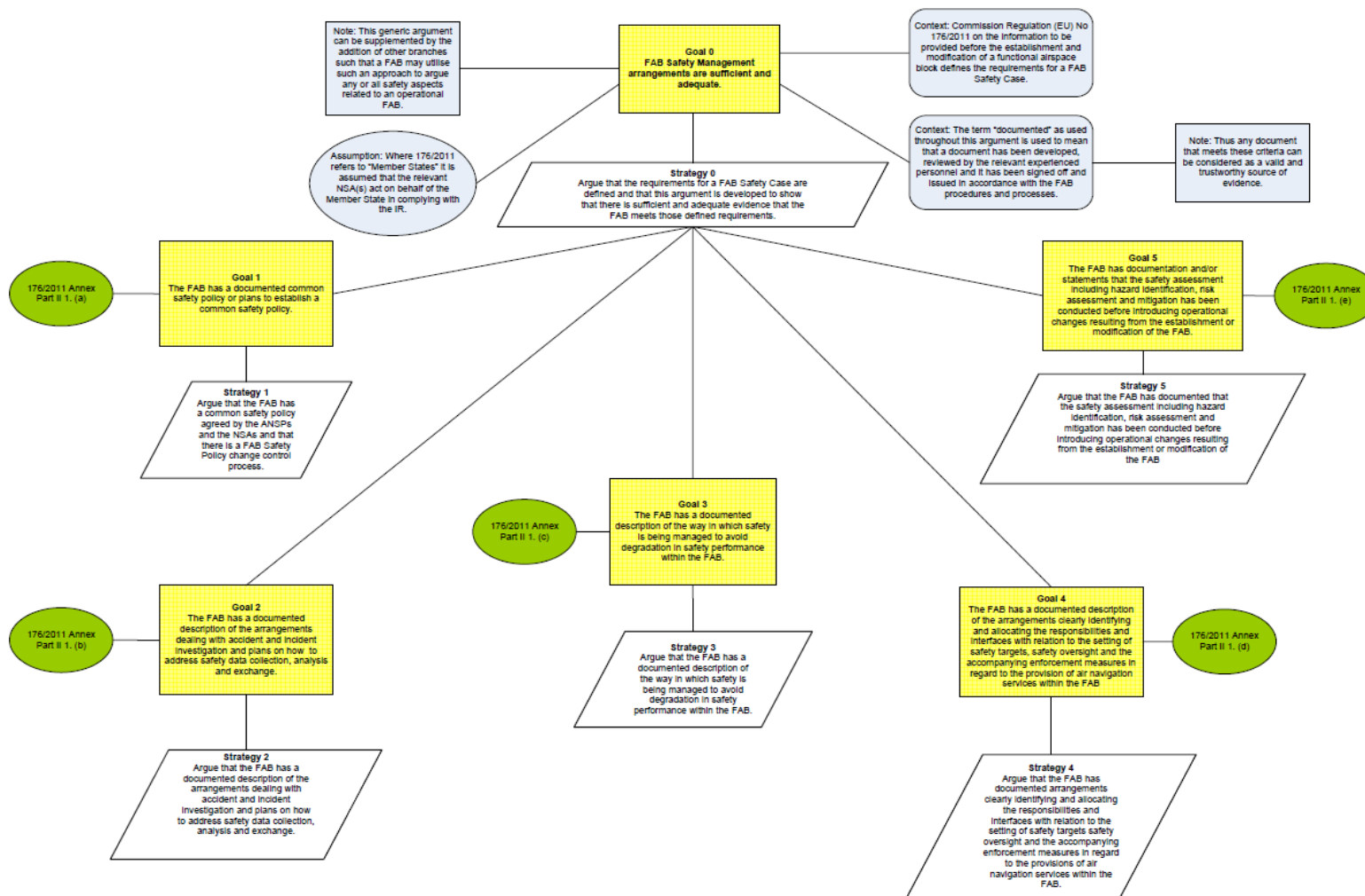


Appendix E: FAB Safety Case Goal Structuring Notation Argument



Appendix F: FAB Safety Case Evidence

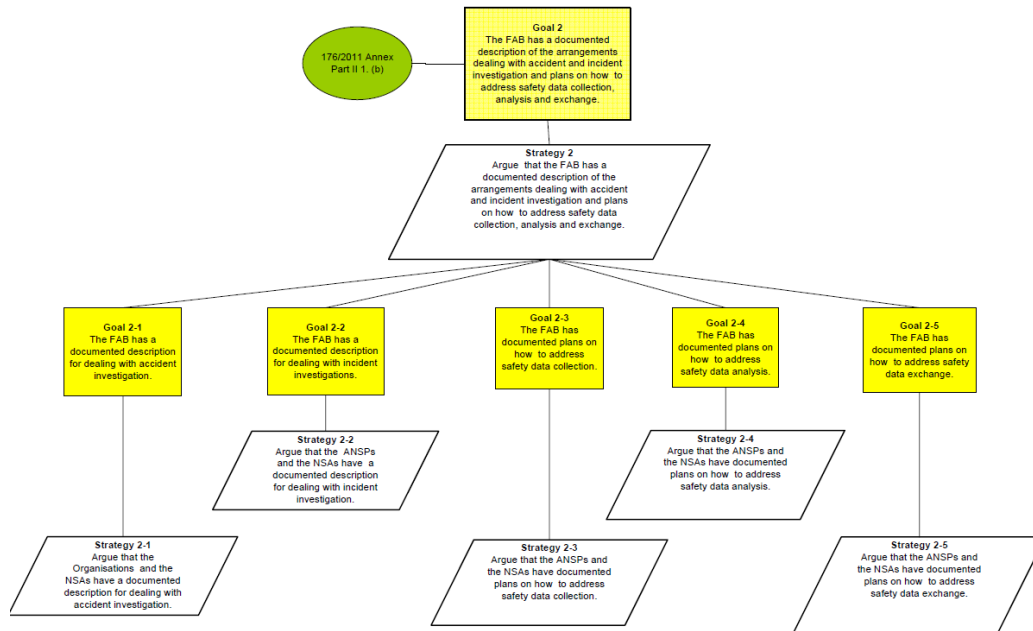
FAB IR Requirements text	Evidence
<p>With regard to the functional airspace block safety case, the following information shall be provided:</p> <p>Item 1:</p> <p>(a) The common safety policy or plans to establish a common safety policy;</p> <div style="text-align: center; margin: 20px 0;"> </div>	<p>E1-1-1</p> <p>A common FAB safety policy has been developed through a consolidation of the existing NATS and IAA ANSP safety policies. It is demonstrably compliant with the Common Requirements Regulation (Commission Regulation (EC) No 1035/2011). It will form a core part of the FAB Safety Management Manual (SMM) and will be agreed by both the NATS and IAA ANSPs with a target date of Q2 2012.</p> <p>The NATS and IAA <i>local</i> policy and principles linked to the common safety policy are overseen by the respective Competent Authorities.</p> <p>E1-1-2</p> <p>The FAB SMM (of which the FAB safety policy is a core part) will be proposed to the UK and Irish Competent Authorities for approval in Q2 2012.</p> <p>E1-2-1 and E1-2-2</p> <p>In the future any change to the FAB Safety Policy will be required to be formally approved by the NATS and IAA ANSPs and associated Competent Authority prior to implementation. Changes will be managed in accordance with the FAB Safety Governance process documented in the FAB Safety Management Manual.</p> <p>Changes to the NATS and IAA <i>local</i> policies, principles and procedures will continue to be overseen by the respective Competent Authorities.</p>

FAB IR Requirements text

With regard to the functional airspace block safety case, the following information shall be provided:

Item 2:

(b) A description of the arrangements dealing with accident and incident investigation and plans on how to address safety data collection, analysis and exchange;



Evidence

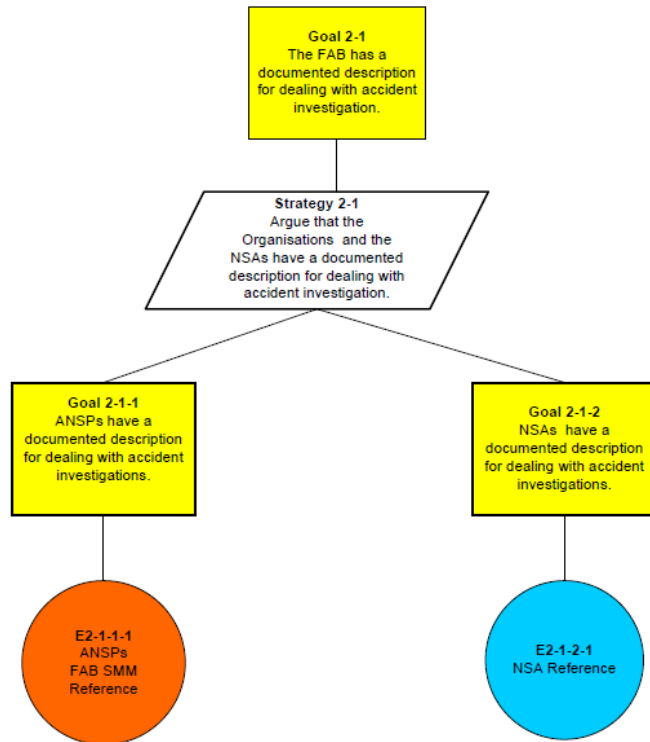
Evidence to support this requirement is broken down in to five separate sections

- Goal 2-1 The FAB has a documented description for dealing with accident investigation
- Goal 2-2 The FAB has a documented description for dealing with incident investigations.
- Goal 2-3 The FAB has documented plans on how to address safety data collection.
- Goal 2-4 The FAB has documented plans on how to address safety data analysis.
- Goal 2-5 The FAB has documented plans on how to address safety data exchange.

FAB IR Requirements text

With regard to the functional airspace block safety case, the following information shall be provided:

Goal 2-1: The FAB has a documented description for dealing with accident investigation



Evidence

E2-1-1-1

All local NATS investigations are conducted in accordance with the Safety Reporting and Investigation procedure (SP300) which ensures that all accidents and incidents are investigated to the extent necessary such that safety improvement actions are identified and implemented as soon as practicable.

In the case of the accident or incident having wide ranging safety assurance implications across NATS units or where there is a perceived need for greater assurance/independence, a major safety investigation is initiated in accordance with the Major Safety Investigation procedure (SP301). This process will subsume the local Unit SP300 investigation.

IAA investigations of accidents and/or incidents are conducted in accordance with the Safety Reporting and Investigation procedures SP300 and SP301 as per IAA SMM Ver.1-3-3 and also in accordance with the IAA MOR (Mandatory Occurrence Reporting) Manual Procedures.

E2-1-2-1

UK Accidents and Serious incidents are investigated by the Air Accident Investigation Board (AAIB) (www.aaib.gov.uk) in accordance with Regulation (EU) No 996/2010 on the investigation and prevention of accidents and incidents in civil aviation and the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996. The AAIB aims to improve aviation safety by determining the causes of air accidents and serious incidents and making safety recommendations intended to prevent recurrence. The findings from investigations are published along with recommendation when applicable for the UK Competent Authority and NATS. The UK Competent Authority regularly provides support to the AAIB in the form of R/T transcripts and when relevant specialist ATS investigations.

Irish Accidents and Serious Incidents in Ireland are investigated by the Air Accident Investigation Unit (AAIU) in accordance with Annex 13 to the International Civil Aviation Organisation Convention, European Union Council Regulation (EU) 996/2010, and Statutory Instrument No.460 of 2009 (Air Navigation [Notification and Investigation of Accidents, Serious incidents and Incidents] Regulations 2009). The fundamental purpose of such investigations is to determine the circumstances and causes of these events, with a view to the preservation of life and the avoidance of similar

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
	occurrences in the future The Memorandum of Understanding (MOU) on Cooperation between the Competent Authorities of Ireland and the UK (UK CAA and SRD of IAA) in relation to UK-IRL FAB provides that (Section 3) Accidents or Serious Incidents will be investigated in accordance with ICAO Annex 13 in line with cooperation arrangements that are extant between the UK and Ireland.

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Goal 2-2 The FAB has a documented description for dealing with incident investigations</p> <pre> graph TD G22[Goal 2-2 The FAB has a documented description for dealing with incident investigations.] --- S22[/Strategy 2-2 Argue that the ANSPs and the NSAs have a documented description for dealing with incident investigation./] S22 --- G221[Goal 2-2-1 ANSPs have a documented description for dealing with incident investigations.] S22 --- G222[Goal 2-2-2 NSAs have a documented description for dealing with incident investigations.] G221 --- E2211((E2-2-1-1 ANSPs FAB SMM Reference)) G222 --- E2221((E2-2-2-1 NSA Reference)) </pre>	<p>E2-2-1-1 All Investigations are conducted in accordance with National Safety Management processes. For NATS this is accordance with SP300 unit procedure or where there is a perceived need for greater assurance/ Independence a major investigation is initiated in accordance with SP301. IAA investigations of accidents and/or incidents are conducted in accordance with the Safety Reporting and Investigation procedures SP300 SP301 as per IAA SMM Ver.1-3-3 and also in accordance with the IAA MOR Manual Procedures.</p> <p>E2-2-2-1 The UK Competent Authority has in place a Mandatory Occurrence Reporting (MOR) scheme defined in Article 226 of the Air Navigation Order 2009 (ANO) that, supported by CAP 382, implements Directive 2003/42/EC and provides the procedures for reporting and investigating incidents. The purpose of the scheme is to contribute to the improvement of flight safety by ensuring that relevant information on safety is reported, collected, stored, protected and disseminated. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability. Within the scheme the pilot or a controller making the report has the opportunity to classify their MOR as an Airprox, if they believe that the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved was or may have been compromised. These types of incident as investigated by the UK Airprox Board (UKAB) which is an independent body, sponsored by the CAA, made up of civil and military aviation experts. The investigations raise recommendations to reduce the likelihood of a further occurrence and communicate the findings across the UK ATM industry. As well as UKAB the UK Competent Authority also undertakes its own ATS investigation of certain ATS related incidents utilising its own team of ATS and Engineering investigation experts. The Irish Competent Authority has in place a Mandatory Occurrence Reporting (MOR) scheme as defined in S.I. no. 285/2007 European Communities (occurrence reporting in civil aviation) Regulations 2007 that</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
	<p>transposes directive 2003/42/EC into national legislation. The purpose of the scheme is to contribute to the improvement of flight safety by ensuring that relevant information on safety is reported, collected, stored, protected and disseminated. The sole objective of occurrence reporting is the prevention of accidents and incidents and not to attribute blame or liability</p> <p>Article 65 of the Irish Aviation Authority Act 1993 provides for the investigation of incidents by the Irish Competent Authority. This provision is supported by IAA/SRD Procedures which describe the process for the Irish Competent Authority to investigate, independently of the ANSPs, incidents where ATM is implicated or are ATM specific occurrences, in Irish airspace or at ANS units which are subject to regulation by the Irish Competent Authority. The sole objective of the investigation is the prevention of accidents and incidents.</p> <p>The Memorandum of Understanding (MOU) on Cooperation between the Competent Authorities of Ireland and the UK (UK CAA and SRD of the IAA) in relation to UK-IRL FAB in Section 3 provides "... an ANSP will be regulated by its own Competent Authority wherever it operates in a FAB"; "Accidents or Serious Incidents will be investigated in accordance with ICAO Annex 13 in line with cooperation arrangements that are extant between the UK and Ireland in this respect.</p> <p>In Ireland an Airprox Panel is established to investigate all events where in the opinion of a pilot or a controller, the distance between aircraft as well as their relative positions and speed have been such that the safety of the aircraft involved was or may have been compromised. The investigations will raise recommendations to reduce the likelihood of a further occurrence and communicate the findings across the Irish ATM industry.</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Goal 2-3 The FAB has documented plans on how to address safety data collection</p> <pre> graph TD G23[Goal 2-3 The FAB has documented plans on how to address safety data collection.] --- S23[/Strategy 2-3 Argue that the ANSPs and the NSAs have documented plans on how to address safety data collection./] S23 --- G231[Goal 2-3-1 ANSPs have documented plans on how to address data collection.] S23 --- G232[Goal 2-3-2 NSAs have documented plans on how to address safety data collection.] G231 --- E2311((E2-3-1-1 ANSPs FAB SMM Reference)) G232 --- E2321((E2-3-2-1 NSA Reference)) </pre>	<p>E2-3-1-1</p> <p>NATS has published a Just Culture Statement which through its implementation aims to form an environment where staff can raise safety issues and observations without fear of reprisal. Senior Managers' safety accountabilities cascade a staff responsibility to promote a Just Culture within the company. A close working relationship has been developed with the Trade Unions to ensure an environment is developed which is conducive to reporting. All Safety Significant Events raised via Mandatory Occurrence Reports or the Open Reporting Scheme are assessed against the Eurocontrol RAT and the UK-Ireland Safety Significant Event (SSE) scheme.</p> <p>The IAA ANSP has in place the Mandatory Occurrence Reporting (MOR) scheme and the MOR Manual. Quarterly and annual MOR reports are produced and analysed. MORs involving a loss of separation are subjected to the SSE scheme and the EUROCONTROL RAT, SSE information is openly shared between IAA and NATS.</p> <p>Engineering maintenance data is recorded and analysed locally and data is available for exchange between units.</p> <p>E2-3-2-1</p> <p>Under Article 226 of the Air Navigation Order 2009 and in accordance with the Mandatory Occurrence Reporting Scheme (CAP382), NATS Air traffic controllers and Air Traffic Engineers are mandated by the UK Competent Authority to report "Any incident which endangers or which, if not corrected, would endanger an aircraft, its occupants or any other person."</p> <p>Under SI. no. 285/2007 European Communities (occurrence reporting in civil aviation) Regulations 2007 and in accordance with the IAA MOR Scheme Air Traffic Controllers and Air Traffic Engineers are mandated to report occurrences which endanger, or which, if not corrected, would endanger an aircraft, its occupants or any other person. Regulation 7 of the Statutory Instrument provides for the Irish Competent Authority to put in place a mechanism to collect, evaluate, process and store safety data. Procedures describe the process for implementing this regulation.</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Goal 2-4 The FAB has documented plans on how to address safety data analysis.</p> <pre> graph TD G24[Goal 2-4 The FAB has documented plans on how to address safety data analysis.] --- S24[/Strategy 2-4 Argue that the ANSPs and the NSAs have documented plans on how to address safety data analysis./] S24 --- G241[Goal 2-4-1 ANSPs have documented plans on how to address safety data analysis.] S24 --- G242[Goal 2-4-2 NSAs have documented plans on how to address with safety data analysis.] G241 --- E2411((E2-4-1-1 ANSPs FAB SMM Reference)) G242 --- E2421((E2-4-2-1 NSA Reference)) </pre>	<p>E2-4-1-1</p> <p>In accordance with the Evaluation of the Safety Significance of ATC Events procedures (SP302), all MORs are categorised under the safety significant event scheme and the Eurocontrol RAT which enables safety performance to be monitored and analysed. The evaluation is performed by the ATC unit applicable and moderated centrally by a team of ATC specialists to ensure consistency of application.</p> <p>Safety Data Performance monitoring is in accordance with the IAA SMM Ver.1-3-3 Part 2 and described in detail for each unit in Part 4.</p> <p>E2-4-2-1</p> <p>The UK Competent Authority undertakes a risk level assessment for each reported MOR and assigns a risk rating from A to E. The UK Competent Authority prepares a monthly Occurrence Listing which summarises the MORs that has occurred over the last reporting period.</p> <p>Additionally, the Airprox Board (UKAB) undertakes its own risk level assessment for each reported Airprox and assigns a risk rating from A to E (using its own definitions) dependent upon the degree of risk exposure.</p> <p>The Aviation Safety Analysis group (ASA) of the Irish Competent Authority coordinates the analysis and investigation of occurrence reports by continuously monitoring all incoming data for significant hazards or potential hazards. The Competent Authority undertakes a risk level assessment for each reported MOR and assigns a risk rating from A to E. The Irish Competent Authority publishes an annual safety review which includes analysis of occurrence trends. Where specific safety risks are identified or adverse trends observed the Irish Competent Authority issues safety bulletins to highlight these risks and provide information on mitigating actions.</p> <p>Additionally, the Airprox Panel undertakes a risk level assessment for each reported Airprox and assigns a risk rating from A to D in accordance with PANS/ATM classifications.</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Goal 2-5 The FAB has documented plans on how to address safety data exchange.</p> <pre> graph TD G25[Goal 2-5 The FAB has documented plans on how to address safety data exchange.] --- S25[/Strategy 2-5 Argue that the ANSPs and the NSAs have documented plans on how to address safety data exchange./] S25 --- G251[Goal 2-5-1 ANSPs have documented plans on how to address safety data exchange.] S25 --- G252[Goal 2-5-2 NSAs have documented plans on how to address safety data exchange.] G251 --- E2511((E2-5-1-1 ANSPs FAB SMM Reference)) G252 --- E2521((E2-5-2-1 NSA Reference)) </pre>	<p>E2-5-1-1</p> <p>NATS is developing a new Safety Procedure document which aims to ensure that operational unit lesson learning is robust and effective. It will create a forum at each operational unit of nominated experts to review ATM events and prioritise safety lessons and ensure that these lessons are effectively disseminated. The new procedure is expected to be available by the end of the 2012.</p> <p>IAA Organisational and Operational units required to disseminate safety data widely within the authority in accordance with IAA SMM Ver.1-3-3 Part 2 and Part 4.</p> <p>E2-5-2-1</p> <p>Twice yearly, the UKAB reports on the analysis of Airprox trends in UK Airspace and makes recommendations as appropriate to the UK Competent Authority.</p> <p>The Irish Competent Authority provides an AST (Annual Summary Template) report to EUROCONTROL twice a year.</p> <p>The Memorandum of Understanding (MOU) on Cooperation between the Competent Authorities of Ireland and the UK (UK CAA and SRD of the IAA) in relation to UK-Ireland FAB provides (paragraph 3.2.2 and Annex A) for the sharing of Safety occurrence data and trend analysis.</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Item 3:</p> <p>(c) a description of the way in which safety is being managed to avoid degradation in safety performance within the functional airspace block;</p>	<p>E3-1-1</p> <p>The fundamental commitment of the safety policy is to strive to continually improve operational safety performance across the FAB. The FAB SMM is being developed specifically to implement this policy.</p> <p>The NATS Strategic Plan for Safety sets out plans to improve the safety of the operational service within the UK.</p> <p>Safety is being managed through the implementation of Safety Management Systems (SMS) that are compliant with Commission Regulation (EU) No 1035/2011 “Common Requirements (CRs) for the provision of Air Navigation Services” and, in particular, through the implementation of specific “Safety Performance Monitoring and Reporting” processes whose objective is to avoid degradation in safety performance within the functional airspace block.</p> <p>E3-2-1</p> <p>The UK CAA Safety Plan outlines the UK Competent Authority activities to ensure that “the UK aviation industry and the CAA will have measurably increased capability and performance in Safety Management, Human Factors and Just Culture, and demonstrated the benefits in terms of risk reduction.” An avoidance of degradation in safety performance is implicit within this objective. Additionally, the UK Competent Authority exercises safety oversight to ensure safety performance does not degrade in accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1034/2011).</p> <p>The Irish Competent Authority has developed a State Safety Programme with the objective of combining elements of both prescriptive and performance based approaches to the management of safety. The key components of the Safety Programme, namely Safety Policy, Safety Risk Management, Safety Assurance and Safety Promotion, detail the specific sub-processes and activities that the Irish Competent Authority utilises in order to conduct the management of safety.</p> <p>In accordance with the Safety Oversight IR (Commission Regulation (EC) No 1034/2011) and the Common Requirements IR (EC No 1035/2011) the</p>

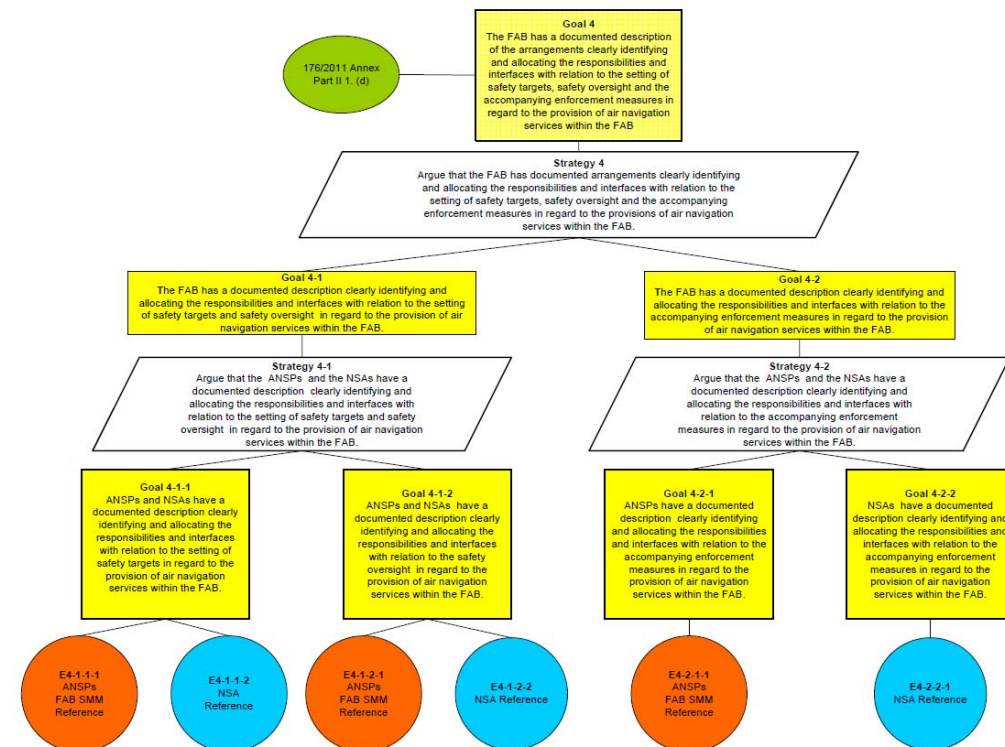
FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
	<p>Irish Competent Authority's safety oversight programmes include inspections, audits and informal surveys to ensure that the ANSP's SMS is functioning effectively and that there has been no degradation of safety performance.</p> <p>The Memorandum of Understanding (MOU) on Cooperation between the Competent Authorities of Ireland and the UK (UK CAA and SRD of the IAA) in relation to UK-Ireland FAB provides (paragraph 3.3) that the 2 Competent Authorities will cooperate to ensure adequate assessment of the ANSP's FAB related activities. Particular emphasis will be placed on the Safety Management Systems of the ANSP's to ensure that they continue to meet existing safety requirements and wherever possible, enhance Safety.</p>

FAB IR Requirements text

With regard to the functional airspace block safety case, the following information shall be provided:

Item 4:

(d) a description of the arrangements clearly identifying and allocating the responsibilities and interfaces with relation to the setting of safety targets, safety oversight and the accompanying enforcement measures in regard to the provision of air navigation services within the functional airspace block;



Evidence

E4-1-1-1

The NATS Strategic Plan for Safety outlines the NATS strategic safety target which is to deliver an average 10% reduction per annum in the weighted safety significant event index until 2015. It presents the high level strategic activities from across the business that will deliver safety improvement.

The IAA "Corporate ATM Safety Strategy" sets out IAA's strategic safety goals.

E4-1-1-2

The UK CAA National Performance Plan documents nine safety KPIs which represent key risk areas to ATM in the UK. Three of these safety KPIs are European wide and were established through the Performance Scheme IR (Commission Regulation (EU) 691/2010). The other six were developed by the CAA having been drawn from the UK Mandatory Occurrence reporting (MOR) Scheme.

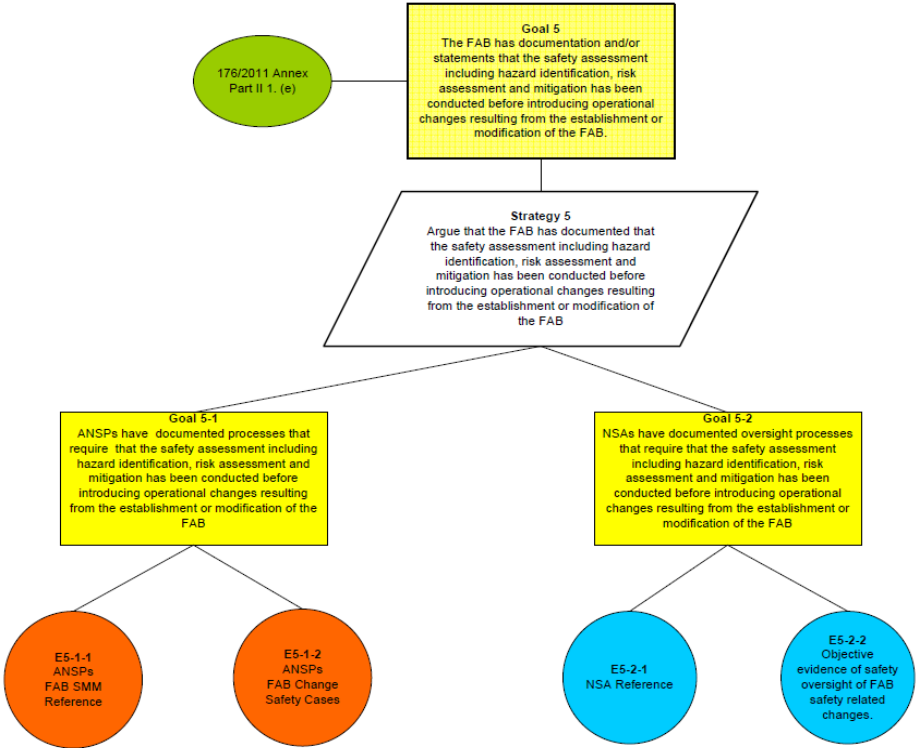
Under Reference Period 1 (RP1), trends in the performance of these KPI will be monitored by the UK Competent Authority and appropriate corrective action taken, as necessary. It should be noted that there are no safety targets set against each KPI but it is expected that for RP2 the UK and Irish Competent Authorities will produce a FAB Performance plan, which may well include the declaration of safety targets.

The Irish Competent Authority has identified 10 KPIs which represent key risk areas to ATM in Ireland. Three of these safety KPIs are European wide and were established through the Performance Scheme IR (Commission Regulation (EU) 691/2010). The remaining 7 key risk areas, were identified through analysis of Mandatory Occurrence Reports data.

Under Reference Period 1 (RP1), trends in the performance of these KPI will be monitored by the Irish Competent Authority and appropriate corrective action taken, as necessary. It should be noted that no safety targets have been notified to the commission for RP1, however it is expected that for RP2 the UK and Irish Competent Authorities will produce a FAB Performance plan, which may well include the declaration of safety targets.

Notice to ANSPs No. S.17, outlines the Acceptable Levels of Safety (ALoS) to be achieved in Ireland. It describes the strategies for defining safety

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
	<p>indicators and safety targets. Procedures detail the methodology for defining the safety targets associated with the Key risk areas, which provides quantifiable measures for the maintenance and/or improvement of the level of safety for ATS service provision in Ireland.</p> <p>E4-1-2-1</p> <p>In order to obtain the certificate necessary to provide air navigation services ANSPs are required to comply with the common requirements as outlined in the Common Requirements (Commission Regulation (EC) No 1035/2011).</p> <p>The process for compliance with the common requirements is detailed in Appendix E</p> <p>E4-1-2-2</p> <p>In accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1034/2011) and as depicted in Fig 2 Appendix E, the UK and Irish Competent Authorities operate a system of supervision and inspection to verify continued ANSP compliance with the Common Requirements and to provide assurance that safety performance does not degrade within the functional airspace block.</p> <p>The Memorandum of Understanding (MOU) on Cooperation between the Competent Authorities of Ireland and the UK (UK CAA and SRD of the IAA) in relation to UK-Ireland FAB establishes a FAB Supervisory Committee which provides the formal coordination and interface forum between the 2 Competent Authorities in all matters relevant to the UK-Ireland FAB.</p> <p>E4-2-1-1</p> <p>NATS and the IAA will document a description clearly identifying and allocating the responsibilities and interfaces with relation to the accompanying enforcement measures in regard to the provision of air navigation services within the FAB. Further information TBA.</p> <p>E4-2-2-1</p> <p>The Authority has documented its Enforcement Policy and procedure (SRD 010 refers). Further information TBA.</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
<p>Item 5:</p> <p>(d) documentation and/or statements that the safety assessment including hazard identification, risk assessment and mitigation has been conducted before introducing operational changes resulting from the establishment or modification of the functional airspace block.</p> 	<p>E5-1-1</p> <p>In accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1035/2011) NATS notifies the UK Competent Authority of all planned safety related changes.</p> <p>All systems changes are required to comply with the NATS SP401 ATM risk assessment and mitigation procedure. This procedure sets out tolerable failure rates for ATM system functions and mandates that all system changes are subject to safety assessment. This ensures that all system changes are assessed for their safety significance and mitigated to a tolerable level of safety risk. Changes to ATC operational procedural changes are managed separately through the SP406 procedures which ensures that the hazards associated with the procedure change have been identified, safety requirements derived and mitigation implemented such that any associated residual operational risks are tolerable. Before the procedure can be implemented the appropriate unit approvals must be obtained.</p> <p>In accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1035/2011) the IAA ANSP notifies the Irish Competent Authority of all planned safety related changes.</p> <p>All system changes are required to comply with the IAA SP401 ATM risk assessment and mitigation procedure. Changes to ATC operational procedures are managed separately through the SP406 procedures. Engineering changes are conducted in accordance IAA ENG001 procedure.</p> <p>E5-2-1</p> <p>In accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1034/2011) NATS is required to notify the UK Competent Authority of all planned safety related changes. This is achieved through the provision of a Safety Case Part 1 or Project Safety Plan (in lieu of a Safety Case Part 1) in accordance with SP403 System Safety Cases procedure. Upon receipt of a Safety Case Part 1 and project safety plan the UK Competent Authority may wish to initiate a formal audit of the project. This enables the UK Competent Authority to perform</p>

FAB IR Requirements text With regard to the functional airspace block safety case, the following information shall be provided:	Evidence
	<p>oversight of the safety processes being applied.</p> <p>Additionally, 30 days prior to implementation the safety assurance documentation for both system changes and changes to ATC operational procedure are required to be submitted to the UK Competent Authority in accordance with the UK Competent Authority CAP670 document.</p> <p>In accordance with the Safety Oversight Regulation (Commission Regulation (EC) No 1034/2011) the IAA ANSP notifies the Irish Competent Authority of all planned safety related changes.</p> <p>This regulation is supported by IAA/SRD Procedures which describe the process for the Irish Competent Authority to ensure, by independent verification, that all ATM system changes are assessed for safety significance, any associated risks are reduced to tolerable levels prior to the implementation of any change and such risk assessment and mitigation addresses the total ATM system through the complete lifecycle of that system.</p>

Appendix G: Rationale for approach to GSN for satisfaction of FAB Safety Case Requirements

GSN	Rationale/Notes
Goal 0	Written so as to allow additional arguments to be added as required.
Strategy 0	Bespoke strategy for the satisfaction of the FAB Safety Case requirements from EC 176/2011.
Goals 1, 2, 3, 4 and 5	The five requirements from 176/2011 (Annex Part II 1. (a), (b), (c), (d) and (e)).
Strategies 1, 2, 3, 4 and 5	<p>The five Strategies are that the FAB has “documented” the approach to the satisfaction of each of the five Goals.</p> <p>Strategy 1 includes a requirement for a FAB Safety Policy change control process as this is likely to be unique in maintaining a Safety Policy across the FAB and will not be in any one Organisation or Competent Authority document.</p> <p>Strategy 1 has assumed that there is a FAB common Safety Policy not that we plan to establish one.</p>
Goals 1-1 and 1-2	Strategy 1 has been broken down into its two elements.
Goals 2-1, 2-2, 2-3, 2-4 and 2-5	Strategy 2 has been broken down into its five elements. These are “FAB” level Goals.
Strategies 2-1, 2-2, 2-3,2-4 and 2-5	Each strategy responds to the Goal above breaking “FAB” into “ANSPs” and “Competent Authorities”.
Goals 2-1-1 and 2-1-2	These Goals address the ANSPs and Competent Authorities arrangements for dealing with accident investigations.
Goals 2-2-1 and 2-2-2	These Goals addresses the ANSPs and Competent Authorities arrangements for dealing with incident investigations.
Goals 2-3-1 and 2-3-2	These Goals addresses the ANSPs and Competent Authorities arrangements for dealing with safety data collection.
Goals 2-4-1 and 2-4-2	These Goals addresses the ANSPs and Competent Authorities arrangements for dealing with safety data analysis.
Goals 2-5-1 and 2-5-2	These Goals addresses the ANSPs and Competent Authorities arrangements for dealing with safety data exchange.
Goal 3-1 and 3-2	These Goals address the ANSPs and Competent Authorities arrangements to avoid degradation in

GSN		Rationale/Notes
		safety performance within the FAB.
Goals 4-1 and 4-2		Strategy 4 has been broken down into its two elements. These are "FAB" level Goals.
Strategies 4-1 and 4-2		Each strategy responds to the Goal above breaking "FAB" into "ANSPs" and "Competent Authorities".
Goals 4-1-1 and 4-1-2		These Goals address the ANSPs and Competent Authorities arrangements for dealing with safety targets and oversight.
Goals 4-2-1 and 4-2-2		This Goal addresses the ANSPs and Competent Authorities arrangements for dealing with enforcement measures.
Goals 5-1 and 5-2		These Goals addresses the ANSPs and Competent Authorities arrangements for dealing with hazard identification, risk assessment and mitigation.

Appendix H: Establishment of Common Requirements for the provision of air navigation service

Safety Management Systems (SMS) are harmonised at EU safety regulatory level by the Commission Regulation (EU) No 1035/2011 "Common Requirements (CRs) for the provision of Air Navigation Services."

The CRs set out specific requirements to ensure a harmonised common minimum level of safety management across the EU.

In accordance with the SES Certification process, IAA and NATS in their applications for certification referenced the Safety Management System (SMS) arrangements in place within each organisation that provide compliance with the CRs.

As depicted in Fig 2. the Irish and UK Competent Authorities verified IAA and NATS compliance with the CRs, issued a certificate of compliance and, the Irish and UK Governments have respectively designated NATS as IAA for a multi-state FAB.

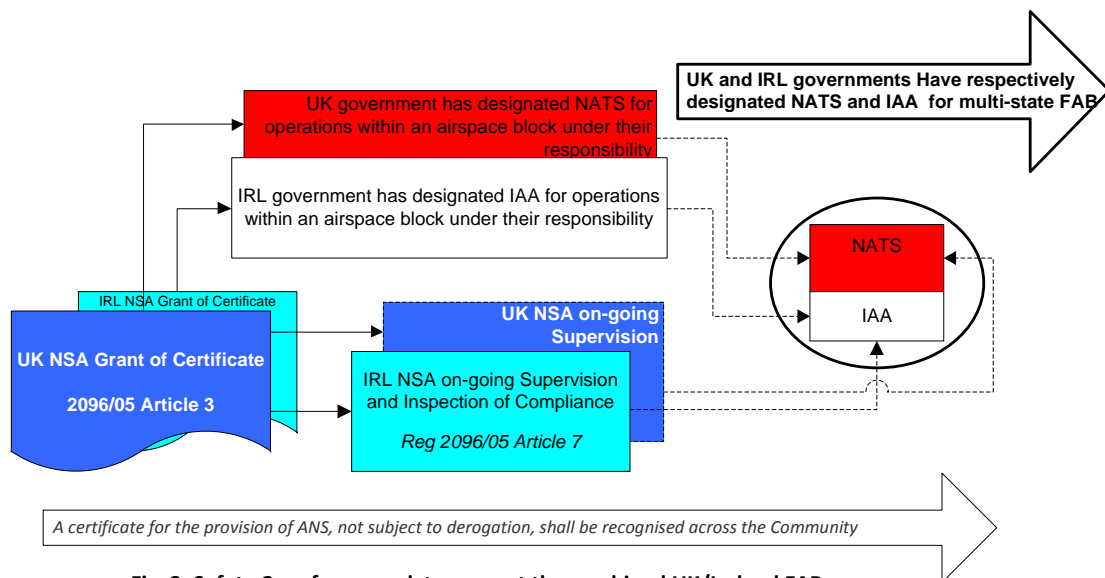


Fig. 2. Safety Case framework to support the combined UK/Ireland FAB

The Irish and UK Competent Authorities operate a system of supervision and inspection to verify continued ANSP compliance with the CRs.