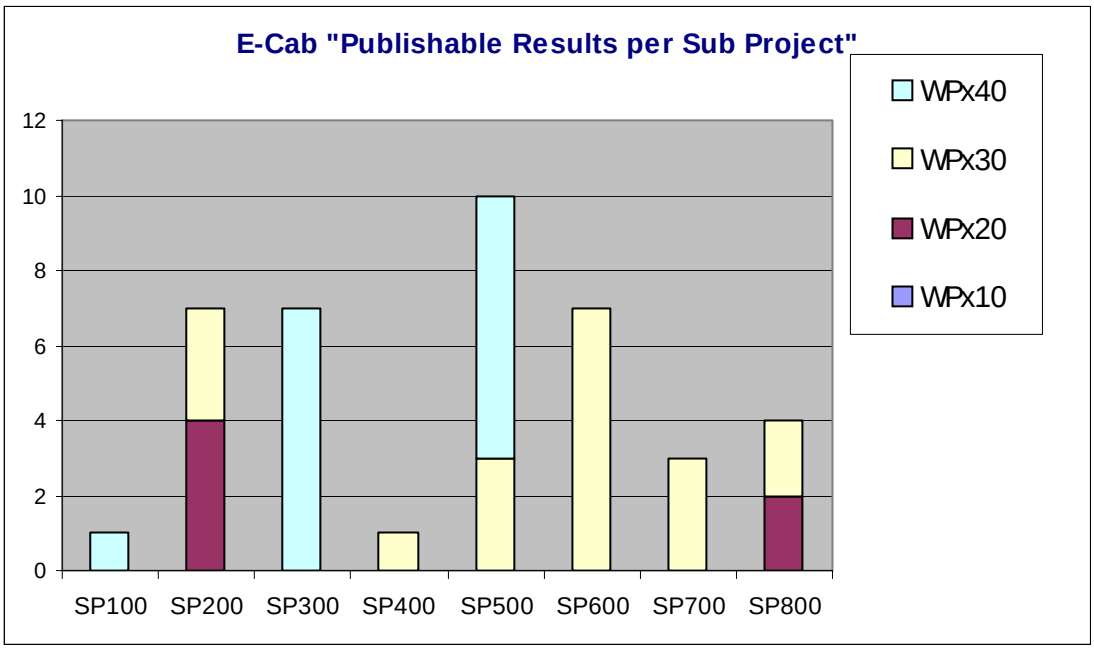
In 2008, the internal training activities focused on how to set-up a market conform Integrated Data Management System and the development of pertinent tools. In preparation of a successful project closure, the methodology for evaluating projects and the project exploitation tools and procedures and how to prepare the Final Technology Exploitation Plan was trained. In 2009, the knowledge gained in E-Cab was passed on to the external community, either in the form of e-learning sessions or by classroom lectures conducted by the involved universities. The offered e-learning sessions are available on the E-Cab website at http://www.e-cab.org/index.php?option=com_wrapper&Itemid=61.



2.2 PUBLISHABLE EXPLOITABLE RESULTS – SUMMARY

The graphic underneath depicts the number of publishable results by the different sub projects. The sub project SP100 “Requirements, Concepts, Standards” is by its very nature limited with their publishable results to standardization work, since the other work packages within sub project produced results that are for project internal customers, only. Most of the other sub-projects, in particular SP200 “Passenger Services”, SP300 “People Moving” and SP500 “Catering Services” reported a high number of publishable items and indicated their open mindset for further business and new collaborations, while most of the partners in SP400 “Freight Handling” indicated that they have already formed new cooperations on their own.

The publishable results about SP600 “Communication Infrastructure” are limited to cabin crew applications. The SP700 “Integration & Verification” sub project has, similar to SP100, only internal customers. Therefore, the outcomes of this sub project are limited to the evaluation methodologies of test results and to the automatic test case and test data generation.



The achieved project results are being formalised in the “Final plan for using and disseminating the knowledge”, with the publishable part of this report being available on the E-Cab website at www.e-cab.eu and on the CORDIS market place.

3 CONTACT DETAILS OF THE CO-ORDINATOR

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