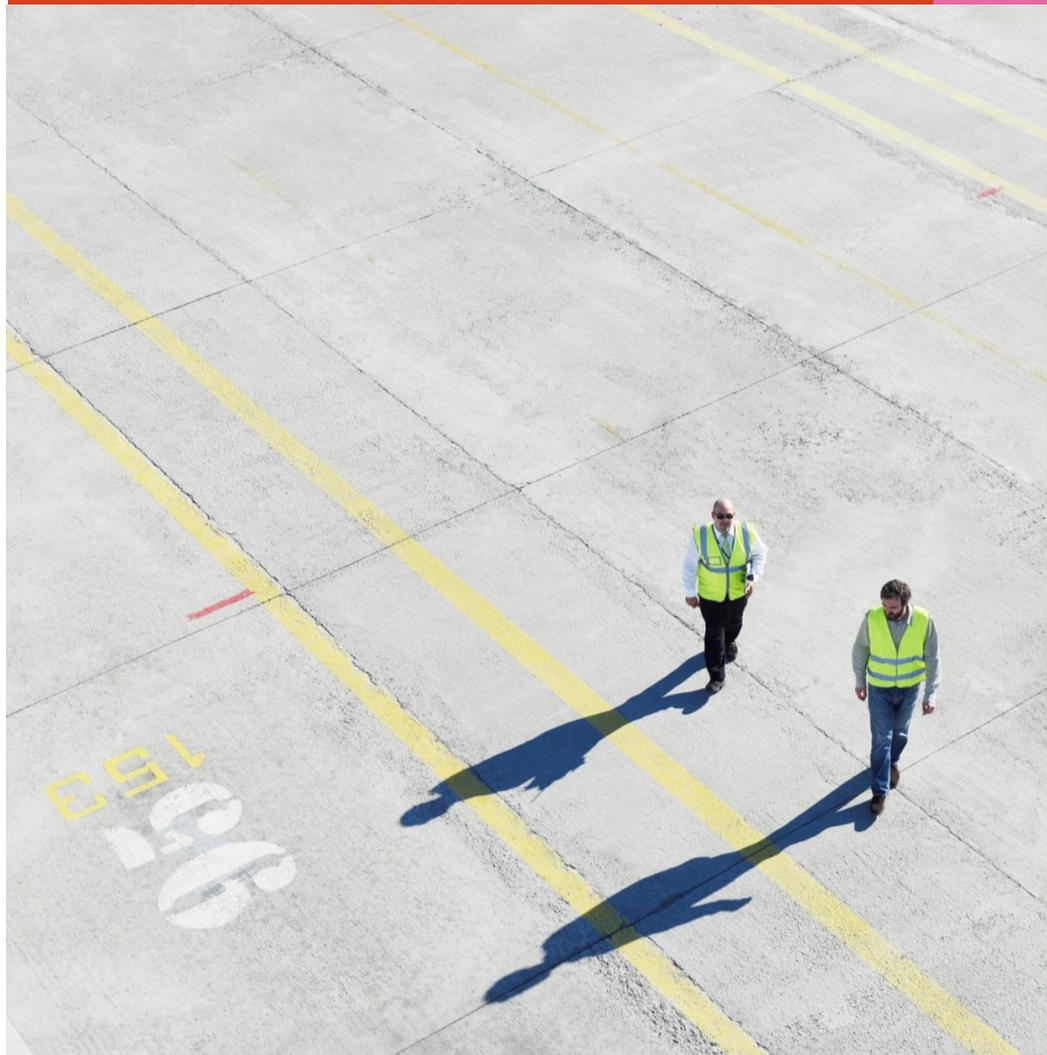


CAA

Review of Airspace Change Process

21 January 2011



Contents

<i>Executive Summary</i>	5
<i>Purpose of the Review</i>	5
<i>Approach</i>	5
<i>Key Findings</i>	5
<i>Options for Process Improvement</i>	6
<i>Introduction</i>	8
<i>Scope and Drivers for the Review</i>	8
<i>Approach</i>	10
<i>Review criteria</i>	10
<i>Overview of lean</i>	11
<i>Framework for issues</i>	11
<i>Initial Review</i>	13
<i>Supporting Documentation</i>	13
<i>Process Throughput</i>	14
<i>Information and Knowledge Management</i>	14
<i>Summary</i>	14
<i>As-Is Process Review</i>	16
<i>Stage 1</i>	16
<i>Stage 5</i>	16
<i>Linkage to Other Stages</i>	17
<i>Issues and Causes</i>	19
<i>Collection and Definition</i>	19
<i>To-Be Process Development</i>	22
<i>Stage 1</i>	22
<i>Stage 5</i>	23
<i>Conclusion</i>	25
<i>Key Findings</i>	25
<i>Potential Improvements and Benefits</i>	26

<i>Appendices</i>	35
Appendix A – Full List of criteria	36
Appendix B – ACP Overview Data	38
Appendix C – Stakeholders consulted	40
Appendix D – Key documents consulted	41
Appendix E – ‘As-Is’ process maps	42
Appendix F – ‘To-Be’ process maps	43
Appendix G – Stages 1-7 – Issues map	44

Abbreviations

ACP	Airspace Change Process
AIRAC	Aeronautical Information Regulation & Control
APCC	Airspace Policy Coordination & Consultation
BIS	(Department for) Business, Innovation & Skills
BRE	Better Regulation Executive
CAA	Civil Aviation Authority
CAS	Controlled Airspace
CAP	Civil Aviation Publication
CO ₂	Carbon Dioxide
DAP	Directorate of Airspace Policy
DfT	Department for Transport
ERCD	Environmental Research & Consultancy Dept
FAS IP	Future Airspace Strategy Implementation Programme
GA	General Aviation
NATMAC	National Air Traffic Management Advisory Committee
NATS	National Air Traffic Services Ltd
NERL	NATS En Route Limited
SLA	Service Level Agreement
SRG	Safety Regulation Group (of the CAA)

Executive Summary

Executive Summary

Purpose of the Review

This review had two primary purposes as follows:

- To determine if the internal airspace change process can be tailored to better reflect the varying degree of complexity inherent in airspace change proposals, including issues around the risk of judicial review.
- To consider options for improvements to stages 1 (Framework Briefing) and 5 (Regulatory Decision) of the airspace change process as documented in CAP 724/725 in terms of the time taken internally, the outcomes achieved and how proposer burden could be reduced, including options for tailoring stage 4.

Approach

The review was managed in two phases: Assess and Design

Assess

The first phase focused on documentation review, interviews and workshops to establish the ‘As Is’ current state of stages 1 and 5 of the 7 stage Airspace Change Process (ACP). This phase also included limited contact with NATS, the primary customer of the ACP to understand their perspective of burden on the proposer.

Design

This phase developed the ‘To Be’ future state, built on extant CAA principles and Lean principles. Improvement options were discussed and prioritised with those engaged in the process based on the impact of issues captured in the Assess phase.

Key Findings

Findings confirm potential for the process to be tailored and improved to better reflect the varying degree of complexity inherent in airspace change proposals:

- Internal documentation underpinning CAP724/725 appears to provide a clear and consistent standard from which to plan activity and there are clear roles and responsibilities identified for the operation of the process.
- Scheduling and coordination of resource is currently reactive and does not encourage efficiency of staff effort. There is limited visibility of demand via the NATS pipeline and no systematic performance management in place.
- The assessment criteria outlined at stage 1 is not consistently explicit. Proposers have on occasion not submitted a complete proposal at stage 5, leaving the CAA to manage the shortfall.
- The opportunity to tailor the duration of stage 4 (Consultation and Formal Proposal Submission) remains limited.
- The DfT environmental impact guidance has not been revised since 2002. It is uncertain when the DfT will address the known ambiguities, which increase proposer and CAA effort, by issuing an amendment.
- Formal process controls are present at the end of stage 5 and there is limited regular assessment of ACP task risk.

The Airspace Change Process is logical and well constructed. It is executed by CAA staff with extensive understanding of the inherent complexity of accommodating changes to UK airspace.

The process would benefit from increasing its focus on resource scheduling, application of 'learning by experience' and adoption of a continuous improvement approach.

Implementation of suggested options should improve resource coordination and improve risk management of the ACP.

The options should improve proposer experience, enable better management of proposer expectations and could reduce proposer burden.

- Those engaged in the process have high levels of tacit knowledge but there are few evidenced instances where tacit knowledge has been captured and incorporated into the ACP since 2007 for the wider benefit of others.
- There is limited evidence of tools and techniques being applied routinely to drive and sustain continuous improvement.

Overall, while some issues have been identified, based on the data and information presented by the CAA, the Airspace Change Process is considered to be compliant with Regulatory Principles and the requirements of the CAA as outlined in the Transport Act 2000. However, there are a number of areas where improvements could be made that would be of benefit to DAP, the CAA as a whole and proposers.

Options for Process Improvement

1 Resource Scheduling and Programme Management

Improving resource scheduling to include proactive management of the ACP pipeline and stage gate reviews should streamline decision making, increase transparency and help manage capacity; strategic opportunities, such as the Future Airspace Strategy Implementation Programme (FAS IP), might also benefit.

Improvement to the extant 16 week period taken for the stage 5 Regulatory Decision should be possible through improved focus on internal coordination and control; reducing the time to complete a stage 5 review may also benefit proposers.

2 Supporting 'the learning organisation'

Translating tacit knowledge into timely updates of good practice would provide clearer guidance to proposers and improve management of proposer expectations in stage 1. The effectiveness of stages 1 and 5 could both be improved by a more timely and consistent codification of 'learning by experience'. The risk of judicial review could be further reduced through more explicit communication of assessment criteria.

Introducing a continuous improvement approach would align with wider CAA imperatives. DAP should also consider adopting appropriate tools and techniques to support a visual approach which fosters collaboration.

3 Environmental Issues

Accelerating progress in the clarification of DfT environmental guidance should be a CAA imperative; improved scheduling and control around ERCD could further reduce the risk of judicial review.

4 Risk Management

Transparent activity scheduling and active task controls would improve risk management of the ACP. Integrating risk management in a more visual way with resource scheduling would help make the overall process more responsive.

5 Benefits management

Providing more detailed guidance on criteria used to determine ACP safety benefits would improve the clarity and transparency of the process. The CAA could set safety criteria which requires each ACP to enable an overall net safety improvement within the proximity of a specific ACP. More formal coordination with Safety Regulation Group (SRG) and Environmental Research & Consultancy Dept (ERCD) to agree ACP benefits would support this intent.

Introduction

Introduction

Scope and Drivers for the Review

The potential for increased demand on the Airspace Change Process requires effective management of resources

This report is produced for the Director of Airspace Policy within the CAA, as specified in the letter of engagement dated 3 December 2010.

The purpose of this review was to examine the CAA elements of the current airspace change process at stages 1 and 5, as described in CAP 724/725.

The CAA anticipates an increase in demand for airspace change over the coming years. In addition, CAA staff involved in the ACP may also have to allocate more time to other aspects of CAA business which may impact on CAA staff capacity to handle airspace change proposals.

This review has also considered broader themes impacting upon the airspace change process, such as:

- FAS IP
- EU directives eg. 'single skies'
- Current CAA change initiatives

The objectives of the review were to:

- Determine if the internal process could be tailored to better reflect the varying degree of complexity inherent in airspace change proposals, including issues around the risk of judicial review
- Identify options for improvements (to stages 1 and 5 of the airspace change process as documented in CAP 724/725) in terms of:
 - Reducing time taken (internal cost and value stream)
 - Improving outcomes (quality)
 - Reducing proposer burden (external cost)
- Identify options for tailoring the duration of stage 4 (Consultation and Formal Proposal Submission) of the airspace change process, reflecting the varying degree of complexity of applications, including identification of risks and how risk might be managed.

The review also considered:

- The assessment that is made at the commencement of stage 5 to determine if the submission meets the CAA's requirements as set out in paras 41-45 of the Proposal Submission as set out in stage 4.
- The process that is completed by the CAA to conduct the Case Study and the contents of the Directorate Manual that sets out internal processes A1/3.
- The decision making process by the Director of Airspace Policy in reaching his final assessment on the merits of the proposal.
- The role that the Environmental Research & Consultancy Department play in providing advice and guidance to enable the Director to reach his decision.
- The communication that emanates from the CAA to the proposer and the wider National Air Traffic Management Advisory Committee (NATMAC) community throughout each of the stages of this process.

Approach

Approach

The Terms of Reference limited the scope of the review to focus on internal stakeholders, supplemented by limited contact with key external stakeholders, to represent the proposer community. Wider engagement with the public or general airspace community was not within scope and as such they have not been involved. A full list of stakeholders consulted appears in Appendix C and a listing of documents consulted is shown in Appendix D.

Review criteria

The aim of the approach was to maximise engagement with CAA staff and to foster collaboration around the options for improvement.

A number of criteria were used to conduct the review; these served as the principles that underpinned the options for improvement. These ranged from the Department for Business Innovation and Skills 'Better Regulation' Principles, to key policy documents such as the Transport Act 2000. In addition, lean principles and lean 'good practice' process characteristics were used as the methodological framework for our review.

Key principles and their impacts are shown in the table below: (A full list of review criteria can be found in appendix A)

Source area	Review Criteria	Definition
Better regulation	Proportionality	Application of commensurate responses
	Transparency	Clarity of policy and procedure
	Accountability	Clarity of ownership
	Consistency	Alignment
	Targeted Resources	Strategic and operational priorities reflecting matching of supply to demand
Lean process characteristics	Capability	Ability of process to cope with the breadth and depth of likely demand
	Repeatability	Different caseworkers produce same outcome when working to same process
	Consistency	Process undertaken right first time consistently to stakeholder requirements
Lean principles	Flow	Minimising delays and waits in between the value-adding activity
	Customer Focus (value)	Understanding and managing delivery against proposer expectations
	Pull	Improving connections between activities

The factors impacting on the complexity of changes to airspace as listed at the end of Appendix A were used to frame how aspects of the ACP could be improved.

Knowledge and experience of proposers

- It was assumed that proposers had differing levels of knowledge and experience of undertaking an ACP. To simplify the review, proposer familiarity with CAP725 was framed as follows:
 - High familiarity:
 - > MoD
 - > NATS (NERL)
 - Moderate familiarity:
 - > NATS (NSL)
 - Low familiarity:
 - > General aviation users
 - > Any other applicants

Overview of lean

The application of Lean aims to sustain continuous improvement.

Lean is a way of working which sustains continuous improvement by identifying what is valued in activity and removing all the waste. As a transformation, the culture change generally requires a four phase programme to implement, consisting of: Assess; Design; Construct and Implement.

This review considered the first two phases:

- The Assess phase considered the ‘As Is’ sequence of steps in the process and critically, what actually happens between the steps, with the aim of eliminating waste. This will leave the activities which are value-adding.
- The Design phase considered the ‘To Be’ activity, based on the application of agreed principles which will seek to minimise waste for the value-adding steps, creating a better flow of activity which can be further refined through continuous improvement. This should be evolved, to enable one activity in the process to trigger another without delay or waiting, creating a seamless and responsive ‘pull’, which synchronises the ‘what’ with the ‘when’.

Framework for issues

Following an initial review of the airspace change process it was determined that the key issues and their causes could be divided into the following categories:

- Programme management;
- CAA as a ‘learning organisation’;
- Environmental issues ;
- Risk management; and
- Benefits management.

These categories form the framework within which options for improvement have been selected.

Initial Review

Initial Review

Supporting Documentation

The following documentation was reviewed as part of the initial work to provide an overview of the Airspace Change Process:

Regulatory documentation

Internal documentation underpinning CAP724/725 appears to provide a clear and consistent standard from which to plan activity. It includes ‘responsibilities and actions’ for stage 1 and detailed work schedule templates for stage 5. Significantly more detail is available to support stage 5 than stage 1.

Overall, CAP724/725 appears to provide a clear, relevant and coherent framework around which an ACP can be conducted.

Judicial Review history

Typical triggers for a Judicial Review (JR) are listed in Appendix A. Only one JR has been initiated but was not upheld. This JR challenged the consultation associated with an area of designated outstanding national beauty (Dedham Vale).

Environmental analysis guidance

The DfT environmental analysis guidance was first published in 2002 and has not been revised since. Guidance was drafted when the focus of Government policy was primarily on aircraft noise and departures, whereas consideration is currently being given to updating guidance in light of greater focus on CO₂ emissions (eg. the next review meeting is scheduled for 17 January 2011). Greater clarity will aid both proposer and DAP.

Consultation guidance

The ACP appears compliant with specific Cabinet Office guidance on consultations, specifically the 12 week consultation window for stage 4.

Dept for Business Innovation & Skills (BIS)

Latest 2009 guidance in relation to ‘code of practice on guidance on regulation’ from the Better Regulation Executive (BRE) lists 8 ‘golden rules of good guidance’, examples of which are: Easy to access; based on a good understanding of users; designed with input from users and their representative bodies; organised around the users’ way of working; easy for the intended users to understand; designed to provide users with confidence in how to comply with the law.

The CAA website, specifically the ACP section, could do more to support proposer understanding of the ACP.

Internal CAA documentation

Internal Job Descriptions highlight the primacy of safety, supporting high level regulatory guidance. However, they do not specify how the competing tensions around safety/environment/financial benefits should be balanced at caseworker level.

Performance Management Reviews indicate (in Section B) the expectation of some behaviours supportive of continuous improvement, such as continuous learning and being adaptive to change.

The ‘golden rules of good guidance’ advocate a strong ‘customer focus’

Process Throughput

Since the 2007 revision to the ACP there is evidence of 18 ACPs, where 8 have completed stage 6 (implementation) , 8 have completed stage 7 (post implementation review) and 2 ACPs have been withdrawn by proposers, one at stage 1 the other at stage 4 (TC North).

Information and Knowledge Management

There are clear roles and responsibilities identified for the operation of the process, but the quantity of supporting data available is poor, as outlined below:

- There is no systematic planning or monitoring of resource utilisation; data is weak and there is no formal structured approach to collecting and applying feedback from proposers.
- There are no data identifying resource consumed by the process; this prevents any trend analysis relating to efficiency.
- There are some data confirming dates by which ACP staged milestones have been achieved, however, this data is incomplete.
- The quality of data supporting evaluation of milestone achievement in the process is weak eg. the tracker document with staged milestones is retrospectively populated by caseworkers so has little value as a proactive management tool.
- No proposer feedback on information presented to them during stage 1 is in evidence, nor feedback regarding the overall experience of the process and what lessons might be identified. There is evidence of only one formal 'lessons learned' exercise, conducted recently for TC North to help prepare for impending 'LAMP' activity.
- There is a high level of tacit knowledge applied by the caseworkers undertaking the ACP; however, much of this knowledge is not formally captured for the benefit of all staff involved in the ACP.

Summary

Overall, stages 1 and 5 of the ACP are coherently underpinned by CAP 724/725.

A strong 'customer service' ethos is in evidence from the caseworkers, who give appropriate guidance to proposers; CAA ACP caseworkers clearly value and understand the importance of stage 1 to proposers, proactively building relationships to facilitate improved understanding.

The CAA website contains the main CAP 724/725 process documentation. However, the site's design does not support easy access to different parts of the guidance.

The data supporting both efficiency (resource consumed) and effectiveness (documented proposer feedback) of the process is poor.

As-Is Process Review

As-Is Process Review

The following narrative complements the 'As Is' process maps in appendix E:

Stage 1

DAP is contacted when the proposer has identified the need for change, usually by telephone. This first contact marks the commencement of stage 1. From this point there is a period of dialogue between the proposer and the caseworker, during which the proposer is informed of the change process, principally through CAP 724 and 725, with the caseworker providing guidance to the change proposer.

The period between first contact and the framework briefing has historically taken anywhere from 3 weeks to 203 weeks, although one exceptional case remained at stage 1 for 541 weeks. With this exceptional case omitted, there is a median of 15 weeks (sample size of 13 ACPs), based on the limited evidence available in the tracker document. Throughout this period, the proposer will be prepared for the framework briefing, and the caseworker may have some preliminary discussions with Environmental Research & Consultancy Dept (ERCD) and Airspace Policy Coordination & Consultation (APCC), who may also attend the framework briefing.

Once the framework briefing has been held, the proposer may decide to hold some preliminary consultations, and then will inform DAP of its decision on whether to proceed or not.

Confirmation to the proposer is then sent in the form of a letter.

Link to stage 2: typically, there can be an extended period of time between the framework briefing (stage 1) and the start of the preparation for consultation (stage 3). Based on the data in the tracker, the median duration is 33 weeks (sample size of 7 ACPs).

Stage 5

The quality of the framework briefing, and the understanding of the change sponsor has a significant bearing on the successful progression through the consultation (stage 4), and the quality of the proposal which arrives in stage 5.

Stage 5 can be divided into four phases. The first phase is the period prior to the '16 week' time period formally starting, when the caseworker receives the proposal, and has a one week period to check it for completeness. Annex E of the proposal, the environmental assessment, is usually though not always passed to ERCD, and Annex D of the proposal is passed to APCC for a check of completeness.

The second phase is the pre-case study assessment, during which the application is checked for content. This is mandated to be up to five weeks in duration. Based on the limited evidence in the tracker, the typical duration is between 3 and 5 weeks.

The third phase is the compilation of the case study report, and is mandated to last up to seven weeks. Evidence is too limited to determine the typical duration of this phase.

The fourth phase is the CAA sign off process, and results in the decision letter being sent to the change sponsor. This phase is expected to last up to four weeks, though evidence suggests significant variance in the length of this section, which is recorded as having ranged between one and seven weeks. This represents the first point in the process where ADAP1 is formally involved, which means the formal control is close to the end of the stage.

It is important to note that the framework briefing (stage 1), appears to be serving its purpose of informing proposers of the significant effort required to bring a proposal to stage 5. In seven of the eleven recorded cases of ACPs being dropped following the framework briefing, the application never progressed beyond stage 1.

Average timings for stage 5 based on the sample of 15 ACPs was 11.6 wks. (This included a single 'Fast Track' ACP of 6 wks.) The range is 4 wks to 25 wks.

The average time taken when excluding 'unforeseen circumstances' outside the direct control of the team is 8.8 weeks (based on sample of 12 ACPs). This excludes 3 ACPs which exceeded the 16 week window for reasons beyond the direct control of DAP [delays were caused by: the Secretary of State intervention (TCSW); Salisbury Plain had official letter delayed beyond 16 wks due to lack of knowledge of process - but change sponsor was verbally informed and P600 was put on temporary hold due to Irish regulations].

Data summarising the 'As Is' ACPs can be found in Appendix B.

Learning from experience throughout the process could significantly improve the proposer experience at Stage 1 if codified and presented appropriately.

Linkage to Other Stages

Stages 2 and 3

Discussion at the mapping sessions confirmed that applying 'lessons identified' would be helpful in providing supplemental guidance around issues proposers may find helpful: eg. identification of stakeholders; content / format of applications (eg Clacton ACP); time taken on analysis (usually underestimated by proposers). There are therefore opportunities to improve the detail provided to sponsors.

Once an application develops during consultation, the safety / efficiency case may evolve. The caseworker / change sponsor has the opportunity to stay sighted on these safety / efficiency issues as consultation develops, as has the Safety Regulation Group (SRG).

Issues and Causes

Issues and Causes

Collection and Definition

Issues have been collated into five broad themes and these are referenced against the proposed options for improvement (eg. P1/L1 etc) which are listed in the Conclusion section of the report.

Issues and Root Causes

1. Programme management

The current process for managing scheduling and coordination of resourcing for ACPs is poor.

There is limited visibility of the demand ‘pipeline’ from NATS (NERL and NSL) which could be improved and evolved (ref P1/P8/P10). A potential significantly increased workload from NATS combined with unpredictable impending workload from European ‘single sky’ legislation and commitments restricting existing resource suggest that process capacity is a critical future consideration.

The ‘Tracker’ spreadsheet does not coordinate resources around priorities and in its current form is reactive, ad hoc and not routinely completed by all caseworkers (ref . P2/P9) There is no proactive monitoring of internal service levels between the key process participants of caseworkers, ERCD and APCC and DAP management, but overall time could be better coordinated/expedited and consequently improved through the use of visual performance management techniques within the tracker (ref.P3/P4/P5/P7).

Actual time (days consumed on the ACP activity) is not captured, so this is unknown for stage 1 (ref P6); milestone dates achieved for stage 5 are captured on the tracker however, no assumptions can be made around time consumed by overall ACP activity.

The Environmental Research & Consultancy Dept representative on the ACP activity is the only exception to the above as this area is operated as an internal cost centre.

2. CAA as a ‘learning organisation’

The process is undertaken by skilled caseworkers working on standard documentation with a reliance on tacit knowledge. Explicit references prompting the capture of ‘lessons identified’ exist within the process templates, but evidence suggests only one formal example (TC North) has been produced in recent years.

This has a potential impact on the quality of the change sponsor’s experience, particularly during stage 1, as there is limited guidance available for potential change sponsors prior to contact with the CAA, and no FAQs or other forms of supplemental guidance which may aid the proposer (Ref L1/L2/E3/L3/R1). This could also impact on the quality of submissions received in stage 5 in terms of completeness, content and suitability (ref L4).

References to continuous improvement appear in Job Descriptions and Performance Management Reviews (Section B highlights ‘ability to change’ and ‘continuous learning’) but there is little evidence of tools and techniques being applied to drive and sustain continuous improvement (L11).

Potential increases in demand on ACP capacity require improvements in management of DAP resource, with earlier visibility and monitoring of pipelines

Skilled caseworkers have high levels of tacit knowledge which could benefit the process and proposers with more structured sharing

Typically, continuous improvement is usually achieved by a balance of (i) a small number of events which drive significant step change (ref L9/L10) which will engage a small number of people and (ii) everyone focused on ongoing small tweaks to the process which build improvements over time, usually enabled by a visual approach which enhances collaboration (ref L7).

The need to provide different types of proposer with different levels of guidance – and to obtain feedback in order to improve it (ref L5/L12) presents a strong theoretical opportunity for a website to manage initial expectations, but the immaturity of the ACP section on the CAA website means it is difficult to navigate and unrewarding to spend time on. This means that initial contacts are driven by telephone/email/face-to-face contact.

There is significant value in providing appropriate guidance at the outset of the process (ref L1/L2/L3/L14) but this issue presents an opportunity to re-balance the channels through which proposers could be engaged (eg via a website - (L8/L13)).

There are opportunities to improve coordination, control and risk management around ECRD inputs

3. Environmental issues

The general absence of scheduling of resource (ref E2) and the sole single point of contact within the Environmental Research and Consultancy Dept creates a concern in that there is not always consistent, timely consultation between caseworkers and ERCD around stages 1 and 5 (ref E6), and no formal sign off to indicate that involvement of the ERCD representative is not required, when the caseworker believes that no environmental issues exist to be addressed (ref E4/5).

The lack of ERCD visibility of the ACP pipeline is also an issue which could affect responsiveness.

From a NATS perspective, the ambiguity of language within environmental guidance increases proposer burden (ref E1).

4. Risk management

While recognising the existence of a risk log, the absence of an integrated approach to risk management which sits alongside coordination of resourcing is an issue, (ref R2/R3/R5) given the potential increased pressure on capacity of the process during 2011-12.

It is further recognised that while ongoing contact is available from ADAP1 to provide guidance and advice to the wider team on an 'as and when required' basis, formal review and control is currently formalised around a milestone close to the end of stage 5 (ref L6).

Given the potential risk of increased pressure on process capacity, the issue of secondees requires review (ref R4), alongside protection of highly skilled but scarce resource (ref R6).

5. Benefits management

There is explicit reference to the primary importance of safety in both regulatory guidance and in individual Job Descriptions and Performance Management Reviews. However, it is unclear how safety benefits might be balanced against competing requirements (ref S1) and how change sponsors could be sighted sufficiently early on the need for investing in appropriate modelling of local safety risk (S2).

To-Be Process Development

To-Be Process Development

The ‘To Be’ future state addresses the root causes of the reported issues to offer options for improvement. Issues and principles used to test options were discussed and agreed with ADAP1 and CAS Team Leader.

Based on the principles applied to evaluation, Future State ACP is intended to be :

- Faster (more customer focused internally)
- Less of a burden (3rd party)
- Potentially reduce 3rd party costs
- Easier (clearer and less ambiguous)
- Facilitate improved risk management
- Maintain adherence with regulatory principles

The following narrative complements the ‘To Be’ process maps in Appendix F:

Issues have been collected into five broad themes and these are referenced against the proposed options for improvement which are listed in the Conclusion (eg. P1/L1 etc) .

Stage 1

- ACP Work Schedule (GANTT Chart) used to drive the 16 wk timings (picked up on the Tracker milestones) is a valuable document, but could be used more flexibly to provide ‘targeting’ for coordinating and driving internal resource (ref P2).
- The updated tracker document will have the purpose of coordinating resourcing and managing risk (ref P3P5/P11/L7/E2).
- Create supplemental guidance and codify for ease of access to proposers, based on ongoing improvement driven by feedback, including addressing ambiguities in Environmental guidance (ref E1)
- Website support increasingly available and relevant, complementing direct support to proposers from CAS caseworkers (ref L8/L13)
- Record timing of first contact to ‘register’ on tracker and trigger initial resource planning and visibility within risk management (ref P6)
- Any ERCD anticipated exceptions to engagement with ACPs to be raised by ERCD and signed off by ADAP1 ; consider co-location to improve communication (ref E5/E6)
- Improved sight of pipeline with NATS (NERL and potentially NSL) (ref P1/P9/L12)
- Following sponsor confirmation, clear management of expectations regarding stage 5 milestone (and what good looks like to meet this requirement) and timings, taking into account full resourcing issues when confirming timing (ref P10/L4/E3/R1)
- Monthly/quarterly (timing as appropriate) routine to review risk and resourcing (ref P4/P7/E4/R2/R3/R5/S1)
- Feed ‘lessons identified’ into good practice for internal and external-facing purposes (ref P9/P11/L1/L2/L3/L5/L7/L9/L10/L12/L14)
- Align activities and behaviours between high level plans and individual objectives (ref P8/L11)

Stage 5

- Manage proposer expectations around key review milestone (ref L4)
- Within the first week of receipt of consultation documents – consistent approach to sending ERCD and APCC unless ADAP1 has previously agreed that no environmental or consultation assessment is required (ref E2/E6)
- Routine review (timing as appropriate) to visually record and review achievement and manage risk (ref P2/P3/P4/P5/P7/P9/P10 /P11/L7/E4/R2/R3/R5/R6/S1)
- Within initial 5 wk window, all internal SLAs are monitored on tracker and expedited eg ERCD & APCC and DAP management (P3)
- Case conference with CAS Team Leader and ADAP 1 signing- off with DAP on agreed SLA (tracker to be visible to DAP with resourcing requirement scheduled and confirmed) (ref L6/L7)
- Standard ‘Lessons Identified’ format driving behaviours to build good practice for internal and external-facing purposes (ref L1/L2/L3/L5/L12)
- Improve visibility of Stage 5 milestone in CAP725 guidance in paragraph 43 currently stating: “Should the change be approved”) (ref L4)
- Continuous improvement activity progressing (step change facilitation and ongoing structured problem solving applied to concerns – scheduling and beyond) (ref L9/L10/L11/L14)
- Align activities and behaviours between high level plans and individual objectives (ref P8/L9/L10/L11)

Conclusion

Conclusion

Key Findings

The ACP internal process within stages 1 and 5 could be modified to:

- improve its capability, consistency and reliability to improve its durability to increased stress;
- reduce burden on proposers by being clearer about its evaluation criteria, easier to access and understand and improving the management of proposer expectations; and
- improve efficiency through better coordination and be better aligned with CAA strategy and wider continuous improvement initiatives.

The key strengths identified relating to the ACP were:

- DAP staff capability and flexibility;
- ACP templates and annexes underpinning the high level narrative and process flow diagrams of CAP 724/725 work as an effective ‘standard, which will provide a solid foundation for any continuous improvement’;
- Strong and improving relationship with NATS across all levels; this stems from recent work around FAS IP – and is recognised by NATS;
- Continuity of core team in Controlled Airspace (CAS) of DAP undertaking ACP; and
- Identified willingness of core CAS team to provide advice to proposers, especially within stage 1.

The key weaknesses of the extant ACP were:

- Reactive schedule management, ad hoc coordination of resourcing and a lack of visual performance management;
- Limited visibility of the NATS pipeline;
- Environmental guidance from DfT has not been revised since 2002 and requires interpretation; this generates unnecessary proposer burden;
- Environmental Research & Consulting Dept (ERCD) is resource constrained in its support to the ACP process;
- Caseworkers select tasks from stage 5 work schedule template (operational standard) based on tacit knowledge, however this is not formally agreed with DAP;
- There is no expediting stimulus to drive ACPs through the process
- There are little or no data to evidence resource consumed within the process;
- Capture and management of lessons identified is very limited; and
- The CAA website provides only limited guidance to caseworkers and proposers

Potential Improvements and Benefits

The capacity of the process has yet to be seriously tested, but given the likely increased workload driven by impending but unpredictable European ‘single skies’ legislation and the potential of significantly increased workload driven by NATS, all of which have the potential to place extra pressure on process capacity, it is imperative that the options for improvement listed below are considered:

Options for improvement are themed to cover the following five areas:

- Programme Management
- DAP as a learning organisation
- Environmental issues
- Risk management
- Benefits management

Programme Management

The suggested priority is shown in the right hand column of the table below. Priority 1 refers to short term, defined as possible within 3 calendar months given resource availability, linking with end of year performance management.

Priority 2 refers to medium term, defined as taking in excess of 3 calendar months to deliver

Ref	Option	Issue	Benefit (Principle)	Priority
<i>P1</i>	Establish resource scheduling to enable clear overview of resource requirement and issues relating to NATS current pipeline plan – build understanding at next level of detail for resourcing priorities against NATS’ forecast pipeline	Lack of visibility of future pipeline for airspace change	Lean Process- Capable	1
<i>P2</i>	Evolve Tracker document and ACP GANTT chart to (i) schedule and coordinate resource and (ii) manage risk and target delivery of controllable activity in stage 5 in 10 wks	Lack of accurate scheduling of the process, especially stage 5 to coordinate wider team	Lean Process – capable Better Regulation-consistency	1
<i>P3</i>	Introduce internal SLAs to coordinate workflow between caseworkers, ERCD / APCC (eg. < 5wks at start of stage 5); DAP Management: DAP 3 dys (TBC) following ADAP1 and CAS Team Leader	No Service Level Agreements between caseworkers, DAP management, ERCD and APCC	Lean Process capable Better Regulation-consistency & accountability	1

Ref	Option	Issue	Benefit (Principle)	Priority
<i>P4</i>	Proactively review at monthly/quarterly meeting: Cross DAP/(CAA) resourcing issues Risk Management for resourcing of plans 'Learning from experience' outputs eg. Lessons learned	No active tracking of proposals in pipeline. Tracking spreadsheet often filled out retrospectively	Lean Process – capable Better Regulation - accountability	1
<i>P5</i>	Use RAG evaluation to expedite progress of activity via Tracker, with metrics to support business performance objectives	No formal expediting in place for ACPs	Lean Principles – Flow	1
<i>P6</i>	Record first contact between caseworker and proposer; track and actively manage time invested in support	Initial point of contact is not sufficiently formalised	Lean Principles – Flow Better Regulation - accountability	1
<i>P7</i>	Proactive ADAP1 review to ensure systematic approach to performance management in place – frequency as appropriate	No systematic approach in place to manage performance	Lean Principles – Flow Better Regulation - accountability	1
<i>P8</i>	Personal contribution to capturing tacit knowledge to improve ACP process to be formalised through cycle of individual objectives, from Q2 2011	Opportunity to deploy business priorities into individual objectives	Better Regulation-targeted resources & accountability	1
<i>P9</i>	More structured and regular sharing of demand data with NATS and increased feedback on 'voice of customer' issues to support wider adoption of visual performance management with DAP	Lack of measurement of resource requirements, availability and activity planning	Lean Process - capable	2

Ref	Option	Issue	Benefit (Principle)	Priority
<i>P10</i>	Routinely target and achieve stage 5 activity within 10 wks (with stretch target of 6-8 wks) via Gantt chart & tracker to allow for ‘unforeseen circumstances’ ; evolve risk management to help identify specific concerns and root causes	No formal expediting of ACPs	Lean Process- Capable	2
<i>P11</i>	Develop NATS relationship to (i) maximise visibility of likely demand for longer term resource planning – NERL [and NSL in future?] and (ii) provide valued feedback across key areas of performance measurement	Limited forward visibility on likely resourcing requirements and no or infrequent formal feedback captured from NATS on key performance areas	Lean Principle – Customer focus Lean Process – reliable	2

DAP as a learning organisation

Ref	Option	Issue	Benefit (Principle)	Priority
<i>L1</i>	Apply ‘learning from experience’ to update critical documents which underpin CAP724/725 to reflect ongoing good practice and make available to proposers in appropriate format: Marking sheets/Annexes Annex E (Environmental checklist) etc	No formal mechanism to cascade experiences to proposer community eg FAQs etc	Lean Process – repeatable Lean Principles – customer focus Better Regulation-consistency	1
<i>L2</i>	Improve clarity and consistency in stage 1 around ‘what good looks like’ for proposers relating to criteria for consultation submission in stage 5	Variations exist in guidance provided to proposers in stage 1 regarding assessment criteria	Better Regulation – transparency and consistency	1

Ref	Option	Issue	Benefit (Principle)	Priority
<i>L3</i>	ADAP1 and other leaders encouraging sharing of good practice and regular evaluation including proposer feedback on value derived	No formal mechanism for management to ensure experiences are cascaded to proposer community	Lean Process – repeatable Better Regulation - accountability	1
<i>L4</i>	Communicate expectations of critical ACP milestone at start of stage 5 consistently, from initial proposer contact – and revise CAP 725 wording (stage 4 para 43)	Require clearer guidance to manage expectations around key stage 5 milestone – currently low profile within CAP 725 guidance	Lean Process – repeatable Better Regulation - consistency	1
<i>L5</i>	Sample limited number of ‘one off’ proposers to obtain feedback to underpin performance improvement	No formal feedback from proposers on experience beyond one ‘lessons identified’	Lean Process- reliable Lean Principles – Customer focus	2
<i>L6</i>	Adopt ‘case conference’ sign-off for stage 5 to share knowledge and improve flow, utilizing preparation for visible deadline to enhance existing benefits from ‘independent challenge’ arising from serial sign off	Sequential activity and no regular formal engagement of decision makers together around ACP	Lean Process – reliable and Lean Principle – flow Better Regulation - accountability	1
<i>L7</i>	Trial and bed in structured problem solving approach (eg. ‘Concern – Cause – Countermeasure’) in routine use - aligned with any evolving CAA-wide standard? [ensure critical focus on root cause]	No current visual approach to structured problem solving to support continuous improvement	Lean Principles – Flow Better Regulation- consistency	1

Ref	Option	Issue	Benefit (Principle)	Priority
<i>L8</i>	Refresh ACP element of CAA website to improve information presented and promote understanding	Current website has much detailed information, but not easy for proposers to break down	Lean Principles – Customer Focus (value)	1
<i>L9</i>	Nominate individual within CAS to facilitate specific step change activity to build on PwC intervention eg. Activity within FAS IP or links with NATS [visio skills?]	No current capability to drive step change as part of continuous improvement culture	Lean Principles – Pull Better Regulation - accountability	1
<i>L10</i>	Use mapping to evidence the evolving ‘pull’ across ACP, driven via facilitated team sessions. Consider development of use in NATS relationship	No current capability to drive step change as part of continuous improvement culture	Lean Principles – Pull Better Regulation- transparency/ consistency	2
<i>L11</i>	Bed in continuous improvement behaviours to individual objectives eg. evolving ‘adapting to change’ and ‘continuously learning’ areas within section B of Performance Management Report	Current Performance Management Reports have facility to cater for continuous improvement behaviours in Section B but limited sample suggests not in use currently	Lean Transformation – Policy Deployment Better Regulation- consistency	1
<i>L12</i>	Increased sharing of structured good practice with NATS eg. regularise formal CAS contact and identify key areas where feedback may assist performance improvement and develop confidence in modelling capability	No formal discussions around ‘lessons identified with NATS until recent TC North ACP	Lean Process – repeatable Lean principle – Customer focus	2

Ref	Option	Issue	Benefit (Principle)	Priority
<i>L13</i>	Maximise web-based opportunities to support proposers with relevant detail and support, complementing other channels	Build on initial refresh of website to make guidance easier to break into bite sized chunks for proposer – improve based on explicit feedback	Lean Principles – Customer Focus (value)	2
<i>L14</i>	Aspire to create no further ‘step change’ updates for key standards – deliver instead via sustained (ongoing) continuous improvement	Periodic updates create spike in resource usage and make process unresponsive	Lean Process – repeatable Lean Principle – Customer focus	2

Environmental issues

Ref	Option	Issue	Benefit (Principle)	Priority
E1	Address ambiguities in environmental guidance eg. via influencing or driving acceleration of review of guidance with DfT	DfT guidance not revised since 2002	Better Regulation - Transparency	1
E2	Improved resource coordination via updated Tracker ; ERCD representative to be circulated on documentation and engaged in meetings	Stage 5 timelines of ERCD review not formalised or managed in openly visible tracker and no pipeline of work visible	Lean Principles – Flow Lean Process - capable	1
E3	Ensure clear criteria for assessment (environmental and other) established by end of stage 1	Variations in guidance provided to proposers at stage 1	Better Regulation - transparency	1
E4	Formalise earlier effective control in process for ADAP1 in stage 1, especially around environmental issues	Formal controls and risk management currently feature at the end of stage 5	Better Regulation – targeted resources, consistency & accountability	1
E5	ERCD to notify caseworker in stage 1 if input not required. ADAP 1 to give consent within stage 1 after framework briefing	Variable attendance from ERCD at framework briefing	Better Regulation – transparency & accountability	1
E6	Co-locate ERCD member within CAS or as a minimum ensure access to appropriate drives and sighted on relevant ACP planning / coordination meetings or information	Communication between ERCD representative and caseworkers often difficult as located two floors away and limited access to shared drives etc	Lean Principles – Flow Better Regulation - consistency	1

Risk management

Ref	Option	Issue	Benefit (Principle)	Priority
R1	Key milestone activity following confirmation from sponsor in stage 1 is to ensure clear understanding of ‘what good looks like’ via Annexes and ‘marking sheets’ etc – and clarifying expectations around timings for receipt of specifics in stage 5 and forward timings	Caseworker contact through stages 2 and 3 suggests CAA continue to check extent of sponsor understanding of requirements for stage 5 beyond stage 1	Lean Principles – Customer Focus (value) and Better Regulation-consistency	1
R2	Formalise QA control as part of regular, structured exception meetings (ADAP1/ CAS Leader)	Formal QA control in Stage 5 is at end of stage in final sign off – only informal contact prior to this	Better Regulation – targeted resources & accountability	1
R3	Regularised risk management review at appropriate frequency eg. Quarterly. Compliance with documented standard process is a good indicator that risk is being managed effectively	No explicit risk management assessing total system risk or protocol to manage prioritisation of ACPs should resource become constrained	Better Regulation – targeted resources and consistency	1
R4	Maximise number of NATS secondees based on wider resourcing review and given v. positive feedback on benefits to date. Specify level of experience and competency eg. Consider environmental credentials etc.	Two NATS secondees y are allocated to DAP under condition 15 of licence, with no formally agreed levels of skills and experience	Better Regulation – targeted resources	1
R5	Consider post-approval changes as part of regular, structured exception meetings (ADAP1/ CAS Leader)	Lack of clarity on degree of changes possible post DAP approval	Better Regulation - Transparency	1

Ref	Option	Issue	Benefit (Principle)	Priority
R6	Consider options beyond succession planning: coaching; joint reviews; accelerated training etc	Business Continuity risk for: ADAP1 (Phil Roberts) ERCD (Andy Green)	Lean Process - Capable	2

Benefits Management

Ref	Option	Issue	Benefit (Principle)	Priority
S1	Identify how 'balance of safety' can be translated from strategic vision into operational prioritisation without excessive proposer burden – clarify policy and what CAA policy aims to achieve. Set out explicitly how to reconcile or resolve tensions between safety / environmental / financial considerations? Work more closely with SRG to enable ACPs to achieve safety benefit beyond sum of individual benefits – improving total safety of system with net benefit to UK plc	CAA capability to determine safety benefits is weak ; no prioritisation of individual ACPs based on safety benefits	Lean transformation – Policy Deployment Lean Process – repeatable Better Regulation – transparency & proportionality	2
S2	Safety assessment criteria should include improvement of safety / risks identified in locality to ACP Simulation and safety case work should be done as soon as early as possible, potentially during stage 1; SRG to be routinely engaged at stage 1, and sighted on risk relevant management	Understanding or modelling of local safety issues relevant to effective implementation of an airspace change is often conducted late in the process, rather than pre-stage 2	Better Regulation – Proportionality Lean Process - capable	2

Appendices

Appendix A – Full List of criteria

The following outlines the principle factors used to evaluate and improve the ACP, supplementing those criteria identified under ‘approach’ in the main report

Source area	Key Principle	Impact – implications for future state
Transport Act 2000	To further the interests of operators and owners of aircraft, owners and managers of aerodromes, persons travelling in aircraft and persons with rights in property carried in them;	Consideration that there are equal rights to airspace, and airlines/airports cannot be allowed to dictate usage
	To promote efficiency and economy on the part of licence holders;	Make the process as predictable and affordable as possible
	To secure that licence holders will not find it unduly difficult to finance activities authorised by their licences;	
	To take account of any international obligations of the United Kingdom notified to the CAA by the Secretary of State (whatever the time or purpose of the notification);	Make the process sufficiently flexible and ensure tie in with the Secretary of State to allow for intervention where necessary.
	To take account of any guidance on environmental objectives given to the CAA by the Secretary of State after the coming into force of this section.	Ensure that Environmental issues are adequately considered on all proposals.
	When to consult	
	Formal consultation should take place at a stage when there is scope to influence the policy outcome.	
	Duration of consultation exercises	
	Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.	
	Clarity of scope and impact	Are the CAA providing the sponsors with all of the necessary material with which to undertake a consultation in the manner which the CAA would expect? I.E document frameworks.
Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.		
Accessibility of consultation exercises		
Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.		
The burden of consultation	How does the CAA reduce the burden?	
Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees’ buy-in to the process is to be obtained.		
Responsiveness of consultation exercises	Does the CAA guidance suggest how to go about consultation and what good practice is?	
Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.		
Capacity to consult	Do they need stage gate reviews to reflect back?	
Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.		

Source area	Key Principle	Impact – implications for future state
CAP 725	<p>Secure the most efficient use of airspace;</p> <p>Satisfy the requirements of all airspace users;</p> <p>Take account of the interests of any person in relation to the use of any particular airspace or the use of airspace generally;</p> <p>Whilst taking account of the Civil Aviation Authority (Air Navigation) Directions 2001 and the Civil Aviation Authority (Air Navigation) (Variation) Direction 2004: The Government's policy on sustainable development; The Government's policy on reducing, controlling and mitigating the impacts of civil aviation on the environment; and</p> <p>The need to reduce, control and mitigate as far as possible the environmental impacts of civil aircraft operations; in particular the annoyance and disturbance caused to the general public arising from aircraft noise and vibration, and emissions from aircraft engines.</p>	

Factors impacting on complexity of changes to airspace

- Altitude
- Proximity to other areas of air activity
- Proximity to Land, conurbations, protected sites
- Diversity of use and timing of utilisation
- Volume of air traffic
- Environmental impact
- Benefits (safety and others)
- International stakeholders

Factors distinguishing a proposal which may be considered 'least-complex':

- En-route
- Upper Airway, above flight levels 195 and 245
- Over sea (in excess of 8 miles from UK shores)
- No International connections
- MoD and NATMAC only external stakeholders for consultation

Triggers for a Judicial Review were considered and discussed with CAA legal representative David Stoplar, and were described as follows:

- 'Contravening or exceeding our statutory powers or pursuing an objective outside our powers;'
- 'Acting in a way which is procedurally unfair, contrary to a general duty to act fairly - e.g. in relation to consultation, adequate reasoning of decisions, lack of bias or conflict of interest, or thwarting a legitimate expectation.'
- 'Acting in a way which is unreasonable or irrational (as traditionally termed), or disproportionate (in more modern thinking, particularly with regard to EC law and human rights legislation).'

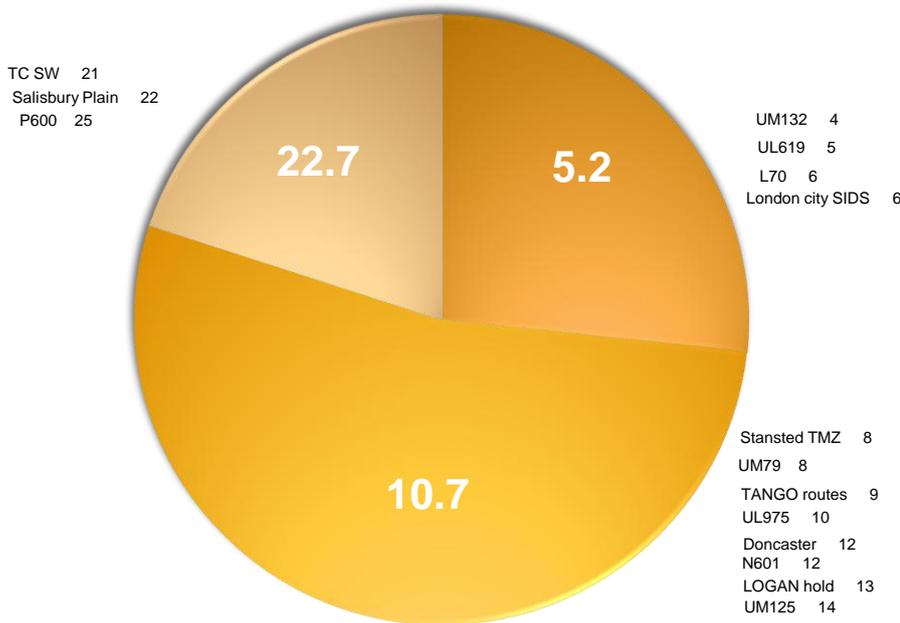
Appendix B – ACP Overview Data

Stage 5 durations since June 2007

The dark right section indicates those proposals which were completed in 6 weeks or less, of which the average length was 5.2 weeks. (note: this includes a ‘fast track’ proposal – London City SIDS).

The lighter red section indicates those proposals which were completed in between 7 and 16 weeks, of which the average was 10.7 weeks.

The purple section indicates those applications which took in excess of 16 weeks, of which the average was 22.7



weeks.

Note –

The average length of all proposals is: **11.6 weeks**

The average length of all proposals falling within 16 weeks is: **8.8 weeks**

ACP	Stage 4	STAGE 5 pre -case study assesments		Case study report completion	DAP informs change sponsor	DAP decision letter	No of Weeks
	Submit formal proposal	Start date	End date				
UL 619	14 December 2009	15 December 2009	24 December 2009	04 January 2010	04 January 2010	15 January 2010	5
London City Airport SIDs	09 January 2009	13 January 2009	04 February 2009	05 February 2009	20 February 2009	20 February 2009	6
L70	05 September 2007	12 September 2007		09 October 2007	17 October 2007	17 October 2007	6
UM132	28 January 2009	28 January 2009	16 February 2009	16 February 2009	25 February 2009	26 February 2009	4
UL975	27 June 2007	28 July 2007		21 August 2007	03 September 2007	04 September 2007	10
UM125	27 June 2007	28 June 2007		21 August 2007	27 September 2007	01 October 2007	14
LOGAN hold	17 September 2007	17 September 2007		06 December 2007	12 December 2007	19 December 2007	13
TANGO routes	27 May 2010	27 May 2010	20 July 2010	20 July 2010	26 July 2010	29 July 2010	9
UM79	30 March 2010	10 March 2010		04 May 2010	14 May 2010	24 May 2010	8
Robin Hood/Doncaster/Sheffield	12 March 2008	15 October 2007	09 November 2007	19 May 2008	18 June 2008	02 June 2008	12
Stansted TMZ	29 May 2009	01 June 2009	25 June 2009		22 July 2009	22 July 2009	8
N601	26 August 2008	28 August 2008	02 October 2008	21 August 2008	17 November 2008	17 November 2008	12
P600	01 September 2008	02 September 2008	07 October 2008	15 January 2009	20 February 2009	20 February 2009	25
Salisbury Plain	23 November 2009	30 November 2009	18 January 2010	12 March 2010	24 March 2010	26 April 2010	22
TC South West	03 September 2007	08 October 2007	18 January 2008	18 January 2008	29 January 2008	29 January 2008	21

Appendix C – Stakeholders consulted

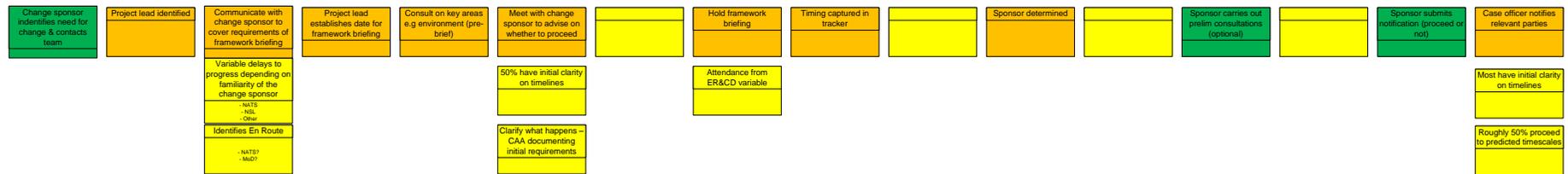
Name	Position	Nature of contact
Mark Swan	Director of Airspace Policy	Overall project guidance, stakeholder facilitation and review of sign-off process
Phil Roberts	Assistant Director of Airspace Policy 1	Overall project guidance, periodic review, regulatory and statutory policy and review of sign-off process
Stuart Lindsey	Head Controlled Airspace Section (DAP)	Review of end to end ACP process
Colin Cordery	Airspace Regulator, CAS	Review of end to end ACP process
David Drake	Airspace Regulator, CAS	Review of end to end ACP process
David Raine	Airspace Regulator, CAS	Review of end to end ACP process
Dean Miller	Airspace Regulator, CAS	Review of end to end ACP process
Mac MacKay	Airspace Regulator, CAS	Review of end to end ACP process
Jim Walker	Business Co-ordinator, Business Management	Review of end to end ACP process including stage 4 and the consultation review
Gerry Corbett	ORA 4	Review of end to end ACP process
Andrew Green	Project Manager - Environmental Research & Consultancy Dept (DAP)	Review of end to end ACP process with particular reference to the Environmental assessment and its review
Phillip Tring	Principal En-Route Inspector (SRG)	Overview of safety implications of the ACP and their management
Alex Craker	Head of CAA Change Programme	Overview of Change Management initiatives within the CAA
David Stoplar	CAA Senior Legal Advisor	Overview of the legal implications of the ACP and their management, criteria for Judicial review and their mitigation
Gretchen Burrett	Director, Safety	Overview of safety implications of the ACP and their management
Richard Taylor	CAA Safety lead	Overview of safety implications of the ACP and their management
David Harvey	Head of Airspace & ATM Tools Development (NATS)	Representing proposer community
Paul Harvey	MoD representative	Representing proposer community

Appendix D – **Key documents consulted**

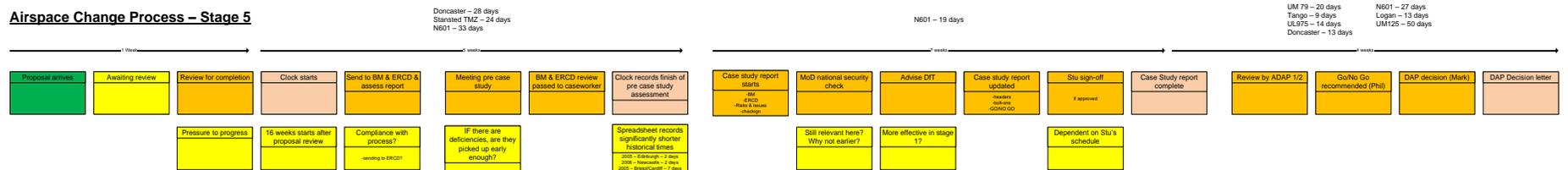
- Transport Act 2000
- Air Navigation Directions.
- Guidance to the Civil Aviation Authority on the Environmental Objectives Relating to the Exercise of its Air Navigation Functions-
- Code of Practice on Consultation
- Better Regulation Executive ‘code of practice on guidance on regulation’
- Policy for application of the Airspace Change Process as set out in CAPs724/725
- CAS ACP Project Tracker
- DAP ACP work schedule

Appendix E – 'As-Is' process maps

Airspace Change Process – Stage 1

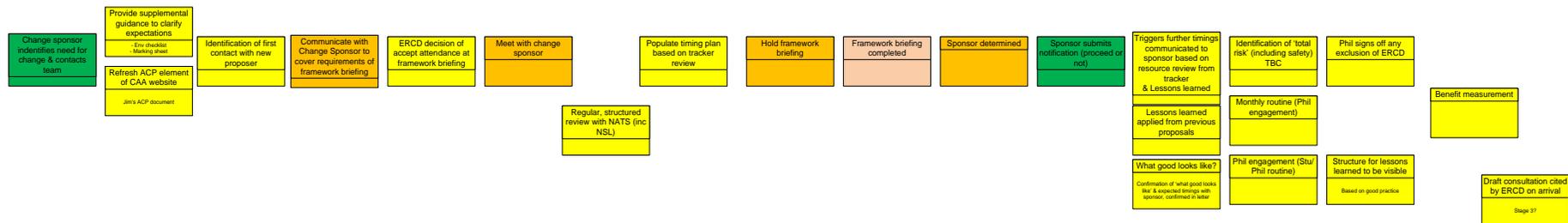


Airspace Change Process – Stage 5

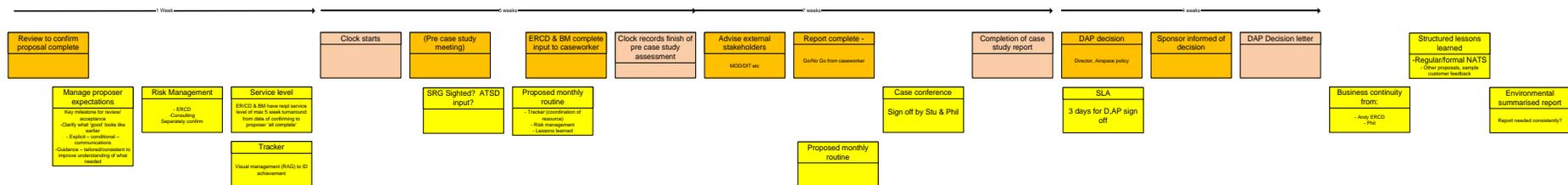


Appendix F – 'To-Be' process maps

Airspace Change Process – Stage 1

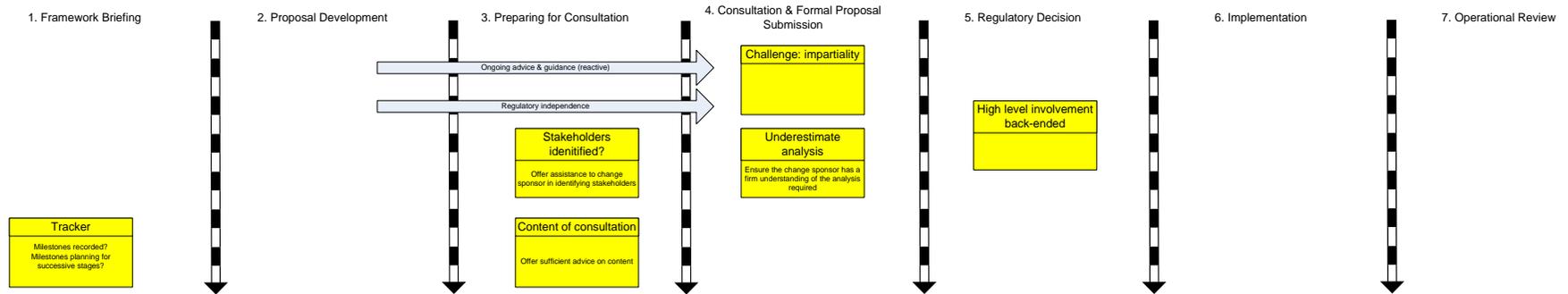


Airspace Change Process – Stage 5



Appendix G – Stages 1-7 – Issues map

Airspace Change Process – Stages 1-7



This document has been prepared for the intended recipients only. To the extent permitted by law, PricewaterhouseCoopers LLP does not accept or assume any liability, responsibility or duty of care for any use of or reliance on this document by anyone, other than (i) the intended recipient to the extent agreed in the relevant contract for the matter to which this document relates (if any), or (ii) as expressly agreed by PricewaterhouseCoopers LLP at its sole discretion in writing in advance.

© 2011 PricewaterhouseCoopers LLP. All rights reserved. 'PricewaterhouseCoopers' refers to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom) or, as the context requires, other member firms of PricewaterhouseCoopers International Limited, each of which is a separate and independent legal entity.

Design:pic 1100039