

***SAFETY CASE AND SAFETY ROADMAP***  
***SW PORTUGAL/SPAIN FAB***

May 19th - 2011

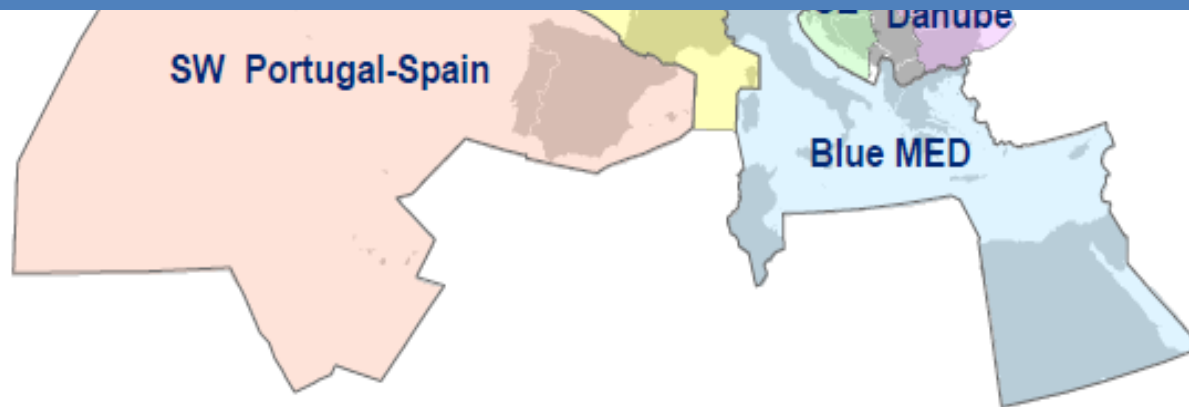


Air Navigation Directorate - Aena  
Safety Division  
Quality, Safety, Security and Certification Directorate



Co-financed by the European Union  
Trans-European Transport Network (TEN-T)

- A vast FAB airspace of more than 8 million of sq. km
- Natural partners due to the geographic location
- Many similarities in both ANSP's operational concepts
- Sectors: 59 (Spain 52, Portugal 7)\*
- ACCs: 6 (Spain 5, Portugal 1)
- Approx. 1,8 million IFR movements



## **Contents**

**-What we did... Safety activities performed in SW FB**

**-What we are doing/going to do... Safety Roadmap - Deliverables**



## **-What we did..**

*Operational Task Force.-OTF (specific initiative)*

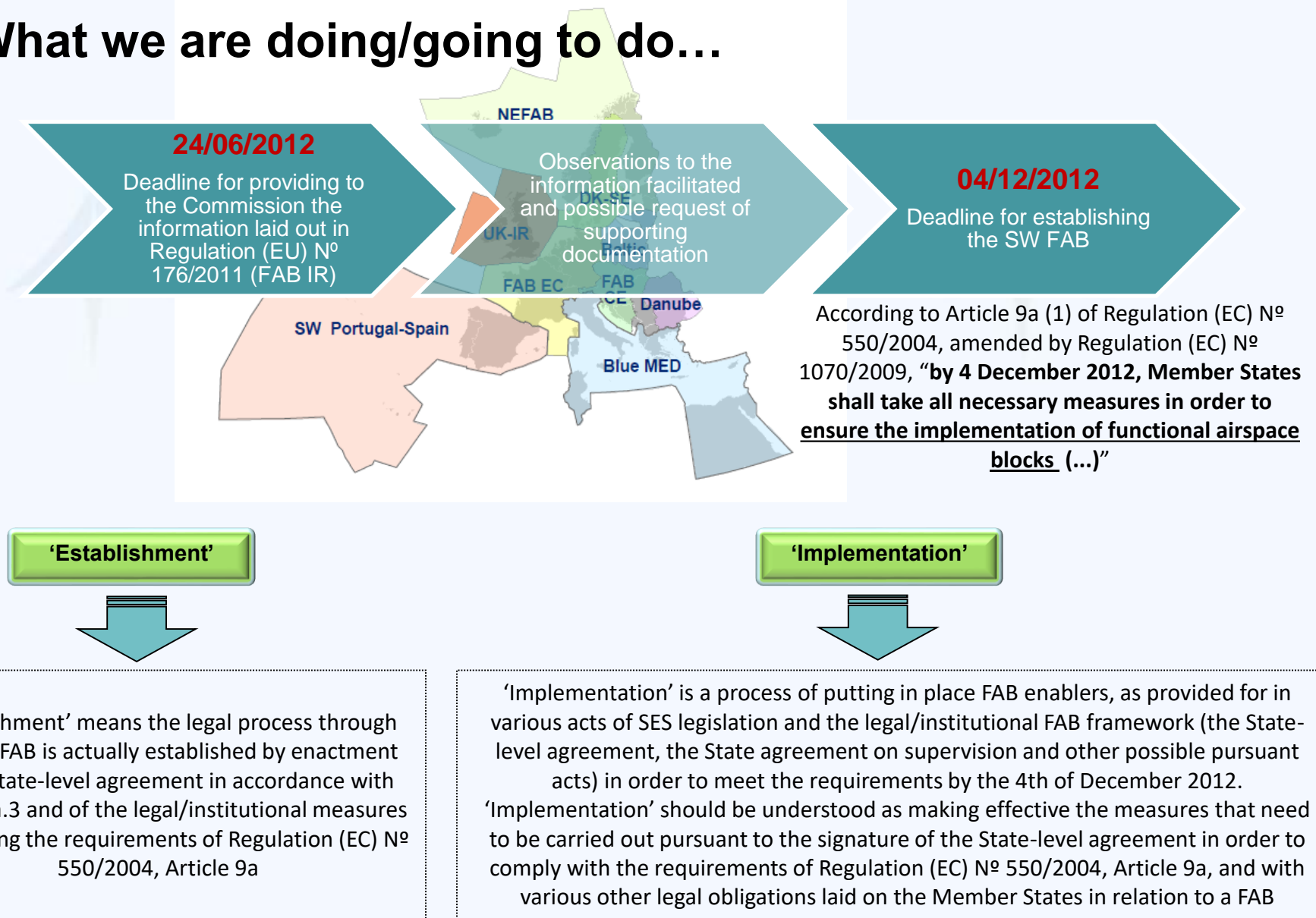
### ***SWI01 Safety Assessment Report - Sept 2009***

- SMS Nav Pt description
- SMS AENA description
- Compatibility & Divergence

•Common Safety Assessment for a  
project:  
point-to-point night route structure

## SW FAB establishment and implementation process

### -What we are doing/going to do...





## Principal planned ANSPs' activities for SW FAB establishment and implementation



## Main ANSPs' deliverables required for SW FAB establishment and implementation

"Guidance Material for the establishment and modification of Functional Airspace Blocks (FAB)", edition 0.07.3 from 18/11/2010

"Commission Regulation (EU) No 176/2011 on the information to be provided before the establishment and modification of a functional airspace block"

"Extract From the Guidance Material for the establishment and modification of Functional Airspace Blocks (FAB.) The "Upper Layer" Guidelines – FAB Guidance Check-List", edition 0.07.2 from 15/11/2010



**Assessment FAB Guidance Material\_Actions SW FAB\_v1 0**



Documento de  
Microsoft Office Word 97

## Main ANSPs' deliverables required for SW FAB establishment and implementation

Assessment FAB Guidance Material\_Actions SW FAB\_v1 0



Set of deliverables required for SW FAB  
establishment and implementation

Operational TF

System TF

Planning TF

Flight Calibration TF



## Main Safety deliverables required for SW FAB establishment and implementation

### “Safety case” supporting a FAB



Summary of the requirement	<ul style="list-style-type: none"><li>• <b>FABs shall, in particular, be supported by a safety case</b><ul style="list-style-type: none"><li>• <b>SC in its minimum content:</b><p>The content of the SC : Common Safety Policy or plans; arrangements for dealing with accident and incident investigation; safety management system to avoid degradation of safety performance with the FAB; arrangements identifying and allocating the responsibilities and interfaces with regard to the setting of safety targets, execution of safety oversight and the accompanying enforcement measures in regard to the provision of ANS; evidence that safety assessments (including hazard identification, risk assessment and mitigation) have been conducted before introducing operational changes within the FAB; confirmation that all aspects have been addressed by the FAB.</p></li></ul></li></ul>		
Regulation reference	Article 9a.2 (a) of Regulation (EC) N° 550/2004 Recital (14) and point 1 of Part Two of the Annex to Regulation (EC) N° <b>XX</b> /2011 (FAB-IR)	Expected scheduled date of completion	<b>February 2012</b> (according to the roadmap agreed at the JSB/3)

**Responsible for decision and establishment/coordination of actions:**

**State Civil Aviation Authorities: DGAC / INAC**

**State Civil National Supervisory Authorities: AESA / INAC**



## Main Safety deliverables required for SW FAB establishment and implementation

**Including...**

**Preliminary Safety assessments  
for Ops projects**



**Preliminary common  
safety assessment  
for**

- New boundary limit definition
- Casablanca FIR/UIR dualisation
- Way point LUMAS dualisation
- New NW ATS route structure for LEMG
- Night direct routes v2.0

**Expected scheduled  
date of completion**

**February 2012**  
(according to the roadmap agreed at the JSB/3)

## Main deliverables required - OTF

### Operational Task Force deliverables

### Common Safety Assessment

1. REPORT ON THE INITIAL ESTIMATED IMPACT OF AENA-NAV PORTUGAL COLLABORATION ON THE PERFORMANCE OF THE SW FAB	April 2011	▶
2. DETAILED REPORT ON IMPACT OF AENA-NAV PORTUGAL COLLABORATION ON THE PERFORMANCE OF THE SW FAB	January 2012	▶
3. DOCUMENT ANALYZING THE ORGANIZATION AND CLASSIFICATION OF AIRSPACE IN THE FIRs AFFECTED IN ORDER TO IDENTIFY POSSIBILITIES FOR OPTIMIZATION OF THE RESPECTIVE AIRSPACE CONFIGURATION	June 2011	▶
4. DOCUMENT INCLUDING THE OPERATIONAL REQUIREMENTS OF THE SW FAB	July 2011	▶
5. DOCUMENT IDENTIFYING OPTIONS FOR THE OPTIMUM USE OF THE AIRSPACE	August 2011	▶
6. DETAILED IMPLEMENTATION PLANS OF THE FIRST SET OF 5 OPERATIONAL PROJECTS		▶
6.1 Detailed assessment and preparation of roadmap for development and implementation – New Boundary Limit Definition	September 2011	
6.2 Detailed assessment and preparation of roadmap for development and implementation - Casablanca FIR/UIR dualisation	December 2011	
6.3 Detailed assessment and preparation of roadmap for development and implementation – Way point LUMAS dualisation	October 2011	
6.4 Detailed assessment and preparation of roadmap for development and implementation – New NW ATS Route Structure for LEMG	December 2011	
6.5 Detailed assessment and preparation of roadmap for development and implementation – Night Direct Routes Version 2	December 2011	
7. COST-BENEFIT ANALYSIS OF THE SET OF 5 OPERATIONAL PROJECTS	December 2011	▶

## Main Safety deliverables required for SW FAB establishment and implementation

**“Safety case” supporting a FAB**



Claim	SW FAB implementation and operation will be acceptably safe		
Pillars	Safety Management Systems in the FAB	Coordinated Safety Oversight in the FAB	FAB System will be acceptably Safe

Safety Culture will be developed ?

**- Can we (as a group) agree on a common structure (claim – pillars, first level safety arguments)?**



**Aena**



*Aeropuertos Españoles  
y Navegación Aérea*

# Thank you

**Air Navigation Directorate - Aena  
Safety Division  
Quality, Safety, Security and Certification Directorate**



# Annex

**6<sup>th</sup> Deliverable required**

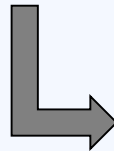
**OTF & STF**



## Main deliverables required - OTF

### 6. DETAILED IMPLEMENTATION PLANS OF THE FIRST SET OF 5 OPERATIONAL PROJECTS

- *Identifying clearly:*
  - - activities;
  - - resources;
  - - Risks and mitigations;
  - - implementation schedule (based on a decision date – T0)



*During 2011 and according to the schedule included in the 2009-EU-90003-S Strategic Accion Plan, Aena and NAV Portugal have to develop the detailed assessments of the first set of projects:*

- *Sub-activity 2.2 - Detailed assessment and preparation of roadmap for development and implementation – New Boundary Limit Definition;*
- *Sub-activity 2.3 - Detailed assessment and preparation of roadmap for development and implementation - Casablanca FIR/UIR dualisation;*
- *Sub-activity 2.4 - Detailed assessment and preparation of roadmap for development and implementation – Way point LUMAS dualisation;*
- *Sub-activity 2.5 - Detailed assessment and preparation of roadmap for development and implementation – New NW ATS Route Structure for LEMG;*
- *Sub-activity 2.6 - Detailed assessment and preparation of roadmap for development and implementation – Night Direct Routes Version 2.*

