



UK-Ireland Functional Airspace Block

Presentation to Safety Partnership Agreement Meeting
SWANWICK
3rd April 2008





UK-Ireland FAB:

1. Development History
2. Our FAB Concept
3. Meeting the Regulatory Requirements
4. Sample FAB Focus Areas
5. Next Steps

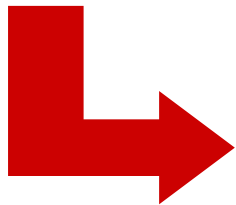


1. Development History

- History 2005-07
- Project Status, April 2008

UK-Ireland FAB History

- ❑ Helios Report Recommendations (2005)
- ❑ Joint ANSP Working Groups Output (2005- 06)
- ❑ Business Integration Output (2007)
- ❑ Government Recommendation (Oct 2007)



NATS & IAA should develop Operational FAB

Project Status, April 2008

- Submitted proposal Dec 2007 (amended version Feb 2008)
- Secured informal approval from both NSA's – March 2007
- Stakeholder Consultation process ongoing at ANSP's & Government level):
 - EC Single Sky Committee
 - EC DG TREN
 - PRC / PRU
 - Airline Customers
- Formal launch anticipated – June 2008



2. Our FAB Concept

- Approach
- Governance Structure

Proposed Approach

- Operationally driven FAB, focusing on;
 - Airspace Design (strategic long-term developments)
 - Service Provision (network management)
 - Safety (SMS convergence)
- ‘Design and Build’ on Baseline FAB
 - Build on the existing Baseline FAB, under-pinned by approved and established procedures
 - Co-operative arrangement between the parties
- Partnership Approach
 - Involves NATS, the IAA and Airlines (+ Military)

Governance Structure

Inter-State & Inter-NSA Agreements

Inter-ANSP Agreement

FAB Management Board

Co-Chair: Director Operations NATS & IAA,
Chairs from Working Groups below,
Military ANSP Representatives.

Airspace Design WG

Co-Chair: NATS & IAA

Service Provision WG

Chair: Airline Users (rotating)

Safety WG

Co-Chair: NATS & IAA



3. Meeting the Regulatory Requirements

Article 5 of Regulation (EC) 551/2004 ("the airspace Regulation"):

1. Supported by safety case
2. Enable optimum use of airspace
3. Be justified by added value through a cost benefit analysis
4. Ensure flexible and fluent transfers between service units
5. Ensure compatibility between upper and lower airspace
6. Comply with ICAO conditions
7. Respect regional agreements including those out side Europe

Meeting the Requirements

1. Supported by Safety Case:

1. Safety Case Assurance (no-change baseline start) with Safety Audit and Due Diligence Reports and Safety Assurance Statement.
2. Detailed Safety Review of integrated FAB (first 12 months), and
3. Production of safety case assurance for FAB implementation.

Prior to FAB Implementation:

- Step 1 ready – text agreed for Safety Assurance Statement

Meeting the Requirements

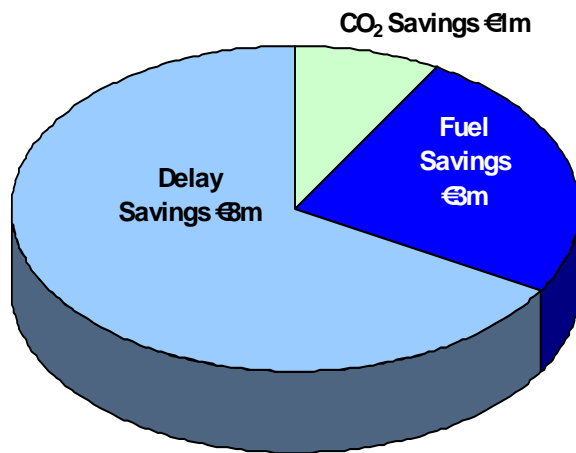
2. Enable optimum use of airspace:

- Current:
 - Airspace is structured around the primary traffic flows without allowing the FIR/UIR boundary to be a constraint.
 - Current airspace development across the FIR/UIR boundaries is not restricted to upper or lower airspace.
- The present co-operation in airspace design will continue and will include strong customer involvement.
- Several items have been identified to be included in this discussion in the first year of operation.

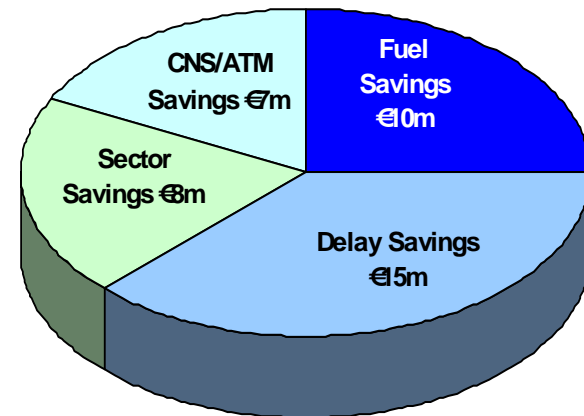
Meeting the Requirements

3. *Be justified by Cost Benefit Analysis:*

- Both providers are already delivering cost savings and service benefits through their own business initiatives and through close cooperation.
- This proposal has minimal setup costs.
- Indicative Savings:



**By 2013: Est. €12m
p/annum**



**By 2018: Est. €40m
p/annum**

Meeting the Requirements

4. Flexible and Fluent Transfers:

- Current procedures and techniques that effectively render the FIR/UIR boundary invisible:
 - Silent handover procedures between sectors
 - Systematic application of flow management
- Future development of these already robust procedures, sectorisation and shared technology, allied to shared performance management and reporting.

Meeting the Requirements

5. Upper and Lower Airspace Compatibility:

- FAB specific requirement is restricted to Upper airspace
- UK-Ireland proposal includes the airspace operated by the ANSP's and thus ensures the required compatibility.

Meeting the Requirements

6. Complies with ICAO Conditions:

- ICAO differences are already taken into account.
- Differences filed are transparently published in respective AIPs.
- Currently there is no requirement or need to harmonise the ICAO differences between UK and Irish Operations – future aspiration will remain to do this.

7. Respects Regional Agreements:

- The UK-Ireland FAB proposal does not alter any extant regional agreements.



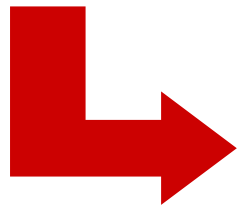
4. Sample FAB Focus Areas

High Level Targets

- **Safety** across the UK-Ireland FAB will be enhanced to meet anticipated traffic increases.
- **Financial savings** in service quality benefits for Airline Users are estimated as;
 - By 2013: €12m per annum, through delay savings, reduced fuel-burn and CO2 emissions savings
 - By 2018: €40m per annum indicative savings by 2018, through fuel savings, delay savings, sector savings from airspace redesign, CNS/ATM technology savings.
- **Environmental benefits** through the development of environmentally efficient routes for both oceanic and TMAs.
- **Delays** will, at the very least, meet the European target of 1-minute maximum average delay per flight.
- **Technology coordination** to align with the SESAR Framework.

Sample Focus Area: Safety

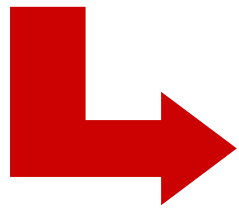
Safety will lie at the heart of FAB business and will be given top priority through a dedicated Safety Working Group.



Near Term Objective: Develop an integrated safety management system for the FAB including publication of a strategic plan for safety with performance reporting against safety metrics by 2009.

Sample Focus Area: Performance Management & Reporting

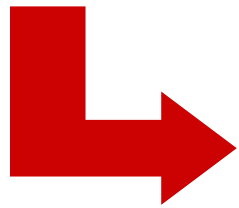
Generation of targets in discussion with customers (metrics for delays, environment, efficiency, etc)



Near Term Objective: Prepare an annual FAB plan by 2008; develop and implement integrated performance management reporting and customer consultation processes by 2009; and prepare an annual report outlining performance against plan by 2010.

Sample Focus Area: Environment:

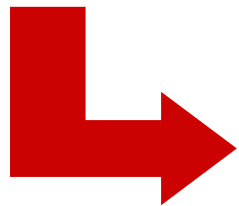
Optimise route lengths and manage speeds in order to reduce holding, and to optimise the altitudes flown at.



Near Term Objective: Develop a plan to allow aircraft at the higher levels transiting Oceanic / UK – Ireland airspace into the FAB European Central airspace or Northern European Alliance partners airspace to operate in a more environmentally effective way by utilising routes tailored to optimal tracks by 2010.

Sample Focus Area: Airspace Design Optimisation

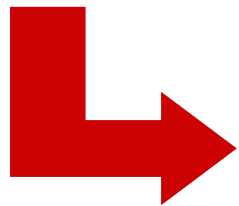
Given greater freedom of design to deliver route length improvements which also allow for improved climb and descent.



Near Term Objective: Provide a plan for the integrated operation of the Dublin, Belfast and Manchester terminal airspaces and their ACC interfaces by 2009; and create extra co-ordination points at current airspace boundaries to allow for parallel routing operations by 2010.

Sample Focus Area: Oceanic Transition

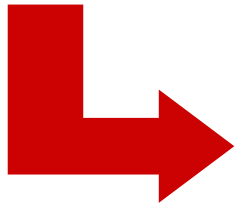
Broadening of solutions to manage this transition in the safest, most environmentally friendly and cost effective manner.



Near Term Objective: Develop a customer optimised airspace and sectorisation plan for the efficient integration of oceanic and domestic traffic to accommodate the significantly increased demand expected on the North Atlantic by 2009.

Sample Focus Area: Airspace Management Optimisation & Civil/MIL Co-operation:

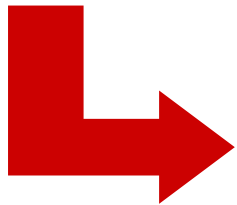
Extension of cross border cooperation on FUA with a view to managing Military airspace in a manner that would provide more efficient routing options for commercial transport.



Near Term Objective: Develop a plan for improved system and procedural support to allow for the optimisation of available route structures and more flexible use of the entire airspace by 2010.

Sample Focus Area: Capacity /Service delivery:

Manage traffic irrespective of national borders in a network approach - begin profiling and positioning aircraft earlier in their flights, enabling more optimised routings and simplified operations.



Near Term Objective: Develop and implement a fully coordinated and consolidated network management function for the FAB which will improve services for all customers utilising collaborative decision making tools by 2010



5. Next Steps

Next Steps

- ✓ First meeting of [Provisional] FAB Management Board.
- ✓ Further round of consultation with Airline users, Trades Unions, etc.
- ✓ Further presentation to PRC.
- ✓ Anticipate presentation to EC at Single Sky Committee meeting in May 08.
- ✓ Formal announcement by Governments expected by June 2008.

Conclusion

- ❑ Design & Build Operational FAB in Partnership with the airlines.
- ❑ Minimal set-up costs.
- ❑ First step towards more formal business integration.
- ❑ Headline targets established.
- ❑ Long-term user benefits will be dependent on ANSP/User joint decisions.



Questions ?