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OCG Guidance
Safety Case for Minor Change

PROJECT 1234 – Euroville DIGBY South Airspace Change

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Abstract

This document is a notification of the airspace changes for the Euroville Centre planned for December 2009. The changes have been assessed as Minor using the criteria set out in ESARR 1 and ESAAR 4.

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CONTENTS

1. INTRODUCTION

The objective of the Euroville airspace development project is to enhance Euroville Air Traffic Service delivery by increasing capacity, reducing complexity and maintaining or enhancing safety provision in the airspace in DIGBY South sector.

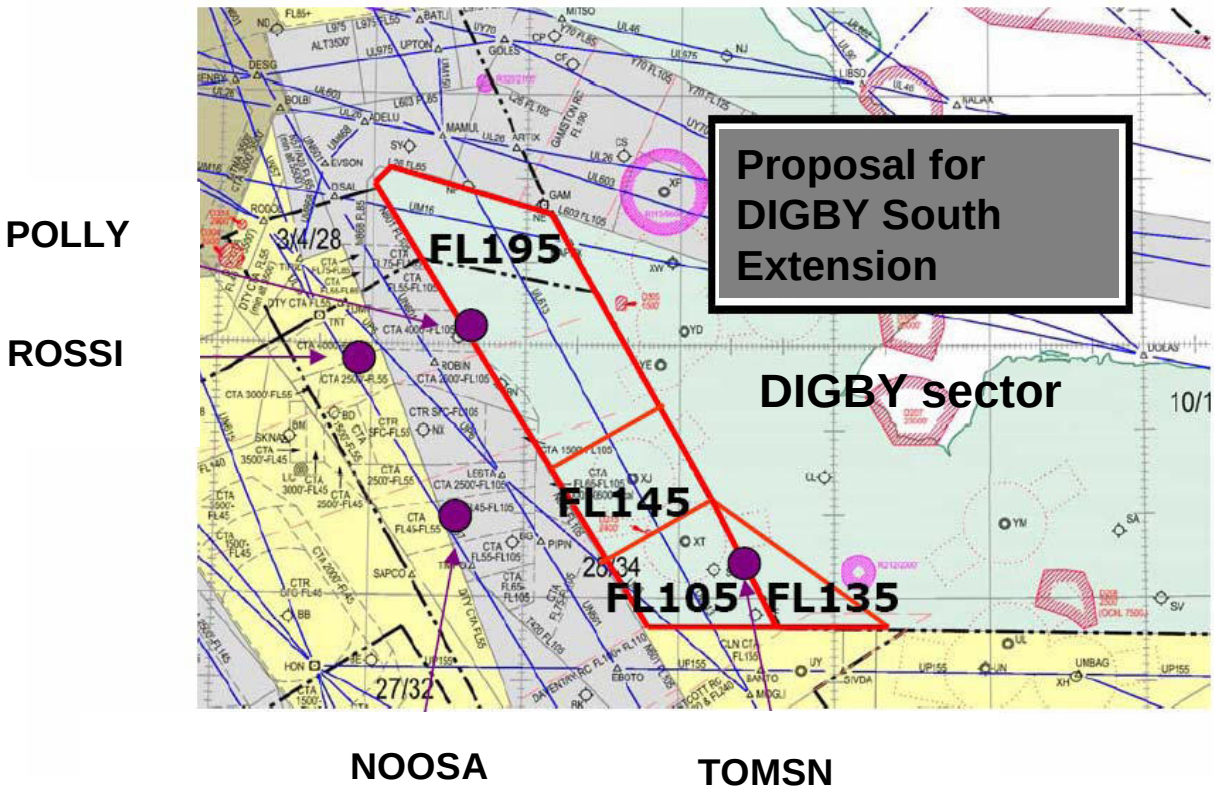
The Euroville development will be introduced through a phased delivery system. DIGBY South will go into service during the March 2010 AIRAC cycle.

The DIGBY South Airspace Extension encompasses:

- A 5nm wide extension to (Route) R-52 between POLLY and R-95 with a base at FL115 to FL195 in the area of NOOSA, stepping up to FL145 to FL195 in the central section and FL195 and above at the northern end. This airspace will utilise Flexible Use of Airspace (FUA) concepts and will become Class C Airspace at specified times before reverting to Class G Airspace outside of these times.

- In addition, permanent Class C Airspace is established above the Flexible Use airspace from FL195 to FL460. This extension will provide additional airspace for tactical vectoring, resulting in a reduction in complexity and therefore workload for DIGBY South.

Figure 1 - DIGBY South Extension



2. PURPOSE OF THIS DOCUMENT

The objective of this DIGBY South Extension Safety Case is to provide the arguments to support the claim that the implementation of the Airspace Development Project (P1234) will not adversely affect the safety of the Euroville provided ATS during the installation, commissioning and transition phases of the project.

The document will be up-issued as necessary to reaffirm that the changes implemented under DIGBY South (P1234) result in a new airspace design that is "Acceptably Safe".

The purpose of this document in relation to the full assurance strategy is described in the DIGBY South (P1234) Safety Plan [8].

In certain areas, safety assurance is dependent upon the completion of tasks, the documentation of which may not be available at the time of baselining this document. Such items have been identified as Conditional Claims, with each Conditional Claim given an individual identifier (individually numbered with a P1234 pre-fix e.g. P1234-CC01). Using this approach, Issue 1 of the Safety Case has been issued subject to the Conditional Claims, while the issues / activities related to the claims are tracked and closed under the 'Outstanding Issues Log' [7], which will be subject to sign-off before Transition.

3. SCOPE

The scope of this notification of safety case is limited specifically to the changes associated with the DIGBY South described in the introductory paragraphs. No other changes at Euroville Centre are within scope.

DIGBY South airspace development safety documentation does not cover the provision of assurance to non-Euroville units impacted by the changes (e.g. Military). It is the responsibility of each ATS provider to assure themselves and the appropriate regulator that any changes introduced at non-Euroville units as a result of the development can be safely implemented.

4. ASSUMPTIONS

1. It is assumed that the changes to existing engineering systems required by the DIGBY South extension can be achieved by changes to adaptation[1] only.

2. It is assumed that no new functionality of a type not already in existence at the Euroville Centre will be introduced as a result of the DIGBY South Extension.

[1] Through adaptation is understood the usage of existing system parameters and not software or hardware changes.

5. SYSTEM FUNCTION, DESCRIPTION, OPERATION

5.1 General System Function

Project 1234, the DIGBY South Extension does not introduce any new equipment functionality of a type that does not already exist at the Euroville Centre. The functions of the key equipment elements of the existing system impacted by the introduction of the airspace development are briefly described below for information.

5.1.1 Air – Ground Communications

This functionality provides two way voice communications between Aircrew and Radar Controllers, and allows Co-ordinator Controllers to monitor the Radio Transmissions. Each sector has its own designated RT channel (frequency).

5.1.2 Ground – Ground Communications

This functionality provides two way voice communications between ATC staff at different sectors and at different Air Traffic Control Centres to facilitate the co-ordination of aircraft through the airspace. Two levels of functionality are provided, referred to as Direct Access (DA) and Indirect Access (IDA).

DA calls cannot be subject to blocking and under normal operating conditions the recipient is always aware that a call is being attempted.

IDA calls can be subject to blocking such that there is no guarantee that the caller will be able to establish contact with the recipient in a short time frame.

5.1.3 Surveillance Data

This functionality provides the Controllers with a graphical representation of the air traffic situation. The position of aircraft is displayed to the Controller, noting that the display of SSR Transponder equipped aircraft additionally includes aircraft identifier (Callsign), altitude data and destination information. Aircraft are tracked to provide histories of aircraft position to assist the Controllers in rapidly assimilating aircraft trajectory.

The Surveillance function also includes safety nets in the form of:

- Short Term Conflict Alert (STCA) - alerts the Controller if aircraft trajectories are predicted to conflict such that there is a real risk of collision.

5.1.4 Flight Data System

The civil flight data functionality is provided by the FDPS and its associated equipment. The functionality of the FDPS falls into two areas - flight data processing (FDP) which is concerned with handling flight plan data, both proposed

(which relate to flights that have not yet entered the airspace but have notified their intention to do so) and active (which relate to flights that are airborne within the airspace or will arrive within a few minutes), and Radar Data Processing (RDP) which is concerned with the handling and interpretation of radar data obtained from real time radar surveillance.

5.1.5 Traffic Management

This functionality provides tools which provide the Supervisory staff with indications of when reduced or increased levels of traffic may occur in order to support the timely de-manning or manning of Sector positions. This functionality additionally provides a means of reducing traffic levels inbound to the centre's airspace in the event of problems resulting in reduced capacity.

5.1.6 Support Information

This functionality provides the Controllers and Assistants with general information that is not directly related to the task of controlling aircraft, but which provides ancillary data that may ease the control task. Such data includes dynamic information relating to the meteorological data and airport environment (including runway direction, RVR, ATIS Letter) and static information such as overhead panels, telephone directories, copies of the Air Traffic Service Manual (ATSM). Support Information additionally encompasses the provision of briefing material.

5.2 System Description

A description of the current and revised DIGBY South Extension Airspace design is as below:

- Modification of DIGBY South route and applicable procedures to add a 5nm extension of controlled airspace (CAS) for tactical use to the east of R-52 in EVL CTA with bases FL115/FL145/FL195. It also extends R-166 – previously called M166 - from POLLY to TOMSN via ROSSI (northbound traffic only) to allow the flight plan to more accurately reflect the route flown. Flexible use of airspace (FUA) arrangements are necessary in order to accommodate military requirements.

- In addition, permanent Class C Airspace is established above the Flexible Use airspace from FL195 to FL460. This extension will provide additional airspace for tactical vectoring, resulting in a reduction in complexity and therefore workload for DIGBY South.

6. SAFETY REQUIREMENTS

6.1 Risk Classification Scheme

The Euroville SMS uses the severity classes defined in the ESARR4 and respective EC/2096/2005 (Common Requirements). The severity scheme and

the Euroville Risk classification scheme are detailed in the DIGBY South Preliminary Safety Assessment, P1234/PSA/01 [9].

6.2 General Requirements

The following functional and performance requirements have been derived and recorded in the Preliminary Safety Assessment [9] to assure the safety of the DIGBY South Airspace extension:

Table 1 – General Safety Requirements

Reference	General Safety Requirements
DS-GR1	Euroville ATC Instructions shall reflect DIGBY SOUTH Extension availability
DS-GR2	The ATC Procedure Safety Assessment Process (Procedure ATC3 from Euroville SMS) shall be applied to ATC Instructions.
DS-GR3	Supplementary Instructions shall reflect use of Blocking strips to ensure ATC controlled aircraft are not positioned into DIGBY SOUTH airspace when it is not available.
DS-GR4	The LoA between Euroville and Military shall include activation / notification details
DS-GR5	Euroville Centre ATC Instructions shall reflect DIGBY South Extension availability and activation procedures
DS-GR6	The Euroville AIP shall be updated to reflect the P1234 DIGBY South Extension airspace changes and reviewed by the Euroville ATC representatives.
DS-GR7	Briefings and ATC Instructions shall identify to Euroville Centre controllers the need to monitor military operations when aircraft are at FL200 in the DIGBY South airspace.
DS-GR8	Euroville shall liaise with CFMU ENV to ensure that CFMU systems and information have been updated as necessary.

6.3 Functional Performance Requirements

The following functional and performance requirements have been derived and recorded in the Preliminary Safety Assessment [9] to assure the safety of the DIGBY South Airspace extension:

Table 2 – Functional and Performance Safety Requirements

Reference	Functional & Performance Safety Requirements
DS – FPR1	Records shall be kept to demonstrate that the appropriate ATC staff have been briefed on the DIGBY South Extension procedures.
DS – FPR2	The Support Information System (SIS) shall reflect DIGBY South Extension availability
DS – FPR3	Maps at sector CWP shall reflect DIGBY South Extension availability
DS – FPR4	DIGBY South Extension Airspace and times of operation shall be marked on Visual Flight Rules (VFR) charts.
DS – FPR5	STCA functionality shall be enabled in the DIGBY South airspace. E.g. STCA parameters tested for the DIGBY South extension.[2]
DS – FPR6	All necessary changes shall be tested and implemented, and results documented, at or before Operation date in accordance with established processes and procedures.
DS – FPR7	Surveillance coverage shall be assessed to identify any shortcomings in coverage provision and mitigation developed as appropriate.
DS – FPR8	Frequency coverage checks shall be carried out for Electromagnetic compatibility of the Documented Operational Coverage in the DIGBY South extension during routine flights. i.e. the frequencies are not interfering.

7. SAFETY REQUIREMENTS SATISFACTION

Evidence to show that the safety requirements are satisfied is shown in the tables below:

7.1 General Safety Requirements

Reference	General Safety Requirements	Compliance	Evidence Ref
DS-GR1	Euroville Centre Supplementary Instructions (SIs) shall reflect the DIGBY South Extension availability	Compliant. The DIGBY South extension is outside the portion of Euroville airspace that is time compliant, therefore the issued Euroville SI is not required to state extension availability. Compliant.	**Euroville SI:** SI 057 EV
DS-GR2	The ATC Procedure Safety Assessment Process (Procedure ATC3 from Euroville SMS) shall be applied to ATC	Compliant.	**Euroville SI:** SI 057 EV

[2] Safety Net is not a safety requirement per se. However in this case we ought to verify and test that parameterisation for the airspace change will not downgrade the level of safety.

Reference	General Safety Requirements	Compliance	Evidence Ref
	Instructions.		
DS-GR3	SIs shall reflect use of Blocking strips to ensure ATC controlled aircraft are not positioned into DIGBY South airspace when it is not available.	Compliant	a) Confirmed via email by Don Ponting - Euroville ATC Representative (27/02/09) **Euroville SI:** SI 057 EV
DS-GR4	The LoA between Euroville and Military shall include activation / notification details	Compliant.	DIGBY South Extension LoA
DS-GR5	Euroville Centre ATC Instructions shall reflect DIGBY South Extension availability and activation procedures	Compliant	Euroland AIP AIRAC 3/2009
DS-GR6	The Euroland AIP shall be updated to reflect the DIGBY South Extension airspace changes and reviewed by the Euroville Centre ATC representatives.	Compliant	**Euroville SI:** SI 057 EV Procedure Safety Analysis: DIGBY South Briefing Presentation (slide 5) and instruction sheet. Both received via email from Don Ponting – Euroville ATC Representative (27/02/09)
DS-GR7	Briefings and ATC Instructions shall identify to Euroville Centre controllers the need to monitor military operations when aircraft are at FL200 in the DIGBY South airspace.	Compliant	SI issued by Centre SUP – email Feb 5th 2009.
DS-GR8	Euroville shall liaise with CFMU ENV to ensure that CFMU systems and information have been updated as necessary.	Compliant	Confirmation received from CFMU via email to Amanda Vandiemen (Euroville Flight Planning & Airspace Data) - 3rd March 2009

Table 3 – List of DIGBY South General Safety Requirements Compliance

7.2 Functional and Performance Safety Requirements Compliance

Reference	Functional & Performance Safety Requirements	Compliance	Evidence Ref
DS – FPR1	Records shall be kept to demonstrate that the necessary ATC staff have been briefed on the DIGBY South Extension procedures.	Compliant, subject to CC04 A record of the (Euroville) staff that have been briefed is being kept. Confirmation that all appropriate staff have been briefed will be provided after the final Euroville brief on 5th March.	Merv Boon (Euroville) to forward (via email) scanned attendance list(s) after final Euroville briefing on 5th March 2009. (confirmation of this was received via email 27/02/09)
DS – FPR2	The Euroville Support Information System (SIS) shall reflect DIGBY South Extension availability	Compliant	System Design Document - P1234/SDD/02 Interim Test report - P1234/TRE/01 Confirmation The SIS database tapes are complete and have now been delivered to Configuration Management (CM) ready for deploying on the night was received via email from David Van Day - Operational Information Team Leader- on 08/01/09.
DS – FPR3	Maps at sector CWP shall reflect DIGBY South Extension availability	Compliant a) Euroville Radar maps have been checked as being correct. b) Euroville maps at CWPs have been amended and will be published on 11th March 2009.	System Design Document – P1234/SDD/02 a) Confirmation received from Don Ponting (Euroville ATC Representative) via email 23/02/09. b) Confirmation received from David Hughes (Euroville ATC Representative) via email 27/02/09.
DS – FPR4	DIGBY South Extension Airspace and times of operation shall be marked on Visual Flight Rules (VFR) charts.	Compliant. The Euroland AIP is the mechanism by which the VFR charts are updated by an external agency. The Euroland AIP has been checked as being correct and contains the required information in order for this to be done.	Euroland AIP AIRAC 3/2009
DS – FPR5	STCA functionality shall be enabled in the DIGBY South	Compliant	System Design Document – P1234/SDD/02

Reference	Functional & Performance Safety Requirements	Compliance	Evidence Ref
	airspace. E.g. STCA parameters tested for the DIGBY South extension.		Interim Test Report – P1234/TRE/01 Confirmation that the STCA adaptation for DIGBY South have been put into service for Euroville Centre was received via email from Richard Van Diemen-Senior Research Analyst – 03/03/09
DS – FPR6	All necessary changes shall be tested and implemented, and results documented, at or before Operation date in accordance with established processes and procedures.	Compliant	Business Requirements Document – P1234/-BR/03 Interim Test report – P1234/TRE/01
DS – FPR7	Surveillance coverage shall be assessed to identify any shortcomings in coverage provision and mitigation developed as appropriate.	Compliant. No mitigation required.	System Design Document – P1234/SDD/02 (Claim 2.3.2) Confirmation received from Stefan Piech – Senior Systems Engineer - via email 20/01/09
DS – FPR8	Frequency coverage checks shall be carried out for Electromagnetic compatibility of the Documented Operational Coverage in the DIGBY South extension during routine flights. i.e. the frequencies are not interfering	Compliant. The channels will be subject to an Air Assurance Test with 'targets of opportunities' before handing back to operational service. As explained in section, these frequencies were not required to be completed for 12th March 2009.	System Design Document – P1234/SDD/02 Frequency Transition Plan – P1234/PLN/03

Table 4 – List of DIGBY South Functional and Performance Safety Requirements Compliance

7.3 Regulatory Requirements Compliance

This project complies fully with the requirements set out in ESARR1, ESARR4, EC1315/2007 and EC2096/2005 (Common Requirements)

8. INSTALLATION, COMMISSIONING AND INTEGRATION

8.1 Installation

The Installation, Deployment and Integration aspects required for the implementation of the DIGBY South Extension are identified in the System Design

Specification. A summary of the equipment system changes required to support DIGBY South are listed below.

These activities are being conducted during the period up to and including the Transition night as identified in the P1234Transition Management Plan.

The Transition activities have been subject to Hazard Analysis to ensure that any associated hazards to the provision of ATS are identified and mitigated as far as is reasonably practicable.

Final assurance for all engineering changes is resolved through thorough testing in accordance with established processes and procedures prior to Transition, in combination with additional final checks to be conducted on the night of Transition. Results will be recorded in the Final Test Report.

The installation and commissioning of the ATC people and procedural aspects relate to the introduction of a Supplementary Instruction (SIs), which shall be issued prior to the second Transition Readiness Review (TRR2).

8.1.1 Surveillance

Adaptation of Radar Maps and STCA to support the revised Airspace Design. This shall be implemented and thoroughly tested on or before O Date.

8.1.2 Flight Data Processing

Changes to the Euroville Centre FDPS adaptation are required to reflect the airspace change.

8.1.3 Support Information System (SIS)

- Update of the SIS at Euroville Centre to reflect the airspace change (maps, sector descriptions, airway descriptions, etc).
- Update of Maps at CWPs at Euroville Centre.

This shall be implemented and thoroughly tested on or before O Date.

8.2 Central Flow Management Unit

Installation, deployment and integration work required at the CFMU is limited to the capture and integration of the airspace and route changes associated with the DIGBY South Extension.

The DIGBY South Extension necessitates an update to the CFMU Environment (ENV) Database. The CFMU have been formally notified of the changes to be implemented via the Euroland ENV Coordinator.

The DIGBY South Extension also necessitates the update of the FPRSA Route Pairing Database (RPD) and Euroland Flight Database (ELFDB).

Integration testing will verify that the Environment Information data has been updated and supplied to Eurocontrol and this will be documented in the DIGBY South Extension Final Test Report.

9. TRANSITION STRATEGY

A Transition Manager has been appointed to take overall responsibility for the transition of all projects being implemented during the March 2009 AIRAC – DIGBY South (P1234). This responsibility encompasses equipment, people and procedures and the co-ordination aspects with interfacing non-Euroville Units. Responsibilities for specific functional areas of the Transition have been delegated to a number of Transition coordinators whilst the Transition Manager retains overall accountability.

A Transition Strategy has been produced within the System Design Document to outline the overall approach and methodology for achieving successful, safe Transition for all projects being implemented in the March AIRAC. The strategy is based on the principles that the implementation should have the minimal impact to operations as possible, and to reduce the risk of making system changes on the transition night.

The Transition Strategy has been further developed into a detailed Transition Management Plan and the Reversion Plan (RP). The Transition Management Plan and its supporting documents set out the detailed responsibilities, timescales (including the definition of the overall Transition Period), activities and method of execution of the transition into operational service for all projects being implemented in March 2009.

A Transition Delivery Document has been created and defines Entry Criteria, which must be met / achieved before the Transition period can be permitted to commence. Similarly, Exit Criteria have been defined which must be met / achieved to satisfactorily conclude the Transition period and formally hand over responsibility for the changes to the Euroville Centre.

As with all transition activities, the objective is to have as many of the system changes implemented as possible ahead of the ‘O’ date, thus minimising the engineering re-configuration activities that are required to be carried out on the Transition Night. Certain engineering changes were required to be in place prior to the commencement of the Transition Period and this work was defined as 'Pre-requisite Tasks' in the Transition Management Plan.

The Transition Management Plan also includes plans to fall forward in the event of unsuccessful Transition, mitigating the effects on ATS of any substantial difficulties that might be encountered during the Transition period.

9.1 Overview of Transition

The strategy for Transition is that, wherever possible, where reconfiguration, adaptation and implementation of equipment does not affect current operations, engineering re-configuration work for Transition will be completed ahead of Transition Night. For those activities that cannot be carried out in advance, the strategy for Transition is to conduct all the changes the same night and to fall-forward.

The Transition Delivery document provides explicit identification of individual steps, their actual timings, specific checkpoints and the individuals responsible for performing the steps. The Transition Manager and Transition Co-ordinators will have a Checklist to ensure that activities are completed and assist in the management of the 'on the night' activities.

9.2 Pre-requisite Activities

Engineering Transition tasks that must be conducted prior to the start of the Transition period are defined within the Transition Delivery Document. The successful conclusion of these tasks is an entry criterion for the Transition period. All tasks carried out as engineering pre-requisites will be subject to testing, which will be recorded in the Interim Test Report.

The Engineering Pre-Requisite Activities for all projects going into service during the March 2009 AIRAC have been defined in the Transition Delivery Document and are summarised as:

- Maps at CWPs available for deployment
- Euroville radar map updates checked and available for deployment
- Euroville SIS page updates and adaptation tested
- Euroville FDP AIRAC adaptation tested and available for deployment
- STCA parametristion ready and available for deployment
- Final Test Report – Interim Test Report produced

9.3 Entry Criteria

A number of Requirements and their satisfactory completion are a pre-requisite to enter the formal Transition Period. The status of all those Requirements was reviewed at the 1st Transition Readiness Review (TRR1), held on 10th February 2009 and also at the 2nd TRR (TRR2) held on 2nd March 2009.

A summary of the Requirements is shown below:

- Euroville ATC Procedures (APSA – ATC Procedure Safety Analysis, Sis – Supplementary Instructions, TOIs – Temporary Operating Instructions, MVs – Monitoring Values (max number of aircraft allowed through a sector), First Brief updates & Operational Notices) together with completed hazard analysis
- LoA between Euroville and Euroland Military
- Military confirm Airspace Changes are ready for Transition
- Formal Regulatory approval for Airspace Change implementation received
- Euroville ATC Training / Briefings
- CFMU Environment ready for Transition
- Euroland AIP and Mil documentation checked
- ATC OPS briefings prior to transition at Euroville Centre complete
- Euroville Centre has sufficient ATC and Military staff rostered for Transition Night with correct ATC validations
- Safety documentation complete and sent to the Euroland National Supervisory Authority (NSA) as appropriate. (including Notification of Change Document and Project Safety Case)
- Euroland National Supervisory Authority (NSA) have been informed of the Airspace changes and 'O' date.
- DIGBY South Transition schedules and checklists available for Euroville and Non-Euroland units and common ‘Checkpoints’ agreed by all co-ordinators
- Euroland Military are ready for Transition
- Pre-Transition testing successfully completed as per the Master Test Plan and OSI Test Plan & Script, and Transition night testing formally identified
- DIGBY South Acceptance Delivery Data Pack, inc Euroville RP145, available for Acceptance Panel
- Euroville Engineering have sufficient staff rostered to Support Transition Night

10. SAFETY PERFORMANCE MONITORING

The Business Requirements Document identifies the following additional Safety-specific benefits:

a) All affected units: the safety of the airspace will be maintained or improved by the airspace change.

As no new systems have been procured for the DIGBY South Extension no new engineering Safety Performance Monitoring procedures are required; rather existing equipment has been adapted or expanded within its Design Envelope to support the provision of the new airspace. Therefore, existing Safety Performance Monitoring procedures in place at the Euroville Centre shall be followed. Similarly, the existing ATC Safety Performance Monitoring systems are applicable for the revised airspace.

Through the extension of DIGBY South, the complexity per flight for aircraft with R-52 routeing via POLLY and ROSS is reduced.

To confirm that this Safety benefit has been realised, it will be necessary for the Euroville Centre to conduct a qualitative assessment of the complexity per flight for aircraft within R-52 routeing via POLLY and ROSS, which should be conducted after a sufficient period of time to ensure that complexity has been reduced, and then demonstrated at the post-implementation review meeting.

11. SYSTEM OPERATION AND MAINTENANCE ARRANGEMENTS

11.1 System Operation

This section identifies any system operation and maintenance requirements necessary to preserve system safety, including the identification and provision of relevant training. It relates to operator handbooks, documented procedures and technical maintenance instructions for the equipment and its operation. It does not include the ATC Operational aspects of the system.

Project 1234 is not introducing any new equipment or functionality of a type that does not already exist at Euroville Centre. Consequently there are no new functional or system operation requirements. Any system changes requiring textual updates to the associated system manuals (e.g. Technical Information Manuals - TIMs) are being undertaken by the Asset Operator responsible for that system.

Since no new systems or functionality are being introduced as part of the DIGBY South Extension there is no requirement for additional Engineering Training.

12. DEPENDENCIES, LIMITATIONS, SHORTCOMINGS

12.1 Design Dependencies

At the time of writing, some references and tasks, such as the ATC Supplementary Instructions (SI) / EVAIP data release and system activities contributing to the overall safety assurance of P1234 are not finalised. These activities continue to be worked in accordance with the project and the Units, and will be in place for Transition. Likewise, activities relating to equipment testing that contribute to the overall safety assessment of P1234 are not yet finalised. These activities are managed by the Work Package Managers and via the P1234 Engineering Manager through the Master Test Plan. In addition to this, Operational System Integration (OSI) tests, checks and inspections will be conducted by the OSI Test Engineer according to the OSI Test Plan & Script Contingency activities for ATC are based upon a "fall forward" strategy, which is documented in the DIGBY South Extension Transition Management Plan. The changes comprising the P1234 Airspace Change will be promulgated on 12th March 2009 in accordance with normal AIRAC cycles, with any ATC system related reversions being managed by raising Euroville Temporary Operating Instructions (TOIs) to ensure safe operations within the new airspace structure. If any difficulties do arise from the adjacent ATS providers' Transition activities, then Euroville Centre could adopt procedures and/or TOIs. This will be managed in accordance with the Euroville Reversion Plan (RP) and P1234 Transition Management Plan to alleviate any problems relating to the co-ordination of control between Euroville and the adjacent centres.

All necessary changes shall be tested and implemented, and results documented, at or before O date in accordance with established processes and procedures. This is a CONDITIONAL CLAIM (P1234 CC01) that is followed from the approval day towards the O date to confirm the complete readiness.

12.2 Dependencies – External Units

The changes associated with the DIGBY South Extension Airspace Change affect external ATS Units in terms of the airspace under their control.

A Letter of Agreement (LoA) between Euroville Centre and Euroland Military has been drafted to define co-ordination and notification procedures between Euroville and the Military for the utilisation of the DIGBY South Extension Airspace extension.

At the time of writing the Safety Case, although the LoA has been drafted, it is not yet complete. This will be completed and formally signed prior to Transition Readiness Review (TRR2) as per the Transition Management Plan. This is a CONDITIONAL CLAIM (P1234 CC02) - for current status, see [7].

12.3 Dependencies - ATC

This Safety Case provides assurance that is dependent upon the successful completion of appropriate ATC staff familiarisation to ensure that appropriately validated and competent individuals are available to man the revised operation at all affected units. By 'O' date, sufficient numbers of briefed ATCOs will be available to support the operation. The Transition Management Team will review the adequacy of the number of briefed staff and confirm that the Military are ready for transition at the Transition Readiness Reviews (TRRs). This aspect is a Requirement to enable transition.

The outstanding aspects identified above are not identified as presenting any unacceptable risks at this stage. Any outstanding issues and references related to the above dependencies are documented in the Outstanding Issues Log.

12.4 Dependencies - Engineering

Euroville Centre is dependent on assurance that the military systems of Euroland Military Units impacted by the airspace classification change are updated adequately to reflect the new service provision and notification / activation / deactivation procedures. Compliance with P1234 Safety Requirement DS-GR4 confirms that military systems have been updated as necessary.

12.5 Limitations

Due to the utilisation of existing equipment to provide the facilities for the new airspace design, the facilities will exhibit the same limitations as currently experienced at Euroville Centre. No further limitations for P1234 have been identified.

12.6 Shortcomings

Other than the shortcomings already identified, the following shortcomings are present at the time of writing:

Staff briefings to familiarise operational ATC staff with the DIGBY South Extension airspace changes have not yet been completed and as a consequence, DS-GR6 (see Table 4) has not yet been met.

The above mentioned outstanding issues will be completed prior to O date to allow the transition to take place and will be progressed via the Transition Management Plan. This is a CONDITIONAL CLAIM (P1234 CC03) - for current status, see 7.

13. REFERENCES

1. Euroville Safety Management System, Intranet, Current Version.
2. ESAAR1
3. ESARR4
4. EC/2096/2005 (Common Requirements)
5. DIGBY South Hazard Log, P1234/HAZLOG/01, Issue 3.
6. Euroville Centre Hazard Log, EC/HAZLOG/01, Issue 12.
7. Outstanding Issues Log, EC/ISSLOG/01, Issue 7
8. DIGBY South Safety Plan, P1234/SAFPLN/01, Issue 3
9. DIGBY South Preliminary Safety Assessment, P1234/PSA/01, Issue 0.2
10. DIGBY South System Design Specification, P1234/SSS/01, Issue 2
11. DIGBY South Transition and Reversion Plan, P1234/TRA/01, Issue 2
12. EC1315/2007

END OF DOCUMENT