

EU grants €13.8 million to FABEC

The European Commission has selected FAB Europe Central (FABEC) with an overall amount of €13.8 million for funding. On 8th of March Matthew Baldwin, EC Director for Air Transport, underlined the importance of integrated and environmentally friendly air navigation services in the core of Europe at the hand-over ceremony

for the official logo symbolising the EC co-financing. Daniel Weder, Chairman FABEC Air Navigation Strategic Board, welcomed warmly on behalf of his colleagues the substantial support which is planned and will help to fulfil the ambitious goals set by the European Commission.

Page 04



Hand-over ceremony

**Project West
Simulations conducted**

In an effort to cope with the anticipated future traffic upturn and improve air traffic management performance in one of the busiest areas in Europe, the civil air navigation service providers Belgocontrol, the French DSNA, EUROCONTROL's Maastricht UAC and NATS (UK), together with their military colleagues from the Belgian and French Air Forces, validated an improved airspace structure during a two-week large-scale real-time simulation held at EUROCONTROL's

premises in Brétigny, France. The first results of the simulation indicate that the airspace structure can be improved to accommodate additional traffic while taking into account military requirements by increasing the number of east-bound routes, reshaping sectors managed by Belgocontrol, MUAC and NATS and by redesigning the military training area CBA1. Implementation of the improved airspace design is scheduled for 2013.

**ATFCM/ASM
FABEC function live**

On 2 May, the FABEC ATFCM/ASM function will go operational. From this date, civil and military experts from all air navigation service providers in FABEC will devise common solutions for the pre-tactical phase (level 2: day-7 until day-1) in a live trial, which will last 3 months. Based on the positive experience made during a field trial conducted at the end of 2009, experts now are taking another step forward: Besides the expected benefits for the airspace users, one main objective is to gain experience for the establishment of a permanent FABEC ATFCM/ASM function in the short term.

Page 02

**Air Ground Data Link
FABEC ANSPs
signed contract**

On 8 March 2011, DSNA, Belgocontrol, LVNL, skyguide and ANA signed a framework contract with SITA for the deployment of a VDL2/ATN infrastructure. This is a significant step to provide by February 2013 a VDL2 communication channel and an ATN routing to all aircraft in their upper airspace meeting the requirements defined by the European Commission. In addition, this framework contract, concluded for a period of ten years, establishes a partnership which will last well beyond February 2013. Moreover, as DFS has already a partnership, and as Maastricht UAC is already conducting data link operations, this framework contract unites all of FABEC working together with SITA.

Page 02

TABLE OF CONTENTS

- Page 01 • **EU grants €13.8 million to FABEC**
- Project West
 - **Simulations conducted**
 - ATFCM/ASM
 - **FABEC function live**
 - Air Ground Data Link
 - **FABEC ANSPs signed contract**
- Page 02 • Air Ground Data Link
- **FABEC ANSPs signed contract**
 - ATFCM/ASM
 - **FABEC function live**
- Page 03 • DSNA/Pau Airport
- **Europe's first EGNOS procedure**
- Page 04 • EU grants FABEC
- **FABEC at ATC Global 2011**
 - Switzerland
 - **New ordinance for Air Navigation Services**
 - DFS
 - **AIRLAWeBook – not only for aviation lawyers**
- Page 05 • LVNL
- **Member of European Alliance for new ATC System**
 - **Belgocontrol Trainees for MUAC**
- Page 06 • Belgocontrol controls Liege Airport full-time
- **LUXEMBOURG TMA 165**
 - **Frankfurt Airport – New procedure increases accuracy**
 - Switzerland
 - **Satellite-based navigation**
 - Belgocontrol
 - **Expertise for the benefit of SESAR JU**
- Page 07 • MUAC
- **142 new direct routes implemented**
 - Performance Plan
 - **Consultation has been started**
- Page 08 • List of abbreviations
- **Points of contact**

Air Ground Data Link **FABEC ANSPs signed contract**

continued from page 01:

The AGDL framework signed on 8 March by DSNA, Belgocontrol, LVNL, Skyguide, ANA and Sita on the occasion of ATC Global is based both on a common FABEC technical specification for the VDL2/ATN infrastructure to be deployed as well as on the respective EC regulation. FABEC also defined the future roles of the air navigation service providers as well as of the air communication service providers. ANSPs will purchase VDL2 and optionally POA ground stations, ATN routers, as well as monitoring and control systems. The ANSP will maintain the equipment and make sure the network meets the performance requirements imposed by the European Implementing Rules for Data

Link Services for ATC data link communications. Also ANSPs controlling the lower airspace signed the framework contract. Indeed, airport applications (D-ATIS, DCL) are also provided over the same equipment. As regards AOC communications, ANSP VDL2 and POA ground stations will be seen by the airlines as part of the SITA network.



ATFCM/ASM **FABEC function live**

continued from page 01:

Based on the field trial and the experts' work, the live trial will now validate in operations the function that aims to optimise FAB-wide capacity provision, traffic flows and the use of airspace by civil and military users in close coordination with the network function (CFMU), military units and the local functions. The live trial is to prove its applicability in real operations, providing an analysis of potential benefits. This is required as a basis for finally implementing a FABEC ATFCM/ASM function and offers more insight into the strategy of how to evolve towards co-located FABEC ATFCM and FABEC ASM functions.

In addition, it is envisaged to evaluate the framework conditions for generic booking principles and priority rules in order to optimise civil-military cooperation and the

common use of airspace for all users, to assess FABEC-wide, harmonised pre-tactical procedures based on CDM and improved tool functionality/automation.

The trial is limited to the pre-tactical phase from D-7 to D-1 and is to provide post-OPS analyses on the effects of the FAB function on the tactical phase, i.e. the day of flight operations. Strategic and tactical phases are not part of the trial. It will cover the whole FABEC area, but FAB Function will not be able to monitor the whole FABEC airspace all the time. Therefore the focus will be on a priority area, the so-called core area. It covers primarily the eastern part of France, Belgium, the Netherlands, Luxembourg, the western part of Germany and the northern part of Switzerland.

DSNA/Pau Airport **Europe's first EGNOS procedure**

On 2 March 2011 the European Geostationary Navigation Overlay Service (EGNOS) Safety-of-Life Service was officially made available. EGNOS uses three geostationary satellites and a network of ground stations to augment GPS precision and integrity, and is a result of 15 years of coordinated effort between the European Commission, the European Space Agency, Eurocontrol and the EOIG, an association of 7 European Air Navigation Service Providers, one Space Agency and one Mapping Agency. EOIG have founded the ESSP Company, now operating the EGNOS system on behalf of the European Commission.

DSNA has been preparing the aviation applications of EGNOS in parallel to the system development, and has declared open the first European approach based on EGNOS the 17th of March 2011 at Pau-Pyrénées Airport, in southern France. Pau is the training airport of Airbus Transport, operating a fleet of Beluga Airbus 300-600 ST amongst many European countries.

Airbus Transport became interested in EGNOS because Belugas go to smaller runways that are not always ILS-equipped. Eurocontrol, through their 'EGNOS Pioneers' programme, helped to equip the Belugas and to develop the first procedure, by sponsoring a consortium lead by EGIS-AVIA, a French company supporting DSNA in satellite navigation implementation.

Maurice Georges, the DSNA CEO, received an award from the GSA, the European GNSS Agency in charge of developing the application sector, during the recent ATC Global. This celebrates the EGNOS Pau procedure publication by DSNA, first of its kind in Europe, and a

further achievement in the transition of aviation to satellite based technology.

DSNA will continue publishing EGNOS approach procedures in the coming months, in coordination with several other aviation communities interested in EGNOS based applications, for example at Le Bourget Airport, where Dassault Aviation will support EGNOS-guided demonstration flights during the Paris Air Show this June, at Marseilles Airport in cooperation with EUROCOPTER, at Toulouse-Blagnac Airport to support the new Airbus A350 EGNOS certification.

DSNA also has a program to provide EGNOS based procedures on virtually any France IFR runway, supporting ICAO recommendations to improve safety, while also improving airport accessibility to runways not equipped with ILS.

Currently the EGNOS system supports approaches with vertical guidance down to 250 feet decision height, and will be upgraded to support 200 feet, as ILS Cat I. Avionics implementation and aircraft operations are directly designed from ILS concepts, providing aircrews with a familiar operational context and reduced training costs.

In addition to those benefits, DSNA also expects to progressively rationalise its ILS Cat I infrastructure network, by proposing an alternative service based on EGNOS. EGNOS signals are provided for free and designing and maintaining EGNOS based procedures involves much lower costs than those related to local airport navigation infrastructure. Therefore this new navigation technique will also contribute to reduce the cost of DSNA services, which is one of the performance targets of the Single European Sky.



EU grants FABEC

continued from page 01:

The policy objective of the European Union to create a single European sky is supported by funding through the TEN-T. In achieving better performance of service provision in Europe, an important tool will be the increased cooperation and integration of service provision through the building of functional airspace blocks (FABs). These blocks must be created by the end of 2012 at the latest and will provide a solid framework to meet new challenging binding performance targets.

Eleven concrete FABEC activities are concerned, covering a broad scope from projects to improve airspace design and airspace use to the set-up of enabling functions, such as the FABEC safety case, programme management as well as HR-related issues like training and a benchmarking study. The funding of FABEC is part of the multi-annual programme 2010: air traffic management systems – functional airspace blocks for which an individual funding decision should be adopted in the coming couple of weeks. For FABEC, Belgium is the contracting State.

Switzerland New ordinance for Air Navigation Services

On March 4, 2011, the Swiss Federal Council formalises a series of changes to the aviation law by accepting the adaptation of the corresponding ordinances. The changes concern, among others, the financing of Air Navigation Services in Switzerland.

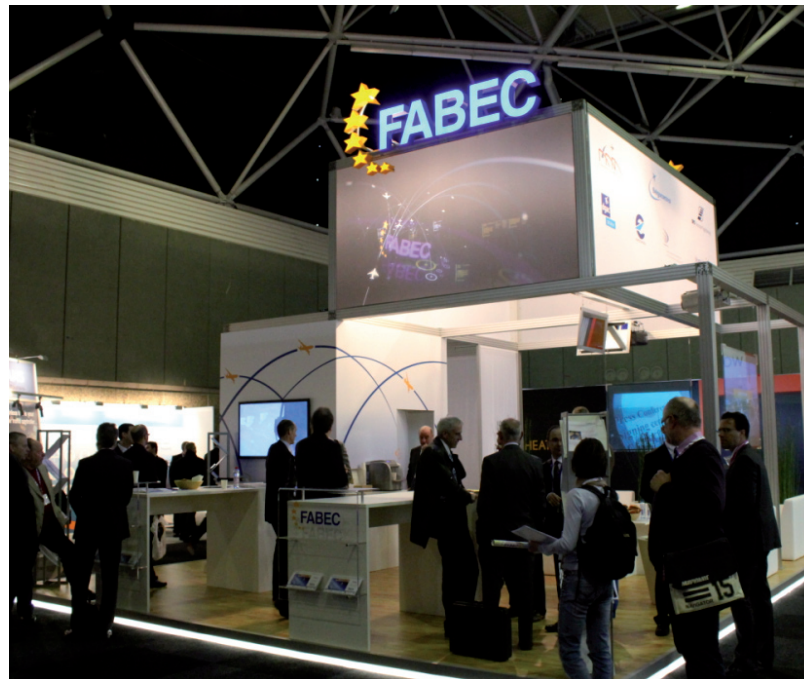
FABEC at ATC Global 2011

For the third time FABEC was represented with a common booth at ATC Global in Amsterdam. The main objective was to bring people together, to discuss, to exchange information or just to initiate an initial contact.

To serve this purpose we offered a 'meet and greet' with experts on different FABEC subjects, recruited from the seven air navigation service providers. The main subjects were: performance, airspace design,

communication, navigation and surveillance and the FABEC Programme and Strategy. The reaction of the visitors was extremely positive.

The booth also gave space to a couple of official activities. Most eye catching was the hand-over ceremony for the official logo symbolising the EC co-financing of FABEC, performed by Mr Matthew Baldwin, European Commission Director for Air Transport.



Often crowded – the FABEC stand

DFS AIRLAWeBook – not only for aviation lawyers

DFS Deutsche Flugsicherung GmbH, in cooperation with the renowned air law authorities Prof Dr iur Elmar Giemulla and Dr jur Heiko van Schyndel, are now presenting the AIRLAWeBook – an easy-to-use solution by means of an electronic collection of the most important air law related EU treaties, directives and regulations, in particular the single European sky (SES) regulations.

Published in English and distributed as an annual subscription, AIRLAWeBook features a quick and comfortable full-text search for single and composite terms. In addition it guarantees a punctual amendment service. AIRLAWeBook is designed not only for aviation lawyers, but also for anyone involved in the exciting world of aviation. (For further information visit www.dfs-aviationshop.de)

LVNL

Member of European Alliance for new ATC System

At the 8th of March, 2011, LVNL has joined a European alliance for the joint development of a new air traffic control system. This will replace part of the air traffic control system – AAA – currently in use as of 2016.

LVNL, in the capacity of partner and co-commissioner, has joined the existing consortium of DFS, NATS and AENA. Together they have commissioned the Spanish company Indra with developing and supplying the new Flight Data Processing system, known as iTEC. For LVNL and DFS this is an important step towards technical convergence within FABEC. Harmonising the air traffic control systems is one of the key factors for success of FABEC.

LVNL is not participating independently in the consortium, but has entered into an alliance to this end with its sister organisation DFS. LVNL and DFS have agreed to expand iTEC further into a system which can replace AAA entirely. In doing so, LVNL will use supplement-

ary systems which DFS is developing or has already developed for this purpose.

With NATS, DFS and LVNL using the iTEC system, the large airspace above these countries will

be served through a common air traffic control system. The new system will enable LVNL to provide sufficient capacity in future for further consolidating the global network of KLM and its SkyTeam partners.



Signing the agreement

Belgocontrol Trainees for MUAC

Recently equipped with 18 additional new radar simulator positions, the Training Centre, totalling now 44 training positions, certainly constitutes an asset for Belgocontrol and an opportunity for other ANSPs to send their students to follow a quality training.

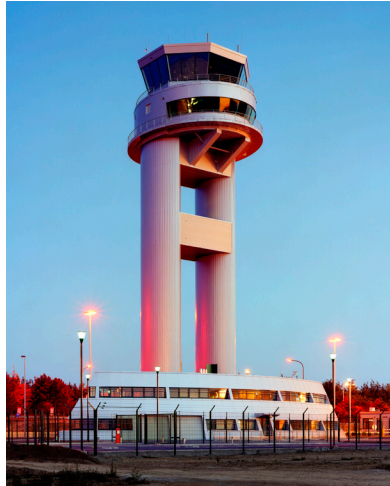


From January to June 2011, the Belgocontrol Training Centre welcomes MUAC

Belgocontrol controls Liege Airport full-time

Since 1 March 2011, Belgocontrol has taken over the air traffic control at Liege Airport full-time, 24 hours per day, 7 days per week.

Before that, the military were in charge of controlling the air traffic in this area by day during the week, while Belgocontrol managed the air traffic at night during the week and 24/24h during weekends.



Frankfurt Airport New procedure increases accuracy

On 23 February 2011 a new procedure to improve the coordination of ground-handling processes entered into regular operations at Frankfurt Airport. This procedure, known as airport collaborative decision-making (A-CDM), enhances the coordination of all decisions concerning aircraft handling be-

tween all partners. The handling of an aircraft is divided into individual steps and each step is allocated a target time. This helps to ensure that aircraft can take off on time. The procedure was introduced in Frankfurt at the initiative of DFS Deutsche Flugsicherung and the airport operator Fraport.

Switzerland Satellite-based navigation

Within the frame of the CHIPS programme (CH-wide Implementation Programme for SESAR oriented objectives), two important steps are taken in March 2011: The positive result for satellite-based helicopter test flights on the "Inselspital" in the very heart of the City of Bern leads to a second test phase also during bad weather conditions and limited sight. And Zurich is the first airport in Switzerland to offer a satellite-based approach. This GPS "overlay" procedure for the approach on runway 14 is identical with the standard ILS approach.

Belgocontrol Expertise for the benefit of SESAR JU

On 21 January 2011, Belgocontrol signed a cooperation agreement with DSNB within the framework of SESAR JU. In its quality of SESAR associated partner, Belgocontrol will actively participate or be in charge of the implementation of a series of projects, originally assigned to DSNB.

Eager to contribute to an even more safe, efficient and smooth air traffic, Belgocontrol will be closely involved in nine projects covering the following domains: Complexity Management in En Route; Integrated Sequence Build-

LUXEMBOURG TMA 165

On 10 March 2011 the project 'Luxembourg TMA 165' was implemented, which from the ANA Luxembourg perspective constitutes a big achievement. The main change realized: the upper limit of the TMA, north and south of Diekirch, is raised from FL135 to FL165. Due to the introduction of a so-called release box on the French-Luxembourg interface, the coordination load is decreased. The airspace change could only take place with the persistent work of all participating ANA employees in close cooperation with the neighbouring FABEC partners. The project included: new airspace arrangements, fast time simulations, real time simulations, new route design on several standard arrival and departure routes and environmentally friendly continuous descent approaches. These major airspace changes have a positive effect on safety, predictability, workload, flight profiles, efficiency and the environment.

MUAC

142 new direct routes implemented

142 new direct routes have been implemented in the airspace controlled by MUAC. These new direct routes come on top of the 40 direct routes already implemented in 2010 as part of the FABEC Night Network. They will contribute to reduce flight and engine running time, fuel burn, gas emissions and costs in high-density European airspace. To ensure maximum safety the new routes will initially be used during the least busy hours of the night (currently from 00:00 to 06:00 CET and from 00:00 to 08:00 CET as from June). At the end of the year, they will also be used during weekends. This development is the first step in the implementation of the Free

Route Airspace Maastricht (FRAM) programme, which aims to put in place a direct route network for 24/7 operations.

The savings expected from the use of direct routes in the first phase of FRAM deployment during nights and weekends are estimated at 1.16 million km per year, resulting in economies of 3,700 t of kerosene, 12,000 t of CO2 and 37 t of NOx when compared to the fixed route network.

For several decades now air traffic controllers at MUAC have been offering airlines direct routes as far as possible. However these routes have not been reflected in

the flight plan, which has always referred to the fixed route network. Aircraft operators are now able to flight-plan these routes, which is expected to generate greater flight efficiency, lower fuel consumption and better network predictability.

For it to unfold to its maximum benefit, the implementation of FRAM will be closely coordinated with similar initiatives in the area. The DFS Karlsruhe UAC (Germany), Naviar (Denmark), NATS (UK) and LVF (Sweden) are expected to link their initiatives with the MUAC FRAM programme in the near future. More information on FRAM is available on www.eurocontrol.int/muac.

Performance Plan Consultation has been started

On 4 April the consultation process on the FABEC Performance Plan was launched. About 30 representatives of civil and military airspace users participated at an initial workshop which takes place in the premises of Eurocontrol. The consultation is based on the decision of the FABEC States to develop and adopt a common FABEC Performance Plan. The plan is currently under development and will be finalised by the end of June.

The objective of the workshop was to provide the airspace users with up-to-date information on the status of the FABEC Performance Plan, especially on the methodologies used, the macroeconomic scenarios chosen as well as the different performance indicators included. It is an initial step to prepare for the formal consulta-

tion pursuant to EU Regulation 691/2010 which is planned for the 20th of March. In parallel, a consultation process with the

staff representatives is foreseen. More information including the presentations are available under www.fabec.eu.



About 80 participants joined the workshop

List of abbreviations

ACC	Area Control Centre	CFMU	Central Flow Management Unit	NM	Nautical Mile
AMHS	Air Traffic System Message Handling System	CNS	Communications, Navigation and Surveillance	NSA	National Supervisory Authorities
AIM	ATFM Information Message	EEC	Eurocontrol Experimental Centre	NOTAM	Notice to Airmen
ANS(P)	Air Navigation Service (provider)	EIP	Early Implementation Package	PC	Provisional Council
AO	Aircraft Operator	FIS	Flight Information Service	PRC	Performance Review Commission
ASB	ANSP Strategic Board	FL	Flight Level	RTS	Real-Time Simulation
ASM	Airspace management	FRAM	Free Route Airspace Maastricht	SC ENV	Standing Committee Environment
ATC(O)	Air Traffic Control (Officer)	IATA	International Air Transport Association	SES	Single European Sky
ATFCM	Air Traffic Flow and Capacity Management	ICAO	International Civil Aviation Organisation	SESAR	Single European Sky ATM Research
ATFN	Aeronautical Fixed Telecommunication Network	ISAAC	Innovative System for Automated Aeronautical Communication	STANLY	Statistics and Analysis
ATM	Air Traffic Management	LARA	Local and Regional Airspace Management System	TMS	Traffic Management System
CBA	Cross-Border Area	NLR	Nationaal Lucht- en Ruimtevaartlaboratorium	UAC	Upper Area Control Center
CDG	Charles de Gaulle (Airport Paris)			VFR	Visual Flight Rules
CDM	Cooperative Decision Making				
CDO	Continuous Descent Operations				

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