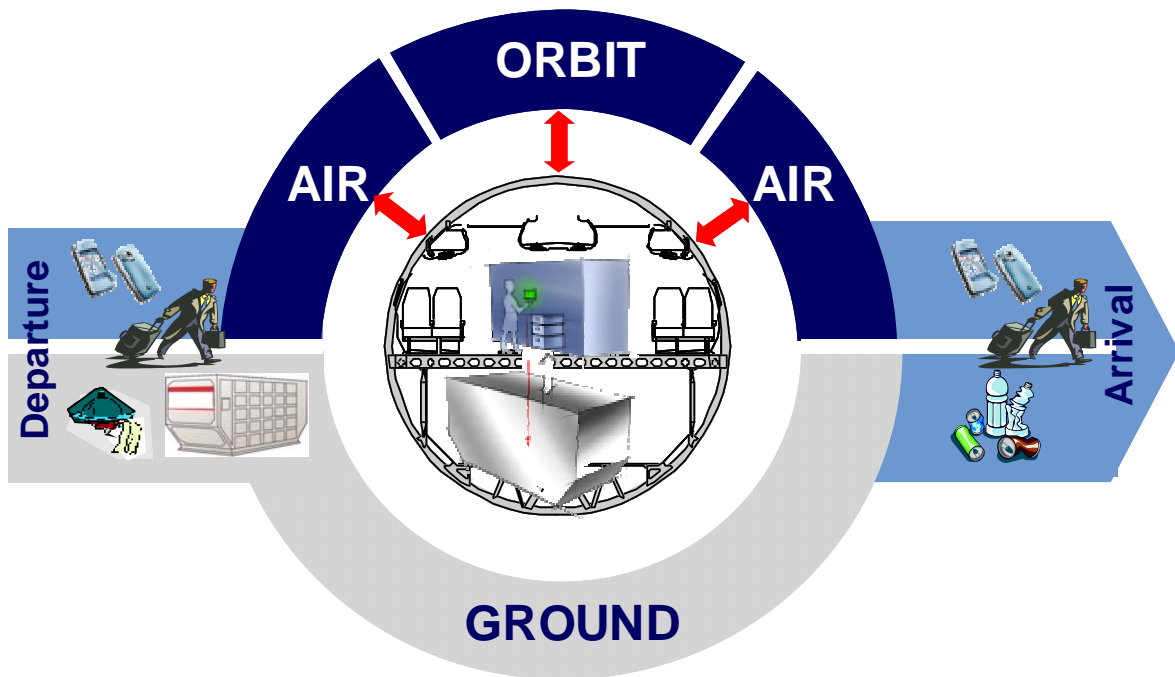


E-CAB PROJECT AT A GLANCE



E-enabled Cabin and Associated Logistics for Improved Passenger Services and Operational Efficiency

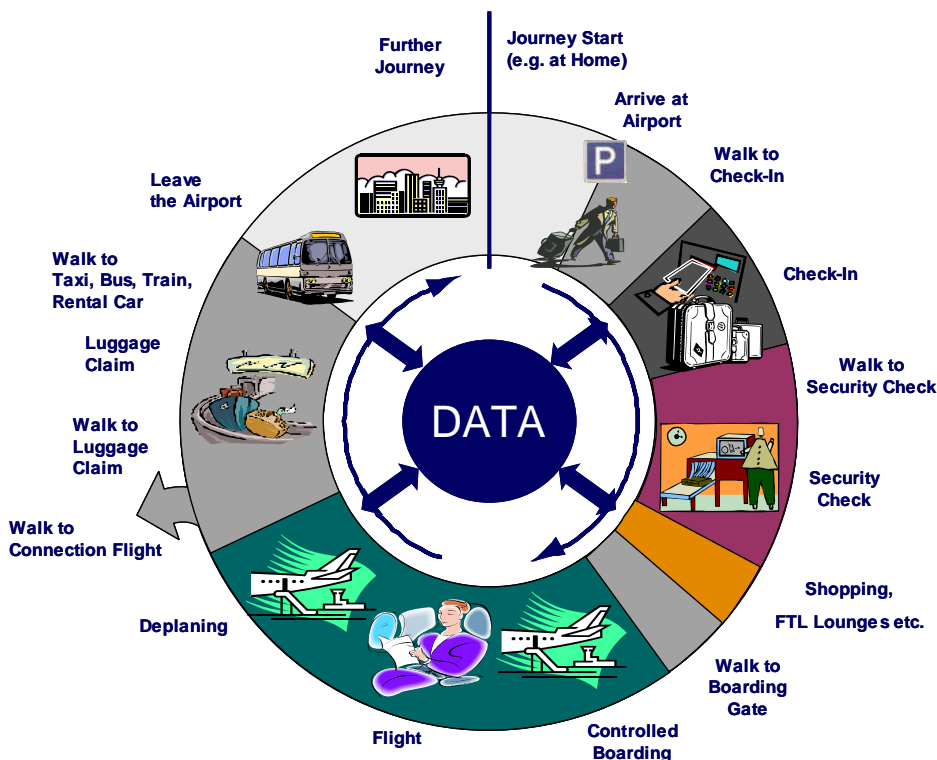
A project partially funded by the Sixth Framework Programme - Thematic Priority Aeronautics and Space - of the European Commission

Situation today

As air travel has grown over 100 years, the extended volume of passengers and the high complexity of airports have dramatically increased up to a point where travel quality is considerably affected also by the process of getting access to the aircraft. Thus, for keeping the traveller contented, the complete and seamless logistic chain of flying needs to be re-considered, covering the whole end-to-end process from start to finish.

E-Cab objectives

A new European research project has been set-up under the 6th Framework Programme called "Electronically enabled Cabin and Associated Logistics for Improved Passenger Services and Operational Efficiency". E-Cab will give answers to the identified issues by improving the end-to-end process in a holistic approach.



The end to end travelling process from start to finish

E-Cab encompasses the whole logistic chain from journey planning at home via processing through the airport, flying, up to reaching the final destination.

Making a journey as convenient as possible, E-Cab will collect, manipulate and provide intelligent information, thus allowing the passenger to know when they are expected on the aircraft, to know the location of their luggage and to determine if they have time to carry out leisure activities in the airport or to maximise productive time for business purposes. On-board the aircraft, passengers shall have control over the means by which they access their connectivity, with options ranging from mobile phones, PDAs, laptop computers up to new IFE interfaces. The passengers shall also be given the means to control their use of time on-board the aircraft by being able to, for example, order meals at times that suit their individual needs.



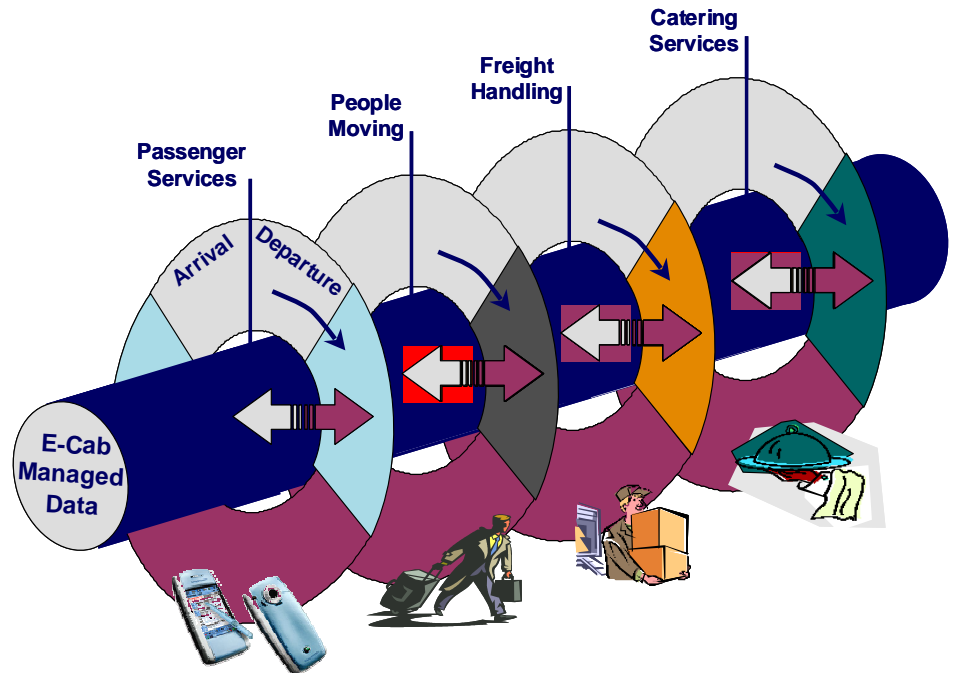
E-CAB AT A GLANCE

Challenges of E-Cab

In order to achieve E-Cab's ambitious goals and to manage the complexity of the work the project is organised around interconnecting sub-projects.

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.



The end-to-end chain "Passenger Services" will particularly concentrate on wireless and 3G communication technologies applied to digital passenger entertainment and seamless connectivity.

The service chain "People Moving" covers the seamless fulfillment of passenger tracing, guidance and other useful information via stationary and/or mobile solutions.

The service chain "Freight Handling" addresses seamless, automated baggage and freight management solutions, mainly based on Radio Frequency Identification (RFID).

The end-to-end chain "Catering Services" will develop new processes for covering services for the passengers before flight, off-board logistics, the service on-board as well as the data intercommunication between booking and scheduling process.

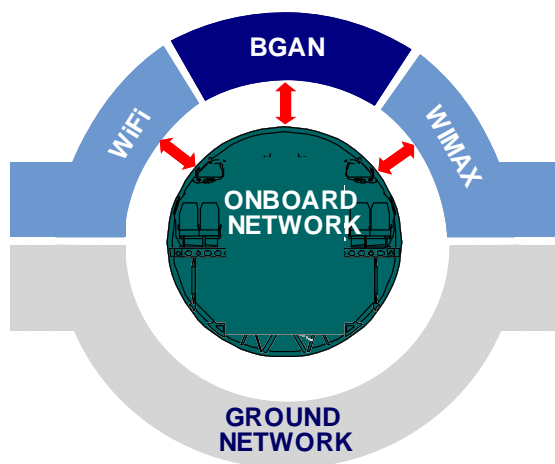
These four sub-projects cover most of the project development, starting from requirements definition up to pre-integration and testing of subsystems. They are preceded and monitored by an additional sub-project "Requirements, Concepts & Standards" that ensures the consistency and coherency between the four end-to-end chains.



E-CAB AT A GLANCE

Integrated communication infrastructure

The integrated communications infrastructure developed in E-Cab will give the airlines, airports and service providers the possibility to efficiently gather all necessary traveller and flight-handling process related information. The key enabler is the seamless integration of the aircraft into the ground based IT structure interconnecting the different e-logistic chains and allowing the developed service applications to talk to each other and exchange data on an integrated network platform.



E-Cab Communication Infrastructure

Key part of the E-Cab project will be the "Communication Infrastructure"

The integrated communications infrastructure will make services easily available to all stakeholders, in a seamless context, from local business premises over the airport to inside the aircraft during all phases of the service process.

Added value for passengers and customers

The E-Cab project will investigate and deliver improvements within each of the aforementioned end-to-end service and logistic chains, but more significantly will focus on the added value derived from effective interaction between them. It will set up a framework of seamless, validated processes, comprising the set of enabling key technologies across the spectrum of E-Cab technical domains and the underlying common communication infrastructure. In detail, the added values are:

- To increase passenger choice with regard to travel cost, time to destination, on-board services and comfort.
- To reduce the aircraft direct operating costs in order to improve the airline's competitiveness.
- To reduce aircraft development costs in order to enable the European aircraft industry to built cost efficiently operable and easy customizable aircraft.
- To increase the transparency and the interoperability of the different end-to-end chains.

The successful completion of this project shall pave the way for the European aviation industry to offer a step change in passenger service concepts.



E-CAB AT A GLANCE

Added value for the European Community

E-Cab will aim at providing the European avionic industry with the capability of producing the information management systems, to be installed in future airports and aircraft for improving passengers' comfort and crew members' working environment. In this way, E-Cab will contribute to the worldwide knowledge-based economy, therefore promoting more and better jobs and greater social cohesion within and around Europe. Furthermore in the long term the expected project achievements, delivered through a balanced consortium of European aerospace and related organisations will contribute to increased highly skilled employment throughout the supply chain.

The E-Cab Team

A consortium of 30 partners from 13 countries across Europe - including European global players, small and medium-sized enterprises, research institutes and universities - will offer all necessary complementary skills and competencies to enhance passenger services they are looking for and to improve the European competitiveness in the avionic industry worldwide.

Contact:

Dr. Reiner RUECKWALD

E-Cab project coordinator
Cabin Innovation & Design Center
Airbus Deutschland
Phone: +49 (0)40 74 37 68 78
Fax +49 (0)40 74 37 62 32
Mailto:reiner.rueckwald@airbus.com

Aircraft manufactures:

Airbus
Dassault Aviation

Large industrial companies:

Diehl Aerospace
EADS Corporate Research Center
Giunti Interactive Labs
Rheinmetall Defence Electronics
SELEX Communications
Siemens Business Services
SITA-SC
Thales Avionics UK
Thales Avionics SA
ULTRA Electronics Airport Systems

SME:

Ascom, B&W Engineering,
Bucher Leichtbau
CeBeNetwork France
Dansk Teknologi
Identec Solutions, Jettainer,
Microtech International, OnAir
TriaGnoSys, Terma A/S

Research centres

Centro IBERLog
CNRS
Fundacion Robotiker
TNO

Universities:

Cranfield University
University of Malta
University of Bremen