

Single European Sky - Market Conditions for Terminal Air Navigation Services in the UK

Advice to the DfT under Section 16(1) of the Civil Aviation Act 1982

CAP 1004



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Executive Summary

Purpose of this document

1. On 21 March 2012 the Department for Transport (DfT) requested the CAA provide advice to the Secretary of State on the existence of market conditions for terminal air navigation services (TANS) in the UK. Specifically, DfT requested the CAA to undertake an assessment against the criteria on market conditions set out in Annex I of Commission Regulation (EC) No 1794/2006 (the Regulation).
2. This document sets out the CAA's advice to DfT.
3. During the CAA's evidence collection phase the European Commission (the Commission) began a review of the Regulation in preparation for the second reference period (RP2) of the Single European Sky (SES) performance scheme, which will run from 2015 to 2019. The Commission has proposed that the scope of the Regulation should include those airports with 70,000 Instrument Flight Rules (IFR) air transport movements or more¹. The CAA's advice to DfT has been structured around this proposed threshold. In submitting its advice the CAA has taken into account the Commission's most recent draft of the revised Regulation in evaluating evidence against the market conditions criteria.
4. The CAA considers that there is evidence pointing in different directions in judging market conditions against the criteria set out in Annex 1 of the Regulation. On the one hand, there are no statutory legal barriers - the market is liberalised and airport operators can choose to switch TANS provider. However, the degree of movement in the UK market and actual switching to date has been low.
5. Looking more specifically at the five criteria in the Regulation:
 1. The extent to which service providers can freely offer to provide or withdraw the provision of these services

¹ FR air transport means the sum of take-offs and landings performed under Instrument Flight Rules, calculated as the yearly average over the three years preceding the submission of the performance plan.

- Although the CAA has not identified any statutory barriers to service providers being able to provide or withdraw the provision of TANS in the UK, it has identified three economic barriers that may limit their ability to do so in practice. These economic barriers include a lack of clarity on the relationship between NATS Services Limited (NSL) and NATS En Route Limited (NERL), NATS Deed of a Trust of a Promise (ToaP) and air traffic control officer (ATCO) licensing requirements and career progression. Balanced against these barriers are a number of factors that might be considered to promote the development of market conditions. These factors include: the presence of competition law, the duration of contracts, and the arrangements in place for the transfer of physical and intellectual assets.
2. The extent to which there is a free choice in respect to service provider, including, in the case of airports, the option to self-supply
 - The CAA has found no statutory barriers preventing an airport operator from changing its TANS provider or moving to self-supply. A common feature of many contracts is obligations on the incumbent TANS provider to aid with an orderly transfer to another provider. However, in practice there are currently be a number of barriers inhibiting airport operators from exercising a free choice. These barriers include the airport operator's tolerance of transitional risks of service provision; the transparency of TANS costs; and an airport operator's ability to move to self-supply. The CAA notes that this position could evolve over time. For example, the Commission is proposing changes to the Regulation to promote greater transparency in TANS costs.
 3. The extent to which there is a range of air navigation service providers from which airports can choose
 - A range of alternative providers exist within the UK. However, a lack of widely adopted competitive tendering processes to date may reflect a current lack of confidence from some airport operators in the credibility of some of the alternatives. Again this position could evolve over time. For example, during RP2 most of the airport operators expect to run full competitive tender processes when their current contracts expire.
 4. For terminal air navigation services, the extent to which airports are subject to commercial cost pressures or incentive-based regulation

- Broadly speaking, UK airport operators are either subject to competitive pressure or else economic regulation that sets incentives aimed at cost efficiency.
5. Where the provider of terminal air navigation services or ancillary services also provides en route air navigation services, these activities shall be subjected to separate accounting and reporting.
 - NSL and the NERL are separate legal entities and as such are required by law to file independent accounts.
 6. In drawing this evidence together, the CAA has taken into account all stakeholder views. With the exception of NSL, most stakeholders have indicated that they do not perceive that market conditions currently exist for airports over 70,000 IFR movements per year. These perceptions are influenced by airport operators' current risk tolerance for what is a vital service and one that is often provided in a complex operating environment. It also reflects their current view on the breadth and track record of viable alternative providers. However, the CAA does not consider that these perceptions are, on their own, the reason for the relative lack of movement witnessed in the market. The potential economic barriers identified above may also have a role.
 7. Following consultation with stakeholders on its draft advice, the CAA has not found it necessary to substantively modify its advice to the DfT. The feedback from stakeholders was broadly supportive, except from NATS.
 8. NATS agreed with the CAA's conclusion that there are no statutory barriers to airport operators changing their ANSP. It also said it believed there are a range of credible alternative providers in the market that are able to compete in the UK. maintain that there are no statutory barriers and that there are other providers in the market that are able to compete in the UK.
 9. NATS proposed a range of actions that it, airport operators and the CAA could undertake to further strengthen competition in the UK TANS market. NATS said it could provide measures to address two of the most significant issues raised in the CAA's report – transparency around the NSL/NERL interface and how NATS might manage ToaP in the event a TANS contract was transferred to another party. NATS indicated that it had started work to prepare these measures.

Summary of the CAA's Advice to DfT

10. The CAA considers that the balance of available evidence, including stakeholder opinion, does not currently support the existence of market conditions for those UK airports with more than 70,000 IFR movements. The CAA considers that airports within the study with less than 70,000 IFR movements per year can, on the whole, take more advantage of self-supply as a credible option and therefore demonstrate market conditions. There may, however, be some exceptions to this.
11. Given the uncertainties in the evidence and the forthcoming expiry of most contracts in the next few years, the CAA would recommend that the DfT request the CAA to undertake further assessments of market conditions at individual airports at a later date, if circumstances were to change substantially. This would ensure any decisions on regulation take into account the most up to date and complete information base. It is not inconceivable that at that time the balance of evidence and stakeholder opinion may have evolved for some of the airports especially if measures are taken to tackle the issues identified in this document.
12. The CAA also recognises the need to avoid regulatory interventions that could frustrate the achievement of a competitive market or affect the level of TANS service provision.
13. The CAA is therefore keen to understand what proactive steps it can take in order to strengthen the prospects for market conditions in the future. In particular it will discuss with industry steps it can take to improve the transparency of the TANS interface with NERL. The CAA is also keen to understand more from airport operators and potential new entrants what proportionate measures would enhance their confidence in the market. It will also keep abreast of developments in the rest of Europe to learn lessons from other markets that have, or may, liberalise such as Spain and Sweden. NATS has indicated that it is keen to develop mitigations on the NSL/NERL interface and ToaP. The CAA welcomes NATS's initiative and will work with NATS and other stakeholders to understand the nature, detail and impact of these mitigations on market conditions in the future.
14. It should be noted that the analysis presented in this document is an assessment against the criteria for market conditions as set out in the Regulation. The CAA has not undertaken a full competition assessment as would be required for an investigation under competition law, for example under the Competition Act 1998.

CHAPTER 1

Introduction

Purpose of this document

- 1.1 The presence or otherwise of market conditions for terminal air navigation services (TANS) will influence the type of regulation that will apply in Reference Period 2 (RP2) of the Single European Sky (SES) performance scheme.
- 1.2 On 21 March 2012 the Department for Transport (DfT) requested advice from the CAA on the existence of market conditions for TANS in the UK². Specifically, DfT requested the CAA to undertake an assessment against the criteria on market conditions set out in Annex I of Commission Regulation (EC) No 1794/2006 (the Regulation)³.
- 1.3 This document sets out the CAA's assessment and advice to the DfT.
- 1.4 If you would like to discuss any aspect of this report please contact Thomas Carr (0207 453 6208 – Thomas.Carr@caa.co.uk) or Amanda Downing (0207 453 6207 – Amanda.Downing@caa.co.uk).

Scope of the Regulation and the CAA's assessment

- 1.5 During the CAA's evidence collection phase the European Commission (the Commission) began a review of the Regulation in preparation for RP2. . In collecting and evaluating evidence so far, the CAA has used the most recent draft version of the amended Regulation set out in Annex 2. Until the Regulation has been adopted and published in the Official Journal of the European Union (OJEU), the CAA reserves the right to review the advice contained in this document.
- 1.6 The Commission has sought to amend the scope of which airports are to be covered by the Regulation. In particular, the Commission has sought to change the airports within the scope of the Regulation from those airports with greater than 50,000 commercial air traffic movements (CATMs) per year to those airports with greater than 70,000 IFR air transport movements (as defined previously).

² DfT's request can be viewed here: <http://www.caa.co.uk/docs5/S16RequestATSContestability.pdf>

³ COMMISSION REGULATION (EC) No 1794/2006; the regulation can be view here: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2006R1794:20101220:EN:PDF>.

- 1.7 The CAA's evidence collection has included all 16 airports included in DfT's original request to the CAA – covering all airports over 50,000 CATMs and some airports just below this threshold. However, the CAA's draft advice to DfT separates out the airports that may no longer be covered by the Regulation (i.e. those airports with less than 70,000 IFR air transport movements).
- 1.8 For the purpose of this document the airports have been classified as follows based on IFR movement data from 2011.
- Tier 1 airports are those airports that the DfT has requested the CAA considers individually (as per the current Annex 1 of the Regulation) as they have over 150,000 IFRs or have the possibility of reaching over 150,000 IFRs during the RP2 period.
 - Tier 2 airports are those that are above 70,000 IFR air transport movements.
 - Tier 3 airports are those that are below 70,000 IFR air transport movements yet were covered in DfT's original request to the CAA.
 - To accommodate the possibility that airports may move between tiers prior to the start of the RP2 period the CAA has reduced each of the tier levels by 5,000 IFR air transport movements.

Table 1: Airports covered by this study

Tier 1 - >145,000 IFRs		Tier 2 - >65,000 IFRs		Tier 3 - <65,000 IFRs	
Heathrow	481,223	Edinburgh	112,238	East Midlands International	63,605
Gatwick	251,399	Luton	98,798	Bristol	57,028
Manchester	166,810	Birmingham International	90,921	Liverpool (John Lennon)	49,104
Stansted	146,839	Glasgow	75,830	Newcastle	48,487
		London City	68,202	Southampton	44,448
		Aberdeen	66,942	Belfast City (George Best)	41,728

Source: Eurocontrol

- 1.9 The CAA notes that the most recent draft of the revised Regulation circulated by the Commission on 21 January 2013 contains two proposed amendments:
- A requirement that an assessment of market conditions should be carried out at each airport (above 70,000 IFR air transport movements) as appropriate. The CAA is confident it has complied with this given its process has gathered evidence from each airport in Table 1 and not just those above 150,000 IFR air transport movements. This evidence includes bespoke interviews with each airport operator and written submissions from most of them. Hence, the CAA's evidence gathering is consistent with this requirement, albeit the presentation in this document remains in terms of the DfT's request to the CAA.
 - The inclusion of 'supplementary air navigation services' within the scope of the Regulation and the option to consider them in the assessment of market conditions provisions. The CAA's evidence gathering process has not considered supplementary air navigation services separately.

CAA evidence gathering

- 1.10 The CAA has sought evidence from stakeholders that they consider relevant to an assessment against the criteria in Annex I of the Regulation. Some of this evidence is quantitative and some of it is qualitative and based on stakeholder opinion and perception. The CAA issued an information request to the operators of airports within the scope of this study as well as other stakeholders such as air navigation service providers (ANSPs) and airline user representatives. The CAA has also conducted interviews with many of the airport operators and stakeholders.
- 1.11 Where possible the CAA has drawn its views from objective evidence provided by stakeholders, however it has been mindful of the market context described by some of the more subjective evidence provided. Further details on the CAA's data collection methods are included in Annex 4.
- 1.12 As requested by DfT, the CAA has evaluated evidence against the criteria in the Regulation. The CAA has therefore assessed evidence against each of the criteria but in coming to its judgement the CAA has

weighed the balance of evidence in the round rather than adopted a 'tick-box' approach.

- 1.13 As part of its process the CAA consulted with stakeholders on the draft advice published on the 18 January 2013. This consultation process included a workshop that took place on 11 February 2013. The outcome of the consultation process is included within this advice.
- 1.14 The CAA has not undertaken a full competition assessment as would be required for an investigation under competition law, for example under the Competition Act 1998. This would require different techniques and methods. However, the CAA expects that some of the criteria might be relevant to such an investigation under competition law.
- 1.15 The CAA conducted a similar assessment of market conditions in the provision of TANS under the regulation in 2008⁴.

⁴ The report of the CAA's 2008 Contestability Assessment can be found here: http://www.caa.co.uk/docs/589/ERG_AssessmentContestability.pdf

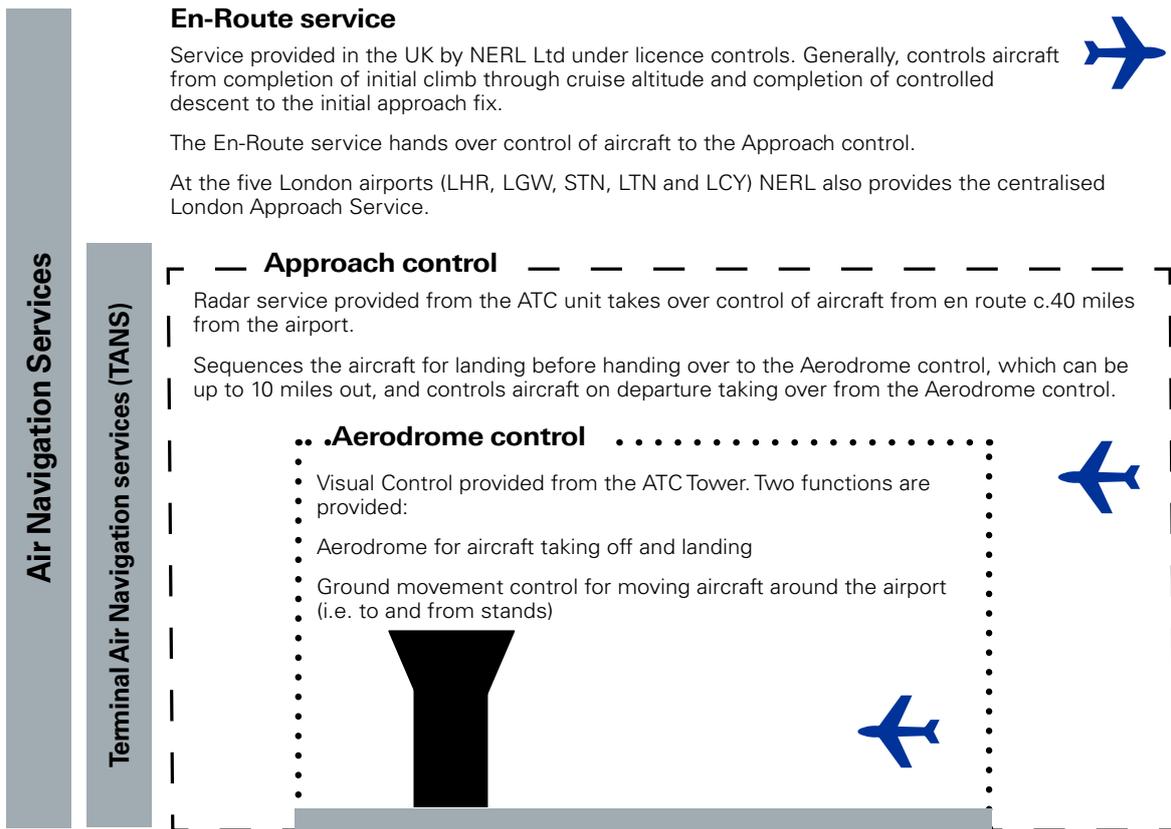
CHAPTER 2

Background on UK TANS provision

TANS definition and airport coverage

2.1 For the purpose of this study TANS are defined as the approach and aerodrome control services as illustrated in Figure 1. It should be noted that the approach service does not necessarily need to be provided from the aerodrome and can be provided remotely as with the London Approach service. More detail can be found in Annex 3.

Figure 1 - Illustration of Air Navigation Services



Source: CAA

UK TANS providers

2.2 There are currently 62 organisations certificated by the CAA to provide ANS in the UK, varying in the number of airports they provide

services at and the complexity of the services provided. The full list of organisations can be found in Annex 3.

- 2.3 The UK TANS market has never been subject to a statutory monopoly. In 2001 following commencement of the Transport Act 2000 the provision of TANS at the majority of towers air traffic control (ATC) units within this study moved from the CAA to private commercial provision by NATS Services Limited (NSL). At the time of the public private partnership (PPP) NATS Holdings plc⁵ was formed including NATS En Route Limited (NERL) and NATS Services Limited (NSL). NERL was given a licence to operate the en route airspace, and NSL continued to operate the TANS at ATC units where it had been historically present. Providers of TANS in the UK operate under commercially negotiated contracts between the ANSP and the airport operator. They are exempted from the need to hold a licence under the Act at least until 31 December 2019.⁶
- 2.4 NSL is the current provider of TANS at 12 of the 16 airports included in this study. The other providers include self-supply provision at Belfast City (George Best) and Newcastle airports, Vantage ATS (formerly Peel Air Traffic Services) self-supply at Liverpool (John Lennon) airport and Manchester Airport Group (MAG) self-supply at East Midlands International airport.
- 2.5 There have been no changes of TANS provider at the 16 airports that are the subject of this study since the last study was conducted in 2008.

NSL profitability

- 2.6 Given that NSL operates the majority of ATC units within the study the CAA have considered whether the profitability of NSL can yield any

5 References to NATS relate to NATS Holdings Limited (NATS Holdings), which is the ultimate parent company of the NATS group of companies, and its direct and indirect subsidiaries, associates and joint ventures. References to NERL, or the regulated business, relate to NATS (En Route) plc, which holds a licence for provision of en route services under the Transport Act 2000 (the Act). The prices NERL can charge users and certain quality standards, such as its capacity/delay performance, are subject to economic regulation by the CAA. References to NSL relate to NATS (Services) Limited, which is an indirect subsidiary of NATS Holdings (NSL is a direct subsidiary of NATS Limited which also holds the shares in NERL). NSL provides air navigation services at airports in the UK and other countries. The CAA regulates NSL's safety in the UK but not the prices and quality of its services. All providers of air navigation services at airports are currently exempt from domestic economic regulation under the Act. NATS Limited, NERL, and NSL and their subsidiaries are together referred to, in this report, as the 'NATS Operating Group'.

6 Under the Air Traffic Services (Exemption) Order 2011 (SI 2011/425)

information that might be relevant to this study. Although profitability is not a perfect indicator of competitive pressure and suffers a number of drawbacks from the use of accounting information, it may help indicate whether there are any persistent patterns that should be taken into account.

- 2.7 Between 2002 and 2012, NSL's return on capital employed (ROCE) increased from 5.4 per cent to 43.1 per cent. The simple average ROCE is 20.7 per cent per year. If an estimate is taken of the four years since the last study in 2008 NSL's ROCE averaged 33 per cent.
- 2.8 As NSL is not economically regulated the CAA has not carried out a formal analysis of an appropriate cost of capital for NSL. The CAA also does not have information available from other ANSPs operating in this market to benchmark NSL's figures. As it is primarily a service organisation, NSL might be expected to attract a high ROCE compared to other types of businesses. That said, the CAA notes that its study takes place against a background of NSL steadily increasing profitability whilst it has not lost a contract with an airport since the last study was conducted in 2008.

Consultation response on NSL profitability

- 2.9 NATS commented on the approach that the CAA took in analysing and portraying NSL profitability. NATS noted that NSL is not a capital intensive business. Accordingly NATS considered that margin on sales is a more relevant measure of profitability than the ROCE approach presented by the CAA. NATS estimated that NSL's average margin on sales over the 10 year period 2002/03 to 2011/12 was between 12 to 14 per cent.
- 2.10 The CAA has not made an assessment of NSL's profitability using the margin of sales methodology and therefore does not comment on the NATS figures. If and when the CAA takes forward future profitability analysis of NSL it will consider the range of methodologies available to it.
- 2.11 At the consultation workshop a stakeholder questioned the purpose of the profitability analysis and suggested that it be used as part of the market conditions assessment. The CAA views the NSL profitability analysis as key background to understanding the overall functioning of the market. In a market that is well functioning excess profits act as a signal for new entrants to enter and overtime an erosion of profits to normal levels is expected. In a market that is not functioning well it can

be expect that excess profits will persist usually due to market entry barriers that prevent firms from entering the market.

- 2.12 Given that the market conditions assessment does not require a full assessment of the profitability of incumbent providers the CAA considered that it was not required to develop this analysis beyond providing contextual information. It has therefore not directly linked NSL's profitability to the market conditions assessment.

European TANS context

- 2.13 The UK model of TANS providers operating via private contracts has been, until recently, fairly unique in Europe where the majority of TANS have been provided by public owned enterprises with a monopoly.
- 2.14 Recently, a number of EU countries have put forward plans to liberalise their TANS markets. Examples include Spain (where 13 towers have been subject to an open tender process with further tranches to follow), and Sweden (where nine Swedavia owned airports are expected to tender for their ANS). The CAA was told by a stakeholder in the course of its study that in relation to Spain there were 8 bidders for the initial tranche of 13 contracts.
- 2.15 European ANSPs, through their certification, are in principle entitled to offer their services anywhere in Europe, where the certification must be mutually accepted. However ANSPs are still required to be designated by the Member State where they wish to operate in order to provide services.
- 2.16 DFS⁷, NATS and Austrocontrol secured NSA designation to operate in Spain. Austrocontrol has won a contract to provide airport ANS at a number of ATC units in Germany.
- 2.17 New privately owned ANSPs have been established and secured certification to provide ANS in other European countries, including ACR⁸ (providing ANS in Sweden), FerroNATS (NATS' joint venture with Ferrovial that won contracts to provide services in Spain) and Saerco (who won contracts to provide services in Spain). The CAA is keen to learn lessons from these market openings in other Member States to inform its thinking on potential further steps it can take to promote competition in the UK market.

7 Deutsche Flugsicherung GmbH

8 Aviation Capacity Resources AB

CHAPTER 3

Analysis

Criterion 1: The extent to which service providers can freely offer to provide or withdraw the provision of these services

- 3.1 The first criterion requires an assessment of: 'The extent to which service providers can freely offer to provide or withdraw the provision of these services:
- The existence or otherwise of any significant legal or economic barriers that would prevent an air navigation service provider from offering to provide or withdrawing from the provision of air navigation services;
 - The duration of contract, and
 - The existence of a procedure allowing assets and staff to be transferred from one air navigation service provider to another'

Existence of significant legal or economic barriers that would prevent an ANSP from offering to provide or withdrawing from the provision of TANS

- 3.2 Within the UK there is no statutory barrier to the provision of TANS, apart from the London Approach service - this is provided by NERL under licence and does not form part of this study.
- 3.3 The CAA has identified three potential economic barriers that it considers relevant for the market conditions assessment. These include the relationship between NSL and NERL, NATS Deed of a Trust of a Promise (ToaP) and air traffic control officer (ATCO) licensing requirements and ATCO career progression.
- 3.4 A number of the issues that are covered within this section also relate to the second criterion of the assessment of market conditions.

NSL interface with NERL

- 3.5 Some airport operators and other ANSPs have expressed concerns that NSL's close relationship with NERL provides NSL with an advantage over potential rivals when it comes to the provision of TANS. This results from these businesses both being subsidiaries of NATS and there being a close operational and historic relationship between the businesses.
- 3.6 These stakeholders perceive a risk that this relationship advantage would be lost to the service at the airport if alternative provision for TANS was sought. The advantages were mainly felt to be due to the close relationship of NERL and NSL staff (particularly management staff), interoperability of ATM systems and information reporting and analysis, linkages with wider UK and European ATM developments and the ability to share expertise and learning.
- 3.7 Several stakeholders said NSL could hold a level of competitive advantage from its close relationship with NERL. This was especially the case with some of the London airports where there was a concern over a lack of transparent service level agreements between NSL and NERL. This could therefore lead to uncertainty over the interactions between the airport aerodrome service and the NERL approach service in the event that an airport operator was to choose an alternative ANSP.
- 3.8 Heathrow Airport Limited (HAL) considered that as part of the London Approach service it had no influence over the ability to manage traffic flows into its aerodrome service. HAL noted that there is no published contract on the level of service NSL is to receive from NERL and therefore no way to monitor performance at the airport. It considered that this would influence the confidence of any incoming operator to maintain service levels as the boundary of service provision is ill-defined.
- 3.9 Gatwick Airport Limited (GAL) considered that there could be benefits between an NSL operated aerodrome service and the NERL approach service due to both companies operating in the same NATS group which may give rise to synergies such as similar systems thus reducing the need for investment for interoperability and interfaces. GAL felt that although interoperability was essential to the market overall it did not believe the issue was insurmountable.
- 3.10 Manchester Airport Group (MAG) considered that it interacted more with NATS as a whole group than with NSL alone. It was unsure of

what the interface would be between the Manchester TANS operation and the NERL service with an alternative ANSP providing the TANS.

- 3.11 Stansted Airport Limited (STAL) considered that the airport operator itself currently has no direct relationship with NERL and that the airport operator would lose the link it has through to NERL if NSL was not operating TANS at Stansted. STAL considered that the advantage for NSL stems from the link into wider developments in air navigation. STAL also had concerns that with a third party TANS provider there is a risk that it would be disadvantaged given the lack of service definition between the aerodrome and approach services in the London area.
- 3.12 The views from the operators of airports operating with between 70,000 and 150,000 IFR movements a year were mixed. Some of these airport operators shared the views of those of the tier 1 airport operators, with concerns over service definition and the closeness of relationship between their ATC unit and NERL. One airport operator especially noted that it was the closeness of the management between NSL and NERL that provided the key advantage in the operation of the air navigation services for the airport. On the other hand, there were some airport operators where NSL provides the TANS that did not have such concerns. The self-supply airport operators did not mention any issues with regards to the interface between their ATC unit and NERL.
- 3.13 NSL recognises that the effectiveness of the relationship between London Terminal Control (TC, provided by NERL under its licence) and the airport ANSP at London airports is clearly important, both tactically and strategically. It stated that all ATC units, whether area, approach or tower control, have documented procedures in place for local air traffic services (ATS) and managing interfaces with adjacent units. In the London area, these procedures are specified in a number of key documents: Manual of ATS (MATS) Part 1 and MATS Part 2 (for each airport), service level agreements (SLAs) setting out how the relevant parties will work together to manage the interfaces between the different units, and other individual unit documentation. The SLAs are in place between TC and the five London airport ATC units managed by NSL as well as with NSL's Farnborough and Southampton airport ATC units. TC also has similar agreements with other airports in the South East where NSL does not provide the airport ATC service, for example Southend, Biggin Hill and the London heliport. NSL also provided several examples of service improvements at airports supported by TC, both with NSL and non-NSL airports.

- 3.14 The relationship that NERL has with NSL and third parties in the provision of services are covered to some extent under the NERL air traffic services licence⁹ which is managed and enforced by the CAA. The relationship is also defined under the European Common Requirements.¹⁰
- 3.15 The following three paragraphs from Condition 2 of NERL's licence are considered relevant in this context:
- 5 *Without extending the obligation as to the overall level of services to be provided under paragraph 1(a), the Licensee shall meet each request for the provision of the Core Services reasonably made by any person.*
- 7 *In providing services under paragraph 1 the Licensee shall not unduly prefer or discriminate against any person or class of person in respect of the operation of the Licensee's systems, after taking into account the need to maintain the most expeditious flow of air traffic as a whole without unreasonably delaying or diverting individual aircraft or such other criteria as the Licensee may apply from time to time with the approval of the CAA.*
- 8 *Subject to paragraph 7, the Licensee shall not unduly discriminate against or give preferential treatment to any person or class of persons in respect of the terms on which services are provided, to the extent that such terms have or are intended to have or are likely to have the effect of preventing, restricting or distorting competition in any market.*
- 3.16 The CAA continues to support the provision of a centralised approach service for the London airports, for operational efficiency and safety reasons. The CAA recognises that there are operational interfaces in place between the TANS operator and NERL, both for London Approach and for the interface with en route. In addition commercial interfaces are also required to be non-discriminatory, and these are currently covered by the licensing regime for NERL. However, there is no further transparent detailed specification of the commercial interface between

9 A copy of the NERL Licence can be found here: <http://www.caa.co.uk/docs/5/20120101NERLLicence.pdf>

10 Commission implementing regulation (EU) No 1035/2011, of 17 October 2011, laying down common requirement for the provision of air navigation services and amending regulations (EC) No 482/2008 and (EU) No 691/2010 – OJEU L271/23 18.10.2011

NSL and NERL to build confidence amongst airport operators and other ANSPs that the licensing regime actually works as it should.

- 3.17 The CAA notes that these arrangements do not appear to have reduced the perception with some airport operators that the interface with NERL could be less effective or a risk should they move to an alternative supplier to NSL. Although no evidence of less favourable treatment has been put forward, the CAA considers that at present this perception among airport operators reflects an economic barrier relevant to the first criterion of Annex 1 of the Regulation. This is especially the case of the London area with its centralised approach.
- 3.18 Looking ahead, this perceived economic barrier might be removed should airport operators observe a successful example of an alternative ANSP replacing NSL at an airport and forging an effective relationship with NERL. It has also been suggested by some airport operators and ANSPs that their confidence would be improved if there were standard and transparent commercial terms and conditions for services provided by NERL to TANS.

NATS Trust of a Promise and the transfer risk of ATCOs

- 3.19 ATCO licensing and validation requirements do not easily lend themselves to the frequent movement of ATCOs between different ATC units or centres or positions within a unit or centre¹¹. Given that unit specific training to gain a rating and/or rating endorsement can take more than six months to complete, it is clear that the loss of an ATCO, for any reason, needs a robust replacement plan and can pose a continuity issue for the staffing of ATC operations at the airport.
- 3.20 Whilst all ANSPs and airport operators face the same limitations from ATCO licensing requirements, some airport and ANSP respondents considered that a new provider taking over TANS where NSL is the incumbent provider could face higher transition costs than if the reverse were to occur.
- 3.21 The key concern was that the NATS ToaP introduces uncertainty around the number of locally qualified ATCOs that would transfer to the new provider.
- 3.22 The ToaP places certain obligations on NATS to maintain the pension arrangements of that group of employees, including taking certain steps in the event of a sale or transfer of part of the NATS business, for

¹¹ Further details on ATCO licensing requirements are included in Appendix E.

example where a Transfer of Undertaking (Protection of Employment) Regulation (TUPE) occurs. In the event that NATS is not able to assure employees of the continuation of these pension benefits when such a transfer occurs, the affected employees have the right to refuse to transfer to a new employer. In this case, NATS may have an obligation to continue to employ those employees.

- 3.23 The ToaP is a legally binding agreement between the Secretary of State, NATS Limited and the Law Debenture Trustees. It was created on 26 July 2001 at the behest of the UK Government and is part of the architecture it designed for the NATS PPP. It applies only to those staff employed by NATS on that date.
- 3.24 Several airport operators have highlighted the ToaP as a key barrier to offering the contract to another provider as well as a barrier to entry for alternative ANSPs. Airport operators stated that the ToaP creates uncertainty and transition risk around the number of NSL employees who would choose to remain with NATS and not transfer to the incoming provider. This could lead to uncertainty and could potentially increase transition costs for the incoming provider if it was required to recruit and train additional controllers and/or bear NATS' pension costs. Such costs would have to be factored into their contract bid for the service.
- 3.25 An ANSP responded that the main issue for an ANSP in considering bidding for a contract is the confidence in staff transferring, and if there is any indication the staff would not transfer then it is highly unlikely that the ANSP would take the risk of the contract failing due to the lack of available staff on transfer. It also stated that recruitment is considered a major issue due to lack of qualified ATCOs in the market place and to recruit, train and validate an ATCO is unrealistic compared to the time expected to transition a contract. A number of respondents considered that most ANSP transfers relied heavily on the TUPE of existing staff.
- 3.26 NATS considered that while these arrangements do contain specific additional commitments to the relevant employees, they do not act as a material barrier to entry or exit from the market. Indeed, a number of other utility privatisations and public sector outsourcing have contained certain protections for employee pensions (the precise details of which vary between cases). NSL has also informed the CAA that similar arrangements have applied in the recent liberalisation of aerodrome ATC services in Spain and this has not prevented the service being transferred from one supplier to another. The CAA acknowledges NSL's

view on the situation in Spain, but considers that the situation may not be fully comparable as the Spanish aerodrome ATC liberalisation did not involve NSL (through its joint venture FerroNATS) bidding against an incumbent provider.

- 3.27 NATS also said that commercial imperatives mean there would be a powerful motivation for all parties to find a satisfactory solution in the event an equivalent scheme is not offered, both for NSL and for the incoming supplier, who would be under a legal obligation under TUPE to offer employment to the relevant employees and would want to ensure a smooth transition of services from NSL.
- 3.28 Table 2 summarises the current proportion of ATCO grades at airports covered by the ToaP. The coverage varies by airport and ranges from 4 per cent to 91 per cent, with an average of 60 per cent of ATCO grades across all NSL ATC units covered by this study.
- 3.29 NATS has provided a projection for the proportion of ATCO grades at each airport that will be covered by the arrangement in the RP2 period from 2015-2019. NATS projects that it could cover on average only 30% of staff by the end of RP2.

Table 2 – NATS ToaP coverage by airport

	Airport	Number of ATCOs	Proportion of ATCOs covered by ToaP 2011/12
Tier 1			
	Heathrow	79	56%
	Gatwick	39	64%
	Manchester	54	91%
	Stansted	32	50%
Tier 2			
	Edinburgh	33	76%
	Aberdeen	65	60%
	Birmingham International	35	63%
	Luton	21	52%
	Glasgow	37	68%
	London City	17	41%
Tier 3			
	East Midlands International	n/a	n/a
	Bristol	26	4%
	Newcastle	n/a	n/a
	Liverpool (John Lennon)	n/a	n/a
	Southampton	17	65%
	Belfast City (George Best)	n/a	n/a

Source: NATS

Table 2 Notes:

1 Note the ATCO numbers quoted refer to the number of ATCOs based at each airport unit and include a number of trained ATCOs who are in managerial or other non-operational roles.

2 The Number of ATCOs at Aberdeen includes those employed on other ATC services managed from Aberdeen Tower, including the North Sea Helicopter and East Shetland Basin services.

- 3.30 NATS provided evidence from its experience of its joint venture FerroNATS of taking over the provision of tower ATC at ten airports in Spain. It stated that all the existing staff at the ten Spanish ATC towers FerroNATS won elected not to transfer to FerroNATS and therefore FerroNATS has had to train or recruit a significant number of new ATCOs to deliver the contracts. NATS considered that this additional activity has had an adverse affect its transition costs, but that it demonstrates that transfer of the ATC service from one provider to another does not require all staff to transfer and that it can be managed.
- 3.31 On balance, the CAA considers that the ToaP is a relevant economic barrier in its assessment of the first criterion of Annex 1 of the Regulation. This is because it creates uncertainty and may raise the costs to those non NSL ANSPs bidding for airport contracts. Although the impact of the ToaP differs by airport, and it is expected to reduce over time, the current and projected share of staff covered by it may remain significant during the RP2 period. At the London airports the risk could be higher as it is not implausible that ATCOs could move between NSL ATC units given their close proximity. The licensing process for ATCOs may also increase the cost of transition in the case where not all staff would be available to a new provider.

Air Traffic Control Officer career progression

- 3.32 The provision of airport ANS is a labour intensive process, therefore it is unsurprising that the availability and retention of ATCOs has been raised as a critical issue by ANSPs, airport operators, and airspace user groups. Many respondents have mentioned a global shortage in the availability of ATCOs.
- 3.33 Significant steps have been taken at an EU level to aid in the mobility of ATCOs through a European licensing system¹² which allows EU licensed ATCOs to work anywhere across the EU. However, given the level of comment on this issue in the responses, the steps taken at an EU level to lower the barriers to the labour mobility of ATCOs do not appear as yet to have had a significant effect on the availability of ATCOs in the UK.
- 3.34 A key concern raised by both airport operators and ANSPs was the ability of smaller ANSPs to recruit and retain ATCOs compared to NSL. In particular respondents highlighted the difficulty for smaller ANSPs

12 COMMISSION REGULATION (EC) No 805/2011; the Regulation can be viewed here: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:206:0021:0038:EN:PDF>

to offer the same level of career opportunities and progression that NATS could offer due to its size and diverse employment opportunities. It was felt that NATS is able to offer more employment opportunities within the NATS group of companies. It was felt that this affects the ability to both recruit a certain quality of ATCO (ATCOs who want career progression would be more likely to want to work for a provider with a range of career possibilities), but also the ability to retain existing ATCOs (experienced ATCOs may look for a new career focus).

3.35 Several airport respondents stated that this was also a barrier to moving to self-supply and a factor that they would assess as part of any tender or contract offering process.

3.36 NATS has stated that in its experience there is a low level of movement of ATCOs between individual airport contracts, especially at those airports that are geographically distanced from each other. Further NATS noted that many ATCOs enjoy performing the operational role at one particular airport and relatively few aspire to transfer into more mobile managerial roles. NATS provided evidence of the total number of operational staff moving between airports in each of the last five years compared to NSL's total headcount (Table 3 below). It should be noted that this information covers the movement of operational staff, and not necessarily the movement of ATCOs from operational roles to other roles within NATS.

Table 3 – Number of NATS staff moving between airports

Number of staff moving between airports		
Year	Actual	% NSL headcount
2008	39	3.8%
2009	28	2.8%
2010	30	3.0%
2011	18	1.9%
2012	15	1.6%

Source: NATS

3.37 The CAA understands respondents' concerns about NSL having an advantage over smaller ANSPs in terms of ATCO development and progression owing to its larger scale and broader reach of operations. That said, the CAA considers that career progression opportunities may be an issue in many small companies throughout the economy, balanced with some people's preferences for working in smaller companies. The CAA has not been provided with sufficient evidence to suggest that the provision of ATCO career progression provides a greater barrier to entry than in other industries. However, NSL's economies of scale in relation to its ability to attract and retain scarce ATCO skills may be a relevant barrier to a smaller ANSP in offering to provide TANS and hence it may be relevant to the first criterion of Annex 1 of the Regulation.

The applicability of competition law

3.38 Competition law is enforced domestically through the Competition Act 1998 (CA98) and the Enterprise Act 2002 (EA02) and at an EU wide level through Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU). Both pieces of Domestic and European competition legislation are similar with Chapter I and Chapter II prohibitions of CA98 broadly matching with Articles 101 and 102 of the TFEU respectively. Since gaining concurrent powers to enforce competition law with regards to air traffic services in the Transport Act 2000 the CAA has received no complaints regarding the behaviour of NSL or other ANSPs operating at an airport within the UK.

3.39 Historically, there has been a level of debate within the UK as to the application of competition law to air traffic services. The main issues stem from the requirement that the firm has to be an "undertaking"

for competition law to apply. In EU case law an undertaking has been defined as: *"...the concept of an undertaking encompasses every entity engaged in an economic activity, regardless of the legal status of the entity and the way in which it is financed..."*¹³

3.40 In 2004 the CAA procured legal advice in respect of the status of NSL as an undertaking for the purpose of competition law. That advice suggested that NSL was not an undertaking although this was not an absolute view given the competitive environment within which NSL obtained contracts at airports. Subsequently, the CAA undertook a consultation on the application of its concurrent powers, and following the consultation produced a policy document in 2006. At the time the CAA considered that it was unsatisfactory that the provision of air traffic services at airports may not be subject to the constraints of competition law while at the same time those suppliers were exempt from the need to hold an economic licence. The CAA recognised, however, that it was ultimately for the courts to determine and concluded that *"...if the [CAA] received a complaint against [a provider of ANS at airports] it would expect to consider this under competition law"*¹⁴

3.41 Since the 2006 policy document there has been some change in the European regulations governing the Single European Sky. The latest regulations on Common Requirements¹⁵ appear to clarify that providers of air traffic services are subject to national and EU competition law. The areas considered relevant are:

"Annex I...

8.1. Open and transparent provision of air navigation services

Air navigation service providers shall provide air navigation services in an open and transparent manner. They shall publish the conditions of access to their services and establish a formal consultation process with the users of air navigation services on a regular basis, either individually or collectively, and at least once a year.

Air navigation service providers shall not discriminate on the grounds of the nationality or identity of the user or the class of users in accordance with applicable Union law.

13 Case C-41/90 Klaus Höfner and Fritz Elser v Macrotron GmbH

14 CAA (2006), Air Traffic Services and Competition Law: A CAA Policy Document, paragraph 4.11

15 Commission implementing regulation (EU) No 1035/2011, of 17 October 2011, laying down common requirement for the provision of air navigation services and amending regulations (EC) No 482/2008 and (EU) No 691/2010 – OJEU L271/23 18.10.2011

... Annex II...

2. Open and Transparent provision of services

In addition to point 8.1 of Annex I and where a Member State decides to organise the provision of specific air traffic services in a competitive environment, that Member State may take all appropriate measures to ensure that the providers of these specific air traffic services shall neither engage in conduct that would have as its object or effect the prevention, restriction or distortion of competition, nor shall they engage in conduct that amounts to an abuse of a dominant position in accordance with applicable national and Union law.”¹⁶

- 3.42 These regulations provide additional comfort to the CAA's position set out in the 2006 policy document and the CAA considers that it is likely that competition law could be applied to the providers of ANS at airports. The intent of regulation appears to be that where a market has been set up in a competitive manner, as the CAA observes for the UK, competition law should be applicable.
- 3.43 The CAA view on the applicability of competition law to providers of ANS at airports, generally, aids the development of contestability of such services within the UK. The CAA considers NSL probably to be an undertaking and, should a case arise, where appropriate would seek to take legal action. However, this issue was not raised as a barrier to entry or exit by stakeholders and the CAA does not currently view uncertainty about the application of competition law as having a significant effect on the market conditions for TANS in the UK.

Duration of Contracts

- 3.44 Table 4 below summarises the current term of the contracts at the airports covered by the study.

¹⁶ Commission implementing regulation (EU) No 1035/2011, of 17 October 2011, laying down common requirements for the provision of air navigation services and amending regulations (EC) No 482/2008 and (EU) No 691/2010 – OJEU L271/23 18.10.2011

Table 4 – Duration of Contracts

	Airport	ANSP	Contract length (years)	Contract expiry date	Has ANSP changed in last 10 years?
Tier 1					
	Heathrow	NSL	5 + 5 yr extension	Mar-18	No
	Gatwick	NSL	5 + 2 yr extension	Mar-15	No
	Manchester	NSL	6	Mar-15	No
	Stansted	NSL	7	Mar-18	No
Tier 2					
	Edinburgh	NSL	7	Mar-18	No
	Aberdeen	NSL	7	Mar-18	No
	Birmingham International	NSL	9	Mar-14	No
	Luton	NSL	3 + 2 yr extension + 1 yr extension	Oct-15	No
	Glasgow	NSL	7	Mar-18	No
	London City	NSL	15	Mar-17	No
Tier 3					
	East Midlands International	Self-supply	n/a	n/a	No
	Bristol	NSL	20	Mar-25	Yes – self-supply to NSL
	Newcastle	Self-supply	n/a	n/a	No
	Liverpool (John Lennon)	Self-supply	n/a	n/a	No
	Southampton	NSL	7	Mar-18	No
	Belfast City (George Best)	Self-supply	n/a	n/a	No

Source: CAA and NATS

- 3.45 The most common contract length is seven years although there are shorter contracts that have been made available as well as longer contract offerings. The length of the contract at Bristol is significantly longer than the average. A number of contracts have reviews or break clauses.
- 3.46 In discussions with stakeholders, the main concern over the length of contract was whether it was long enough to enable a return on the investment made. There appeared to be some level of agreement that for a new ANSP a contract of less than five years was unlikely to be viable given the tendering and transition costs. It was considered that the length of contract offered to an incumbent ANSP could possibly be shorter given the lower transitional costs involved.
- 3.47 It was noted by some respondents that the contract length was in part driven by the time needed to perform a tender process. This was highlighted as a concern, especially for those airport operators that have not tendered as they considered they would require significant time to 'gear up' for a tender process.
- 3.48 The majority of the TANS contracts in the UK expire between now and the end of the RP2 period. Accordingly, the CAA does not consider that contract duration presently represents a material adverse factor in its assessment of the first criterion in Annex 1 of the Regulation.

The existence of a procedure allowing assets and staff to be transferred from one air navigation service provider to another

ANS asset ownership arrangements

- 3.49 The structure of asset ownership, as well as any procedures for the transfer of assets, clearly affects the costs and barriers to switching ANSPs at an airport given the heavy reliance on certain assets in the provision of ANS (tower building, ATC equipment, radar, etc.).
- 3.50 Where an ANSP is contracted to an airport operator, one of the following scenarios currently exists in the UK:
1. the ANSP owns the majority of the assets and ground-based navigational equipment itself;
 2. a third party (such as a finance company) owns the assets and equipment, which is then leased to the ANSP;

3. the airport operator owns the assets and equipment, which is then operated and managed by the ANSP.

- 3.51 From an airport operator perspective, it is important to ensure arrangements for the ownership or leasing of equipment do not entrench the incumbent ANSP. For example, if the ANSP owns the majority of the assets it may be more complex or costly to transfer the assets to an incoming provider compared to the situation where the assets are owned by the airport operator and managed by the ANSP or subject to third party leasing arrangements.
- 3.52 Table 5 below provides an overview of the structure of asset ownership at the airports included in the study. It shows that the majority of the airport operators own the tower infrastructure, and where the tower building is owned by NATS, there are measures in place that oblige NATS to rent it to the airport operator at market rate if the service was transferred to an alternative provider.
- 3.53 Equipment ownership is more of a mixed picture with airport operators owning the equipment in approximately half of the cases and the other half being mainly a mixture of third party ownership under lease contracts and NATS ownership where NATS is obliged to transfer assets to the airport operator based on book rate. In the case of third party lease contracts, the contract would transfer from NATS to either the airport operator or the incoming ANSP at the point of transfer.

Table 5 – Structure of ANS asset ownership at airports

	Airport	ANS provider	Tower Building	Equipment
Tier 1				
	Heathrow	NSL	Airport	Mainly 3rd party with some NATS owned
	Gatwick	NSL	NATS	Mainly 3rd party with some NATS owned
	Manchester	NSL	Airport	Airport
	Stansted	NSL	NATS	3rd party lease contract
Tier 2				
	Edinburgh	NSL	Airport	Mainly 3rd party with some NATS owned
	Aberdeen	NSL	NATS	Mix of 3rd party & NATS owned
	Birmingham International	NSL	Airport	Airport
	Luton	NSL	Airport	Mainly Airport with some NATS owned
	Glasgow	NSL	NATS	Mainly 3rd party with some NATS owned
	London City	NSL	Airport	Airport
Tier 3				
	East Midlands International	Self-supply	Airport	Airport
	Bristol	NSL	Airport	Airport
	Newcastle	Self-supply	Airport	Airport
	Liverpool (John Lennon)	Self-supply	Airport	Airport
	Southampton	NSL	Airport	Mainly Airport with some 3rd and NATS owned
	Belfast City (George Best)	Self-supply	Airport	Airport

Source: CAA and NATS

- 3.54 No respondents highlighted concerns about the asset ownership or transfer arrangements, and in general there appears to be a move to increased airport operator control of assets or the use of third party provider ownership with lease contracts that would transfer to the airport operator or new service provider in the case of contract termination.
- 3.55 TANS contracts now generally contain more extensive provisions in the contracts for exit management, which the CAA considers to be a positive development to allow transparency and predictability around the arrangement for asset ownership and transfer.
- 3.56 The CAA does not consider this evidence represents an adverse factor in relation to its assessment of the first criterion of Annex I of the Regulation.

Manual of Air Traffic Services Part 2

- 3.57 The MATS contains procedures, instructions and information, which are intended to form the basis of ATS within the UK. It is available for use by civil air traffic controllers and may also be of general interest to others associated with civil aviation. The MATS is arranged in two parts:
1. MATS Part 1 contains instructions that apply to all UK air traffic service units (ATSUs)¹⁷, and is developed by the CAA.
 2. MATS Part 2 contains instructions that apply to a particular ATSU produced locally and approved by the CAA. It amplifies and interprets, at local level, MATS Part 1 instructions. Any authorisation required by MATS Part 1 is to appear in MATS Part 2.
- 3.58 The MATS Part 2 document is a key safety document that contains detailed information on the procedures applicable at the ATS unit in question and requires considerable resources to develop. In order to be designated at an airport in the UK it is a requirement for an ANSP to have an approved MATS Part 2 and related safety documentation in place. It is therefore an important asset that has to be taken into account when there is a change of ANSP at an airport.
- 3.59 NSL, and other ANSPs, consider the MATS Part 2 documentation falls under their intellectual property (IP) rights, and is therefore NSL's

17 CAP 493 Manual of Air Traffic Services Part 1 (www.caa.co.uk/docs/33/CAP493Part1adv.pdf)
(www.caa.co.uk/docs/33/CAP493Part1adv.pdf)

IP¹⁸, due to the experience and skills deployed in developing it for a particular ATS unit. Similarly, the self-supply airports, that developed the documentation themselves, generally considered the property rights for MATS Part 2 belong to the airport operator and would seek to maintain this position in the event of transfer to a third party supplier.

- 3.60 Overall, there was little concern from respondents over the transfer or development of MATS Part 2 documentation in the event of a transition in ANSP. In some cases airport operators that do not self-supply have arrangements where the MATS Part 2 documentation is owned by the airport operator itself decreasing further any transition costs.
- 3.61 Evidence from contracts and responses revealed that royalty payments in relation to the transfer of the MATS Part 2 documentation can vary considerably. This can partly be explained by the significant differences in complexity at the different airports, other contract terms, the level of investment in developing the documentation and the level of innovation underpinning the MATS Part 2. NSL has stated that it seeks a fair market rate taking into account these factors and generally that the value of the MATS Part 2 is agreed between NSL and the airport operator as part of the contract as is on-going access to it in the event of transfer of TANS provider.
- 3.62 Concern was raised by the European Low Fares Airline Association (ELFAA) over the possible size of the payments for MATS Part 2, questioning whether these could prove to be an impediment to contestability. The evidence presented to the CAA indicates that the MATS Part 2 documentation costs constitute a relatively low proportion of the total contract value, with the cost constituting between 0.1 to 0.5 per cent of the total contract value.
- 3.63 It appears that there has been good progress since the last study in 2008 to provide greater clarity around the ownership, cost, and transitional arrangements for MATS Part 2 documentation. The CAA considers this as a positive step to minimise the risk and transition costs for incoming providers and it does not consider this issue has an adverse impact in terms of its assessment of the first criterion of Annex I of the Regulation.

18 For the aspects developed by it and not part of a template created by the CAA.

Consultation response on criterion 1

- 3.64 Following consultation the CAA received support from the airports and alternative ANSPs for its initial views on this criterion. No new evidence was put forward or additional issues raised.

- 3.65 NATS did not agree with the CAA's conclusion against this criteria. It argued that, on balance, there was sufficient objective evidence that the criteria had been substantively satisfied.

Criterion 2: The extent to which there is a free choice in respect to service provider, including, in the case of airports, the option to self-supply

- 3.66 The second criterion requires an assessment of: *'The extent to which there is a free choice in respect to service provider, including, in the case of airports, the option to self-supply:*
- *the existence or otherwise of legal, contractual or practical barriers to an airport's ability to change air navigation service provider or to move towards self-supply of air navigation services;*
 - *the role of airspace users' representatives in the selection process of the air navigation service provider'*

The existence of legal, contractual or practical barriers to an airport's ability to change ANSP or to move towards self-supply of ANS

- 3.67 There is no statutory prohibition preventing an airport operator from changing its ANSP or moving to self-supply. Through its evidence collection and analysis the CAA has not found any other legal or contractual barriers that would prohibit an airport operator from changing to another third party ANSP or moving to self-supply. Indeed in the contracts that the CAA has seen there are a number of provisions relating to obligations to the incumbent ANSP to aid in the transfer of TANS between suppliers.
- 3.68 The evidence has suggested a number of practical barriers that may be inhibiting the development of market conditions. In this section the CAA considers the transitional risks of service provision for the airport operator, complexity of operation, transparency of TANS costs and an airport operator's ability to move to self-supply of ANS. The CAA also discusses barriers specific to Aberdeen.

Tolerance for transitional risk of service provision

- 3.69 There is a significant difference in levels of current capacity and demand amongst the airports included in this study and thus the risk associated with loss of service levels and air traffic movements.
- 3.70 An attempt has been made to quantify this risk by looking at the cost of a service reduction to the airport operator in relation to the value of the current TANS contract. However given the diverse range of

capacity issues at the airports it has not been possible to obtain a fully comparable set of indicators. For airports facing a uniform capacity constraint, such as Heathrow, the calculation was relatively straight forward. However, where airports faced a more peaky demand it was difficult for the operators to assess the true cost of service reduction with the airport generally not operating at its full capacity. Table 6 describes as fully as possible the affect on the airport operator from a reduction in service levels that could result during a transitional period between ANS providers at an airport.

Table 6 – Impact of a reduction in service

Airport	Impact of a reduction in service
Heathrow	HAL estimated that a 10% reduction in movements would cost the airport operator £370,758 per day and £741,515 per day for a 20% reduction. This equates to significantly more than the cost of the ANS contract per day.
Gatwick	GAL considered that the airport operator would only transition between service providers in the winter to minimise the risks of service loss in the busy summer period. It noted for that period of the year the airport does not operate at full capacity and would therefore be able to recover from some disruption in the short term.
Manchester	Given the traffic mix at Manchester, MAG considered that it is unclear what a reduction in service would mean in terms of costs as the loss of different slot times would affect different airlines. MAG stated that the complete closure of the airport for ash clouds had cost the airport operator in the region of £6m in revenue over 4 days.
Stansted	STAL considered that the impact of a small reduction in hourly capacity following the introduction of a new operator would not be significant at the current time because of the degree of spare capacity available. It considered that given its current traffic levels the risk of disruption during a transition period would be low. However it noted that disruption in its peak hours would affect the business and the confidence that airlines had in the airport, which could be significant in the longer term.
Other airports	The responses from the tier 2 and 3 airport operators were in a similar vein to those of MAG and STAL. A number noted that the impact varies with the traffic affected. Most, however, were comfortable that in the short term they would be able to handle some reduction in ATMs as they were not operating near their declared capacity. Concerns were also made about the impact that any disruption would have on the airport operator's ability to retain and attract new airline business.

Source: CAA

- 3.71 The risk of transition between ANSPs impacts in an intuitive way with the risk of changing provider being lower at smaller airports without binding capacity restrictions. One such airport operator stated that movement restrictions in any given hour of the day would have minimal costs for airports with spare capacity throughout the day. At such airports it was suggested it could be possible to mitigate the impacts to some extent through airline scheduling. This suggests for the majority of airport operators the transitional risk in terms of the quality of the service provided could be manageable.
- 3.72 At the other extreme, at an airport such as Heathrow with very high demand throughout the entire day, the costs of a small reduction in ANS service levels at the airport (10 per cent reduction throughout the day) very quickly exceeds the daily value of the ANS contract. This indicates a high level of risk for the airport operator in considering switching to another ANSP.
- 3.73 At both Gatwick and Stansted it appears that the airport operators would aim to mitigate the transfer risks as far as they can, for example with GAL not switching ANSP during the summer season. STAL acknowledged that current traffic levels would mean the airport operator would be better able to cope with any transitional affects on service provision; however this may not be the case if traffic levels were to recover at the airport to the previous high levels. Aberdeen Airport Limited (AAL) highlighted that the cost from service disruption at Aberdeen was very high due to the potential impact that it could have on the off shore North Sea helicopter service which services mainly the oil and gas industry. Therefore disruption costs at Aberdeen could extend beyond aviation and affect the wider UK economy.
- 3.74 The CAA also undertook a simple analysis of contractual prices to identify what level of disruption would eliminate any savings an airport operator could have made by changing providers as part of a competitive tender process. The shorter the period of disruption that eliminates any potential cost savings made, the greater the risk to the airport operator in switching providers. Using the assumption that the level of service disruption was equal to the daily TANS contract value, the CAA estimates that a period of disruption of between three months to one year (for the airports included in this study) would eliminate a hypothetical five per cent saving that an airport operator might make as part of a contract review. This shows how the risk of service disruption may weigh heavily in the mind of airport operators seeking an alternative provider.

- 3.75 On the other hand, NATS noted that any transition between suppliers would need to be carefully planned and managed but that there are no insurmountable difficulties in maintaining service levels on transition at any of the airports where NSL currently provides TANS (though the larger and more complex airports may require a longer transition period). Further, NATS stated that it is strongly in the interests of any outgoing provider to ensure that the service levels are maintained in order to secure its reputation and ability to compete in the market place. NATS pointed to its existing contractual commitments to support any airport operator through a transition period, in addition to the CAP 670 requirement on it to “provide reasonable assistance” with the transfer of service to new TANS providers¹⁹.
- 3.76 On balance, the CAA considers that for some airport operators, especially in the London area, a relatively low tolerance for service disruption may at present reinforce the impact of other factors such as the ToaP and the NERL interface. Although airport operators’ risk tolerance is not a barrier in and of itself, when seen in the context of such issues as the ToaP, it may raise a practical barrier for an airport in the sense of the second criterion of Annex I of the Regulation. This situation may improve over time as airport operators gain more confidence with moving between TANS providers and as the effect of underlying barriers such as the ToaP decline.

Complexity of operation

- 3.77 The UK has 137 licensed aerodromes, which handle passenger aircraft, plus many other established airfields catering for general aviation and other non-passenger aircraft activity creating a density in aerodrome activity across the UK. At Annex 6 is a map of the UK licensed aerodromes that illustrates the density of their distribution, particularly in the South and South East of England. There were over three million total ATMs at the top 60 UK airports in 2011, alongside the numerous additional movements at other airfields. The combination of airfield density and high air traffic levels creates a complex air traffic control environment in the UK.
- 3.78 Most stakeholders, particularly those in the busy Manchester and London terminal manoeuvring areas (TMAs), have suggested that the experience and track record of an ANSP in providing services in

¹⁹ CAP 670 Air Traffic Services Safety Requirements; <http://www.caa.co.uk/docs/33/cap670.pdf>

a complex airspace environment or at a complex airfield layout is an important factor in the consideration of a suitable alternative provider. This was considered to be a key factor in the level of risk to the airport operator in transferring from one service provider to another, as it could affect the ability of the incoming provider to maintain current service levels at the airport, the ability to grow capacity at the airport in the future, and the level of confidence that the airport operator would have in the ANSP's safety management systems for such operations.

- 3.79 Other counter arguments have been made that the skill and expertise in managing traffic at an airport lies mainly with the staff providing the service, rather than the ANSP, and therefore an incoming ANSP could retain the expertise held by these staff thereby reducing the risks to the airport operator on transition.
- 3.80 The CAA recognises that there are other ANSPs who operate in similar environments throughout Europe and other parts of the world. The Common Requirements²⁰ framework across Europe has taken many steps to reduce the barriers for ANSPs to provide services in other countries and therefore increases the number of potential providers with similar experience. There is evidence of ANSPs bidding for, and winning, services outside of their home markets from NATS' experience in Spain. Criterion 3 goes into more detail on alternative ANSPs that have been mentioned to the CAA during this study.
- 3.81 All of the airport operators stated that a key concern was the quality of the safety management system and safety reputation of an ANSP in providing services in an environment with similar levels of complexity and reported a high level of satisfaction with regards to NATS' safety management and operations at their airport. Therefore, the consideration may be more about an alternative ANSP's experience relative to the incumbent provider making an overall assessment of the potential affect barriers to entry difficult.
- 3.82 The CAA recognises that experience in managing complex airspace and airfield layouts is important to maintaining and improving service levels. The steps that NATS has taken to win the contract for a selection of ATC towers in Spain are an encouraging signal to other ANSPs about the ability to provide services in other countries. Without evidence of a change in ANSP in the UK at an airport with a considerable level of

²⁰ Commission implementing regulation (EU) No 1035/2011, of 17 October 2011, laying down common requirement for the provision of air navigation services and amending regulations (EC) No 482/2008 and (EU) No 691/2010 – OJEU L271/23 18.10.2011

complexity it is difficult to judge the impact of this perceived risk on TANS market conditions in the UK.

NSL Cost transparency

- 3.83 Responses have highlighted a lack of transparency around TANS costs at non-self-supply airports. Many of the airport operators stated that the TANS contract was either the highest or second highest cost at the airport, second only to security costs in some cases. The view from most respondents was that NSL prices are high and that NSL offered a “gold-plated” service.
- 3.84 Additionally, a number of airport operators shared a frustration that they felt unable to get a sense of the added value for the cost above what they felt they should be paying for either parts of the service and/or the overall service cost. In these cases, the airport operators felt that it was difficult to get a true sense of the cost breakdown of the NSL service in order to be able to judge the suitability of potential bids from alternative providers.
- 3.85 In particular, concern was raised about the core NSL services element of the contract where airport operators felt that they were unable to get enough detail on exactly what services were included and how frequently their services were used or the cost of these services on an individual basis. The airport operators felt that the level of detail they were looking for was something that they were able to get from other contractors at their airport.
- 3.86 HAL stated that it did not have adequate access to the costs or a helpful breakdown of the pricing in order to get more than just a feeling of the value of the pricing structure. The airport operator felt that an element of cost transparency would help with this and highlighted staffing levels, systems costs and maintenance and the quantum of margin that NSL make from the contract as areas where further information would develop market conditions.
- 3.87 GAL considered that transparency was good but felt that it could be achieved through the re-bidding process and were concerned about the impact that further regulation in this area could have in potentially reducing interest from other providers in the TANS market. The rationale for this was the belief that perceived inefficiencies in the incumbent ANSP provides an incentive for an incoming provider to enter the market and bid for services by undercutting the incumbent provider. Therefore

measures which increase the cost transparency of services could in fact lower interest in the ANS market rather than increase it.

- 3.88 STAL stated that historically it had more of a service based contract and therefore it was not able to question much about resources used to deliver the contract; however this was now changing and the airport operator was becoming better able to challenge the information in the contract.
- 3.89 MAG wanted greater granularity and transparency of service requirements. The airport operator was not currently able to judge if it could get better value for money if the airport operator was able to separate out some elements of the TANS service and provide it in a different way.
- 3.90 Other airport operators tended to report that the ANS cost was the greatest cost line to the airport operator and that the ability of the airport operator to control costs was very important. This issue does not apply to the operators of airports that self-supply TANS.
- 3.91 Currently in the UK, under the requirements in the Regulation, ANS costs are aggregated for the two different charging zones; one covers airports with greater than 150,000 ATMs per year and the other covers airports with annual ATMs between 50,000 and 150,000. Aggregate costs are reported for high level groupings such as staff, other operating costs, depreciation, cost of capital and exceptional items costs.
- 3.92 The CAA considers that greater transparency of TANS costs may help in developing market conditions by enhancing the confidence airport operators and enabling them to judge value for money of their contract. The CAA notes that the Commission in its revised draft Regulation has suggested improving the transparency of information that is provided. It is uncertain at this stage how far this proposed level of transparency will meet users' needs. Currently the CAA considers cost transparency is likely to be impacting on the development of market conditions for the purpose of assessing the second criterion of Annex I of the Regulation; however, this impact could decrease over time if the revised Regulations are agreed and through an increase in competitive tender processes.

Self-supply

- 3.93 Self-supply is where an airport operator provides TANS in house as part of its operations, this can be organised as a wholly owned subsidiary.

With self-supply the airport operator undertakes all of the functions that would be provided by a third party ANSP.

- 3.94 Four of the 16 airports under consideration in this study currently self-supply ANS, covering almost ten per cent of total UK IFR movements; Table 7. Self-supply tends to be found amongst the smaller airports in the UK and the largest self-supply airport by IFR movements is East Midlands International airport with almost 64,000 IFR movements in 2011.

Table 7 – Contracted vs. self-supply airports

	IFRs	% of UK IFRs	Number of airports
Contracted - NSL	1,593,736	68%	12
Self-supply	202,924	9%	4
Airports not included in the study	562,172	24%	-
Total	2,358,832	100%	-

Source: CAA

- 3.95 The general view from the evidence of airport operators that self-supply has been that they consider there are limited issues for contestability of their aerodrome service. The majority stated that they consider the barriers to entry low and their decision to self-supply has been mainly driven by cost, with some considering the wider strategic direction of the airport. Although there is no historic evidence of any of the operators of airports in the study having moved from a third party provider to self-supply, a number of those that do self-supply said they have turned down third party offers as they considered them to be at a higher cost and therefore uncompetitive with their current self-supply arrangement.
- 3.96 Although self-supply is an option for all airport operators, many of the airport operators that currently do not self-supply have suggested it is more difficult for an airport operator to move from third party provider to self-supply, than it is to move from self-supply to third party provider. The reasons put forward related to the ability to offer equivalent contract terms, risks associated with the movement of staff (mentioned above in paragraphs 3.19 to 3.31), and the ability to retain staff in the future (detailed discussion in paragraphs 3.32 to 3.37).

- 3.97 Current evidence indicates that self-supply in the UK tends to be focused at smaller airports and those with arguably less complex procedural requirements due to lower ATMs and less complex surrounding airspace.
- 3.98 The CAA considers that self-supply is a valid option for some airport operators in relation to ANS provision at the airport, as evidenced by the fact that one quarter of the operators of airports included in this study currently self-supply their TANS. On the evidence currently available the CAA considers that it is unlikely in the near future that any of the airport operators of tier 1 airports will opt for self-supply. It may be more feasible for operators of tier 2 airports to choose self-supply particularly where the airport is not part of the complex London approach area.

Multiple service provision at Aberdeen airport

- 3.99 There are four separate ATC services provided by NSL from Aberdeen with the following separate arrangements in place to cover each service:
- Airport ATS
 - Customer: Aberdeen Airport Ltd (AAL)
 - ATC Service: Aerodrome and approach radar service
 - Contractual Arrangement: 7 year contract expiring 31 March 2018
 - North Sea Helicopters
 - Customer: NATS (En Route) plc
 - ATC Service: provided in accordance with CAP 774 "UK Flight Information Services"
 - Contractual Arrangement: 5 year intercompany agreement expiring 31 March 2013
 - Sumburgh Approach
 - Customer: Highlands and Islands Airports Limited
 - ATC Service: Approach radar
 - Contractual Arrangement: 5 year contract expiring 31 March 2015
 - East Shetland Basin
 - Customer: Bristow Helicopters Limited; CHC Scotia Limited; Bond Offshore Helicopters Limited

- ATC Service: provided in accordance with CAP 774 “UK Flight Information Services”
 - Contractual Arrangement: 5 year contracts expiring 31 March 2015
- 3.100 NATS own the tower building at Aberdeen from which all the contracted services are managed and AAL considered that there could be complexity in managing the use of the tower infrastructure at the airport. However, AAL did not see any barriers in offering the airport service to another provider if another ANSP was willing to offer its service from the NATS tower building.
- 3.101 The ATS contract between AAL and NSL provides for the eventuality of NSL losing the Airport ATC contract through the inclusion of protections for both AAL and NSL relating to access to the Aberdeen accommodation. If the ATS contract with AAL expires or is terminated, AAL has the option to either request to purchase (on terms agreeable to NSL), or rent the NSL long leasehold interests in the Tower Building at the airport or to sublet areas required from NSL at a market value.
- 3.102 It is likely that there are economies of scale for NSL in operating multiple services from Aberdeen; however AAL stated it does not have full transparency of the cost breakdown of the multiple services provided at Aberdeen and was therefore not able to confidently assess the level of these potential economies of scale.
- 3.103 NSL stated that in the event that an agreement for access to these shared assets was not achievable, NERL would need to consider alternative options for delivering the North Sea Helicopter service, including delivery of the service from an alternative NERL facility.
- 3.104 Although there may be an effect on economies of scale from non-NSL provision of the Aberdeen TANS, the CAA does not consider that it has been presented with material evidence that this issue has an adverse impact in terms of its assessment of the second criterion of Annex I of the Regulation.

The role of airspace users’ representative in the selection process of the ANSP

- 3.105 Many of the airport operators reported that there is regular engagement with the airlines with regards to the general operation of the airport, safety issues and in the development of charging mechanisms. At the currently designated airports there is the process of constructive

engagement, overseen by the CAA²¹. During recent negotiations with NSL, HAL stated that it maintained a brief with airlines on the progress of the negotiations. Both MAG and STAL have stated that they discuss TANS issues through their respective consultative committees.

- 3.106 The majority of the operators of airports in the study considered that commercial decisions at the airports such as the choice of TANS provider were for the airport operator to decide and did not report that they involve airspace users in the actual choice of provider. However, all airport operators reported having a forum where they consult airspace users on the operational and safety aspects of TANS and would keep users informed of contractual review process. In its response IATA noted that it did not consider that there had been consultation on TANS issues with airport operators outside of the yearly charges consultations.
- 3.107 One airport operator suggested that it would include the airspace users as part of the selection process for TANS. However, another airport operator commented that it did not consider it appropriate to consult with the airlines in the ANSP selection process as airlines may lack the relevant expertise in developing this type of contract.
- 3.108 The CAA has been presented with limited evidence that airspace users are routinely and formally involved in the selection of the ANSP. However, there was consistent evidence that airport operators do involve airspace users in the wider operational and safety aspects of TANS, which feed into the airport operator's wider commercial decisions on choice of contractors at the airport. The CAA considers that there may be improvements to this engagement in the communication between airport operators and airline users. Should this be the case, the CAA considers that airline users not having a formal role in the selection of ANSPs does not necessarily mean that the market conditions requirement is not met.

Consultation response on criterion 2

- 3.109 Following consultation the CAA received support from airports and alternative ANSPs for its initial views on this criterion. One respondent argued that in addition to the evidence presented within its draft

²¹ Constructive engagement is a process developed by the CAA in which economically regulated airports actively negotiate with their airline customers over a number of aspects of the price control. Areas of airport operator and airline agreement then form the underpinning of the regulatory decision in those areas.

advice the CAA had not considered the role of NSL's reputation. This respondent suggested that the position of NATS in UK, particularly around its good reputation for safety management and its influence with policy makers and regulators acted as an effective barrier in that it could not be matched easily by potential rivals and reinforced customer inertia

- 3.110 NATS responded that its market reputation for delivering high quality services to airport operators had been hard won over many years. NATS believe that there a range of other TANS providers that have broadly similar capability and credibility.
- 3.111 More broadly with regards to this criterion, NATS commented that while a number of potential barriers had been raised, these were not certain to be barriers and views of stakeholders could in part be based on perception. It also suggested a range of credible mitigation measures could be easily implemented to reduce or avoid the potential barriers reported by the CAA
- 3.112 The CAA considers that its assessment of this criterion holds. Additionally the CAA considers that it has dealt appropriately with the NATS brand within its analysis, noting the credibility hurdle that alternative operators are likely to face in bidding for TANS in the UK.

Criterion 3: The extent to which it can be chosen from a range of service providers

- 3.113 The third criterion requires an assessment of: *'The extent to which it can be chosen from a range of service providers:*
- *the existence of a public tendering process (not applicable in case of self-supply);*
 - *if applicable, evidence of alternative air navigation service providers participating in the tendering process and having provided terminal air navigation services in the past, including the option of self-supply for the airport'*

The existence of a public tendering process

- 3.114 In considering the dynamics of the market, the frequency and extent of change of ANSPs at airports in the UK is a factor that has been considered. In contrast to the 2008 report, which identified five recent changes of TANS providers²², there has been no recent change in TANS providers since 2008 and the last change in TANS provider was in 2005 with Bristol contracting the service to NSL. NSL has not lost a contract since Glasgow Prestwick switched to self-supply on change of airport ownership in 2001. In part the lack of movement can be explained by the time that has elapsed since liberalisation and the length of contracting currently observed within the market, however many airport operators have had recent contractual review periods.
- 3.115 Since the last CAA study in 2008, ten of the 12 non-self-supply airport operators had contract review periods and only two of them resulted in full competitive tender processes with the remainder being re-awarded to NSL following some level of service or price negotiation. Many operators of airports under NSL contracts commented on the recent use of in-house market reviews as a means of assessing possible alternative providers, but in general these reviews do not appear to have identified any suitable alternative providers in the short term.
- 3.116 Table 8 shows that all but one of the ANS contracts at UK airports included in the study could change providers before the end of RP2 covering 74 per cent of total UK IFR movements. Ten contracts, covering 61 per cent of total UK IFR movements, are due for review

²² Liverpool (1999) Serco to self-supply, Southampton (2000) self-supply to NSL, Luton (2000) self-supply to NSL, Glasgow Prestwick (2001) NSL to self-supply and Bristol (2005) self-supply to NSL

specifically in the RP2 period. From the responses received in the course of this study, almost all these airport operators have stated that they intend to conduct a full competitive tender process at their next contractual review point. Therefore, it is possible that full competitive tender process could have been conducted at all but one of the airports with a third party supplier included in this study during the RP2 period.

Table 8 – Contracts due for review in remainder of RP1, RP2 and after using 2011 IFR data

Contracts due for review	IFRs	% of UK IFRs	Number of airports
Self supply	202,924	9%	4
Remainder of RP1	90,211	4%	1
RP2	1,445,787	61%	10
RP3	0	0	0
After RP3	57,028	2%	1
Not included in study	562,172	24%	-
Total	2,358,832	100%	-

Source: CAA

- 3.117 Several self-supply airport operators have indicated that they have reviewed proposals from third party alternative providers. However, other than at Bristol, these operators have not chosen to contract out their ANS service. The reasons for this tended to be due to the cost of proposed service, level of current self supply expertise, or the overall strategic direction of the airport.
- 3.118 London Luton Airport Operations Limited (LLAOL) completed a formal competitive tender process in October 2012 with a new contract awarded to NSL and Birmingham airport's operator is currently in the process of a competitive tender following a similar model to that adopted by LLAOL with a view to completing the process in 2013.
- 3.119 The experience of the competitive tender at Luton showed that there were several initial expressions of interest, including from ANSPs outside of the UK, but many dropped out throughout the process and LLAOL was left with only a small number of formal contract bids from current UK providers. Although still in the tender process Birmingham

airport's operator noted that it was disappointed in the initial level of interest that it received in its tender process.

- 3.120 HAL stated that it would like to undertake a full competitive tender process at the next contract review for 2018 but it was not certain that there would be enough interest from other suitable providers in order for this to be an effective process in the next five years. HAL stated that ideally it would want at least two alternative providers other than NSL to participate in a tender process.
- 3.121 GAL felt strongly that a change in ownership at airports in the UK provided a strong driver for airport operators to review current contractual arrangements at the airports seeking cost reductions and efficiencies as well as increased levels of service. It felt that this pressure would lead to an increase in competitive tender processes and attract more ANSPs into the UK ANS market at airports. GAL felt it was difficult to give certainty as to the outcome of any process at the airport as it was still at the beginning of the process and therefore had only considered the possibilities.
- 3.122 MAG had not yet decided if it would conduct a full competitive tender process at the time of its next review for 2015. The key issue is the complexity of the Manchester operation in terms of airspace, airfield layout, and traffic mix. A credible supplier would also need to provide a full package i.e. the TANS and the engineering support.
- 3.123 Due to the forthcoming change of ownership, STAL was not able to comment with certainty on whether or not the airport operator would conduct a full competitive tender process at the next review for 2018 but did feel that a competitive tender would be a strong possibility.
- 3.124 The majority of the operators of tier 2 airports, and Southampton, shared a strong desire to conduct a competitive tender process at their next contract reviews with cost being the main concern as well as getting further service quality indicators. Bristol airport's contract is not due for review until 2025 and therefore it would not be undertaking a contractual review in RP2.
- 3.125 The CAA encourages airport operators to undertake competitive tender as a feature of contract reviews going forward. The CAA considers that the lack of tendering to date is a factor relevant to the assessment of the third criterion of Annex I of the Regulation and it may be reflective of airport operators' views on the depth of potential competitors and the costs involved in the tendering exercise.

- 3.126 If applicable, evidence of ANSP participating in the tendering process and having provided TANS in the past, including the option of self-supply for the airport
- 3.127 The airport operator responses have highlighted the following UK ANSPs as potential providers of ANS at airports covered by this study:
- NATS Services Limited – currently supplies ATC services at 5 London airports and TANS at 10 of the largest airports in the UK, 7 of which are subject to scrutiny under this study;
 - Serco – currently supplies TANS at five civil UK airports (Scatsta, Hawarden, Cranfield, Battersea, Coventry), none of which are included in this study;
 - Vantage ATS – (formally Peel ATS) currently self-supplies ANS at all Peel Group airports of which Liverpool (John Lennon) is part of this study;
 - Manchester Airport Group – currently self-supplies TANS at East Midlands International and Bournemouth and provides services at Humberside.
- 3.128 In addition, airport operator responses also highlighted a number of European ANSPs that could be considered as alternative providers of TANS in the UK:
- DFS – German ANSP
 - LFV – Swedish ANSP
 - AVINOR – Norwegian ANSP
 - DSNA France – French ANSP
 - AENA – Spanish ANSP
 - ENAV – Italian ANSP
 - Skyguide – Swiss ANSP
- 3.129 NSL believes that the nature of the competition varies between different airports, but it currently considers its principal competition to come from airport in-sourcing, DFS, ENAV, LFV, Serco and Vantage ATS.
- 3.130 The majority of all the potential alternative ANSPs listed above do not currently operate in the UK and are from European states. A number

have expressed interest in tendering for TANS in the UK either informally or as part of a competitive tender process.

- 3.131 Some airport operators have queried whether the incentive for European ANSPs to compete across borders is reduced owing to their collaboration at the strategic level through the SES ATM Research Joint Undertaking (SESARJU) or in Functional Airspace Blocks (FABs).
- 3.132 The majority of airport operators within the study considered that there were questions about the extent to which alternative ANSPs could contest the UK TANS market. A couple of airport operators explicitly ruled out the possibility of using a new entrant due to a lack of a credible track record.
- 3.133 This perception appears more pressing at the largest airports. HAL, MAG and other airports highlighted potential alternative providers, but were less optimistic about the timescale within which an alternative provider (particularly a European ANSP) could realistically be in a position to competitively tender for TANS in the UK. HAL, in particular, considered no alternative ANSP could offer a comparable service to NSL before the end of RP2.
- 3.134 Aberdeen has a unique blend of fixed wing and helicopter traffic requiring a certain level of skill and experience in managing these types of traffic and the complex interactions between the two very different operations. This requirement could limit the number of alternative providers available to the airport.
- 3.135 GAL was the most positive airport operator about the development of alternative suppliers - over the short to medium term it considered the lead possible providers to be NSL, DFS and Serco. It noted that the developments in Spain demonstrated the potential for alternative providers to increasingly become available in the UK.
- 3.136 NSL strongly shared GAL's view and highlighted that the experience in Spain, as well as Germany, Sweden and Abu Dhabi, as demonstrating the appetite and ability of established European ANSPs to operate outside their home markets.
- 3.137 NSL considered that as more airport operators in the UK and overseas openly tender their airport ATC contracts to the market (such as the recent Luton and Birmingham open tenders); either because they see the benefits of doing so or because they are required to by relevant national or international legislation, other competitors may emerge.

Accordingly, NSL fully expects the competitive pressures in the UK TANS market to continue to increase in the future.

- 3.138 It is important to note that none of the responses indicated that airport operators were dissatisfied with the level of service and their operational relationship with NSL. In fact many described having a good, or excellent, working relationship with NSL. Generally, any issues airport operators had with their current contracts were around the transparency of, and ability to influence, the level of costs and efficiencies within the contract.
- 3.139 Fully competitive tender processes require a number of participants in order to provide airport operators with real choice and the CAA has been presented with little evidence of alternative ANSPs competing in the tendering processes in the UK thus far. In fact, the CAA has been presented with a considerable amount of perception and anecdotal evidence as to the potential reasons for the limited presence of alternative ANSPs at the airports included in this study. Whilst the experience in countries such as Spain or Germany are encouraging steps to open up the market for TANS in Europe, it is also possible that these tranche liberalisations may be more practical to achieve than the individual TANS contracts within the UK, which may continue to limit the interest of other ANSPs.
- 3.140 On balance, the CAA considers that, although alternative ANSPs exist within the UK and are clearly developing in the rest of Europe; alternative ANSPs are likely to face a significant credibility hurdle in the minds of some airport operators in the UK when responding to tenders. This is a feature of the market the CAA expects to reduce as operators become more confident in switching but at present it is likely to be a relevant factor in an assessment of the third criterion of Annex I of the Regulation.

Consultation response for criterion 3

- 3.141 Following consultation the CAA received support from the airports and alternative ANSPs for its initial views on this criterion. No new evidence was put forward.
- 3.142 Additional comments were received on the development of alternative ANSPs in the UK. One respondent noted that there were alternative credible providers but that they do not have the appetite to take on the risk to provide TANS in the UK. Further it was noted that market conditions in the UK would likely be driven from the smaller airports

upwards rather than starting with the larger airports. There was limited expectation that the larger UK airports would face market conditions before smaller airports.

- 3.143 NATS considers that there is a range of credible alternative TANS suppliers, for which it considers the recent tender exercise in Spain is evidence. Additionally NATS considers that its current market position results from a long period of innovation and striving to meet the needs of its customers, for example by delivering market leading levels of capacity and safety at some of the busiest international airports in the world.

Criterion 4: For terminal air navigation services, the extent to which airports are subject to commercial cost pressures or incentive-based regulation

- 3.144 The fourth criterion requires an assessment of: *'For terminal air navigation services, the extent to which airports are subject to commercial cost pressures or incentive-based regulation:*
- *whether airports actively compete for airline business;*
 - *the extent to which airports bear the air navigation service charge;*
 - *whether airports operate in a competitive environment or under economic incentives designed to cap prices or otherwise incentivise cost reductions;*
 - *whether there is transparency of information on prices charged for the provision of air navigation services, publicly available'*

Whether airports actively compete for airline business & whether airports operate in a competitive environment or under economic incentives designed to cap prices or otherwise incentivise cost reductions

- 3.145 Currently in the UK the three largest London airports - Heathrow, Gatwick and Stansted - are subject to price and service quality regulation (economic regulation) in addition to that set in the Groundhandling Regulations and the Airport Charges Regulations which apply to a number of airports within this study. The regulatory regime for these airports will change as Part 4 of the Airports Act 1986 is being repealed and replaced by the Civil Aviation Act 2012, which received Royal Assent on 19 December 2012.
- 3.146 As part of the review of the appropriate incentive based regulation at these airports the CAA is currently carrying out an assessment of the market power of the airport operators. So as not to prejudice the decision of these assessments or the review of regulation, it is not possible to comment further on how competitive constraints on these airport operators may develop over the coming years. However, currently the three airport operators face cost pressures through an incentive based regulatory regime.
- 3.147 GAL stated that it believes that the sale of Gatwick, Edinburgh and Stansted by Heathrow Airport Holdings Limited, previously BAA, will

increase the competition between airports particularly in the London area and this will drive further cost reductions at airports. In support of this view, GAL highlighted how it has negotiated enhanced contractual arrangements to its main outsourced service contracts and will seek to undertake a similar process when it next reviews the TANS arrangements at the next contract review.

- 3.148 MAG has not recently had an assessment of its market power; however, an assessment was conducted in 2007 which concluded that it no longer had market power. As a result of this investigation, the economic regulation of Manchester was removed. Since the removal of economic regulation the CAA has not been made aware of concerns regarding the competitive nature of MAG and in its response to the CAA's questionnaire MAG submitted evidence to suggest that it faces competitive pressures.
- 3.149 The other airport operators/airports in this study are not subject to economic regulation within the UK. The evidence submitted by the airport operators has shown that airline users have been setting up and ceasing to fly from these airports in the last three years. The evidence also suggests that the airport operators spend significant resource seeking to attract new airline business and a number of airport operators in these groups have explicitly stated that they have sought reductions in their cost base due to commercial pressures that they face from other airport operators. The CAA has also seen recent market entry (with London Southend airport) and exit (with the closure of Plymouth airport) in recent years.
- 3.150 Although a full investigation has not been conducted into the competitive landscape at the airports as part of this study, airport operators would appear to either face competitive pressures or else incentive based regulation.
- 3.151 Accordingly, without prejudice to any future decision that the CAA or other competition authorities may wish to take with regards to the level of competition at UK airports, the CAA broadly considers that airport operators in the UK face cost pressures such that they would seek to minimise the cost of ANS provision at the airport as a result of either regulation or competitive pressures.

The extent to which airports bear the ANS charge

- 3.152 The extent to which airport operators bear the air navigation service charge varies across the different airports included in this study. A single bundled tariff appears to be the most prevalent charging method at these airports and under this charging scheme the airport operator bears the cost of provision and is open to traffic risk on ANS provision at the airport, although some of the contracts have adjustments for traffic volumes. Heathrow and Gatwick are the only airports included in this study that have landing fee based contracts and therefore the airport operators bear less of the ANS charge.
- 3.153 It should be highlighted that the issue of the extent to which airport operators bear the ANS charge was not raised by any of the stakeholders as part of the study. There may be some degree to which an airport operator faces additional pressure to control costs based on the structure of the ANS charging, but the CAA has not been presented with any evidence or views to the fact that this has an effect on the development of market conditions within the UK TANS market.

Consultation response for criterion 4

- 3.154 The CAA received no additional representation on its assessment against this criterion.

Criterion 5: Where the provider of terminal air navigation services or ancillary services also provides en route air navigation services, these activities shall be subjected to separate accounting and reporting

- 3.155 At the majority of airports covered by this study NSL is the incumbent ANSP. As noted in paragraph 2.3, NSL is a wholly owned subsidiary of NATS Ltd which also owns NERL the en route provider. NERL and NSL are separate legal entities and are therefore required by law to lodge separate accounts with Companies House. Additionally NERL is required to produce separate accounts to that of its parent company under regulation.
- 3.156 Given the legal requirements for separate accounting for NERL and NSL the CAA is satisfied that this criterion is met for the TANS provided airports included within the study.

Consultation response for criterion 5

- 3.157 The CAA received no additional representation on its assessment against this criterion.

CHAPTER 4

CAA advice to the DfT on the existence of market conditions for TANS in the UK

- 4.1 The CAA considers that there is evidence pointing in different directions in judging market conditions against the criteria set out in Annex 1 of the Regulation. On the one hand, there are no statutory legal barriers - the market is liberalised and airport operators can choose to switch their TANS provider. However, the degree of movement in the UK market and actual switching to date has been low.
- 4.2 The CAA's view at the time of its last review of market conditions in 2008 recognised that there were some issues within the TANS market, but the CAA was confident at that time that European wide measures to encourage the mobility of ANSPs and ATCOs would increasingly put competitive pressure on the UK TANS market. The CAA continues to consider that these trends will improve market conditions over time but they may need more time than previously considered to result in mature market conditions.
- 4.3 The evidence collected for this current study has indicated that there may be some factors that are presently having an adverse affect on market conditions as defined by Annex 1 to the Regulation. These include airport operators' views on the relationship between NERL and NSL and the affect on transition costs arising from the ToaP.
- 4.4 With the exception of NSL, most stakeholders have indicated to the CAA that they do not in general perceive market conditions currently exist for airports over 70,000 IFR movements per year. In part this would seem to reflect airport operators' current risk tolerance for what is a vital service and one that is often provided in a complex operating environment. It also reflects their view on the breadth and track record of viable alternative providers.
- 4.5 It should be noted, however, that some of these perceptions may abate over time and the CAA is conscious that during the course of RP2 most of the present contracts at the airports will expire and many of the airport operators have expressed a desire to pursue competitive tender options. This process will help reveal further information about market conditions and it is not inconceivable that the view of some airport operators may change if they are able to attract a range of

credible rival bids. As with other markets that have been liberalised, many customers' views of relative risks may be influenced by whether other customers have made a successful transition to a new or different provider.

- 4.6 The CAA notes that the Regulation does not imply a mechanistic tick-box approach to the criteria. Rather each should be taken into account in coming to a rounded assessment of whether market conditions exist. The mixed picture found on the evidence against the individual criteria reinforces the benefit of adopting this rounded approach.
- 4.7 The CAA currently considers that the balance of available evidence and stakeholder opinion does not currently support the existence of market conditions for airports with more than 70,000 IFR air transport movements at this point in time.
- 4.8 The CAA considers that airports within the study with less than 70,000 IFR movements per year can, on the whole, take more advantage of self-supply as a credible option. There may, however, be some exceptions to this.
- 4.9 The representations made by stakeholders during the consultation highlighted a level of concern over the impact that future economic regulation may have on the development of competition within the market. The CAA continues to consider that securing effective competition in TANS provision will be more aligned to users' interests than regulation. The CAA is therefore keen to understand what proactive steps it can take in order to improve the prospects for market conditions in the future. In particular it is keen to discuss with industry steps it can take to improve the transparency of the TANS interface with NERL. The CAA is also keen to understand more from airport operators and potential new entrants what proportionate measures would enhance their confidence in the market. It will also keep abreast of developments in the rest of Europe to learn lessons from other markets that have, or may, liberalise such as Spain and Sweden.
- 4.10 The CAA welcome that NATS has indicated that it will develop measures that help to mitigate some of the issues the CAA has identified within this report. NATS requested that these mitigations be taken into account as part of the CAA's assessment. The CAA does not consider that it would be appropriate for it to take these mitigations into account for its current assessment. There has not been sufficient time to understand and assess the impact of NATS's proposals and there is

no evidence of how these mitigations would affect decisions made by airports and other ANSPs in the future.

- 4.11 Given the uncertainties in the evidence and the forthcoming expiry of most contracts in the next few years, the CAA would recommend that the DfT request the CAA to undertake further assessments of market conditions at individual airports at a later date, if circumstances were to change substantially, in order to ensure any decisions on regulation take into account the most up to date and complete information base. It is not inconceivable that at that time the balance of evidence and stakeholder opinion may have evolved for some of the airport operators especially if measures are taken to tackle the issues identified in this document.
- 4.12 In the meantime, the CAA will consider how best it can encourage the development of market conditions within the UK TANS market. The CAA is aware that there is a risk to users of introducing too rigid a regime of economic regulation to TANS if it frustrates the development of competition in a situation where the UK market could be progressing towards market conditions. It is important that the CAA in concert with the DfT, in co-operation with the PRB and the Commission, should establish a regulatory framework that supports competition in the TANS market.
- 4.13 Finally, it should be noted that the scope of evidence collection for this study has focused exclusively on the criteria in Annex 1 of the Regulation. The CAA has not undertaken a competition assessment using the techniques and methods that would be relevant to such an investigation under general competition law, such as the Competition Act 1998.

APPENDIX A**The Charging Regulation**

- A1 The Charging Regulation along with the Performance Regulation comprises the SES performance scheme. The performance scheme is being reviewed for RP2, which runs from 2015 to 2019. The outcome from an assessment of this application of the market conditions tests for TANS determines whether or not the UK could choose to opt out of the requirement to apply cost efficiency targets for TANS charges. However, it should be noted that the requirement to establish targets in the other key performance areas (safety, capacity and the environment) for TANS will still apply.
- A2 The Charging Regulation currently sets out regulatory requirements for the disclosure of costs, the calculation of charges and the setting of unit rates for the provision of ANS. Article 3 of the Regulation includes provision for an assessment of the existence of market conditions for the provision of TANS, which Member States can carry out with regard to the provision of ANS at airports. If contestability is demonstrated, the Member State can apply a reduced set of regulatory requirements in respect of ANS provision at airports with 70,000 or more IFR ATMs²³ per year.

²³ IFRs refers to take-offs and landings performed under instrument flight rules as defined in Annex 2 of the 1944 Chicago convention on International Civil Aviation (Tenth Edition – July 2005).

APPENDIX B**Draft text of Annex I of the Regulation**

- B1 The conditions to be assessed for determining whether terminal air navigation services and/or ancillary services are provided under market conditions are as follows:
1. The extent to which service providers can freely offer to provide or withdraw the provision of these services:
 - a) the existence or otherwise of any significant legal or economic barriers that would prevent a service provider from offering to provide or withdrawing the provision of these services;
 - b) the contract duration, and
 - c) the existence of a procedure allowing assets and staff to be transferred from one air navigation service provider to another.
 2. The extent to which there is a free choice in respect to service provider, including, in the case of airports, the option to self-supply:
 - a) the existence or otherwise of legal, contractual or practical barriers to change service provider or in the case of terminal air navigation services to move towards self-supply of air navigation services by airports;
 - b) the role of airspace users' representatives in selecting the service provider.
 3. The extent to which it can be chosen from a range of service providers:
 - a) the existence of a public tendering process (not applicable in case of self-supply);
 - b) if applicable, evidence of alternative service providers participating in the tendering process and having provided services in the past, including the option of self-supply for the airport.
 4. For terminal air navigation services, the extent to which airports are subject to commercial cost pressures or incentive-based regulation:
 - a) whether airports actively compete for airline business;

- b) the extent to which airports bear the air navigation service charge;
 - c) whether airports operate in a competitive environment or under economic incentives designed to cap prices or otherwise incentivise cost reductions.
5. Where the provider of terminal air navigation services or ancillary services also provides en route air navigation services, these activities shall be subjected to separate accounting and reporting.
 6. For terminal air navigation services, the assessment in this Annex shall be carried out at each individual airport, as appropriate.

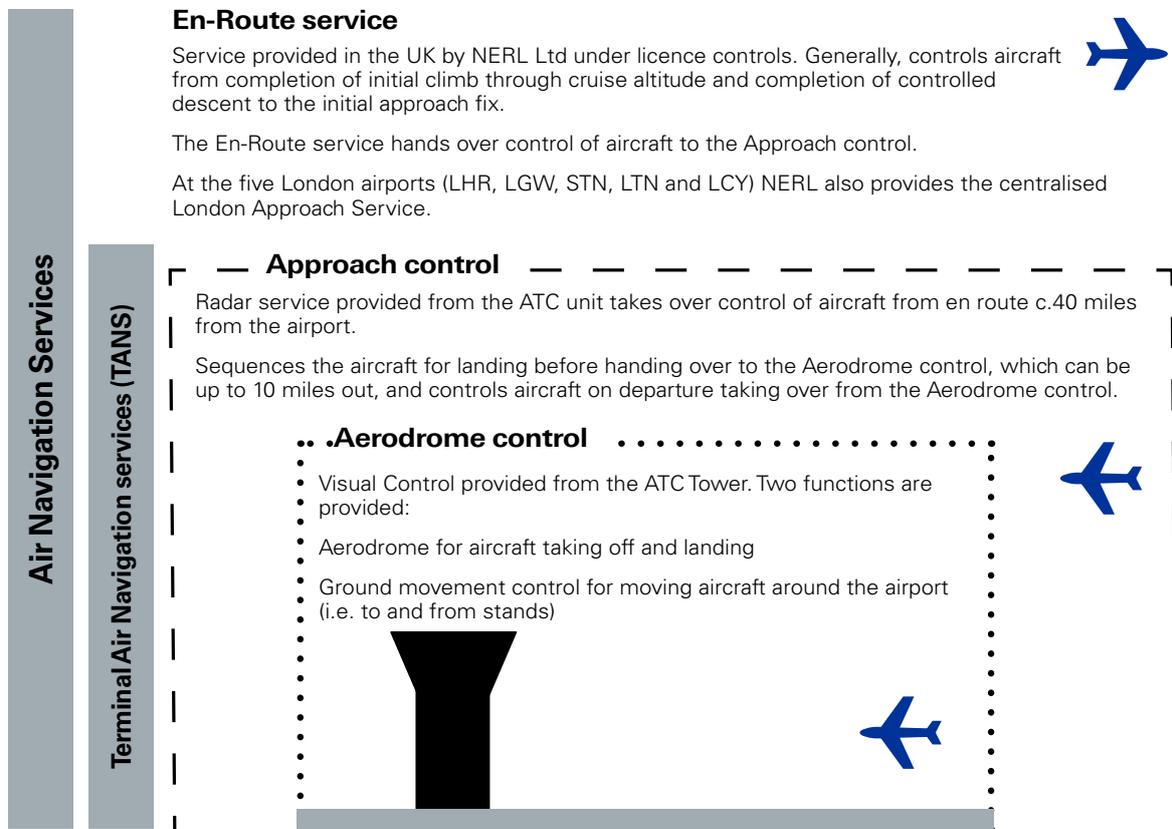
APPENDIX C**The provision of ANS in the UK**

ANSP at airports – the Basics

- C1 ANS provision at UK airports typically consists of an aerodrome control service, together with an approach control service, either based on radar or on procedural control techniques (which rely on aircraft reporting their position in relation to ground-based navigation aids and approved procedures), (Figure 2).
- C2 The approach control radar service involves air traffic controllers directing pilots descending from the en route (cruise) controlled phase, typically from a distance of around 40 miles from the airport. Once aircraft come within around 10 miles of the airport, and are established on the approach track, they will be transferred to the aerodrome controllers for their final descent onto the runway. The precise point at which the transfer between approach and the aerodrome control occur will vary from one airport to another and from time to time depending on specific conditions on the day, e.g. weather. The same division between the radar and visual service will generally apply to aircraft taking off from the airport concerned, although the transfer of control on departure will normally occur immediately after take-off.
- C3 Aerodrome controllers are split into air control and ground control. An air controller is responsible for the operation of the runway; guiding the aircraft through take off and landings, and aircraft crossing the runway if needed. The ground controller is responsible for directing the aircraft around the airport once it has left or before it reaches the runway²⁴.

²⁴ This includes all aircraft movements, between the runway and parking stand and to and from the maintenance bays.

Figure 2 - Illustration of Air Navigation Services



Source: CAA

London Terminal Control service

- C4 The situation in the London area is distinct from the rest of the country as the London Terminal Control Centre (LTCC) provides a centralised radar service for traffic across South East England below 24,500ft flying to or from London’s main airports (Heathrow, Gatwick, Stansted, Luton, and London City). LTCC is based at NATS’ main control centre at Swanwick.
- C5 London Terminal Control is conducted by NERL under a licence from Government initially granted for a minimum period of 30 years (i.e. until 2031) with NERL exclusivity until 2011. Since 2006 the cost base for the London approach service for Heathrow, Gatwick and Stansted has been included within the assessment of the CAA’s price control of NERL. The provision of the approach control service by NERL for the other London airports within the TMA is authorised under NERL’s licence. The charges for this service to the 5 London airports (Heathrow, Gatwick, Stansted, Luton and London City and the other airports in the South East in around the London TMA) is regulated as part of the RP1 settlement.

- C6 Given the complexity of airspace in and around the London area, and the number and nature of aircraft movements within it, such a centralised and co-ordinated service is considered to be the safest, most efficient means of providing approach control within this section of airspace. This area would typically control aircraft from around 80-100 miles from their airport of destination, further out than approach control elsewhere in the country, to within around 10 miles, before handing them over to the aerodrome control service at the individual airports.
- C7 The London Terminal Control service is a blend of en route and approach control and as noted currently the service is provided by NERL under licence. It is the CAA's view that the approach service would not meet the market conditions assessment criterion. However as it is provided under the NERL licence the service is conducted under price control regulation.
- C8 The following 62 organisation have been certificated by the CAA to provide ANS in the UK:

Table 9 – Organisations certificated by the CAA to provide ANS

	Organisation
1	Airways Aero Associations Ltd (Wycombe)
2	Air Caernarfon Ltd
3	Albemarle Shoreham Airport Ltd
4	Argyll & Bute Council (Oban)
5	ATC Lasham Ltd
6	BAE Systems Marine Ltd (Walney Island)
7	BAE Systems (Operations) Ltd (Warton)
8	Belfast City Airport Ltd
9	Bickerton's Aerodromes Ltd (Denham)
10	Biggin Hill Airport Ltd
11	Blackbushe Airport Ltd
12	Blackpool Airport Ltd
13	City Airport Ltd (Barton)
14	CODA (Operations) Ltd (Derry)

	Organisation
15	Cornwall Airport Ltd
16	Council Of The Isles Of Scilly (St Mary's)
17	Cumbernauld Airport Ltd (Cumbernauld)
18	Dundee Airport Ltd
19	Enniskillen Airport Ltd
20	Exeter & Devon Airport Ltd
21	Fairoaks Airport Ltd
22	Gloucestershire Airport Ltd
23	Goodwood Road Racing Company Ltd
24	Herefordshire Aero Club Ltd (Shobdon)
25	Highlands and Islands Airports Ltd
26	Humberside International Airport Ltd
27	Imperial War Museum Duxford
28	Infratil Airport Europe Ltd
29	Kemble Air Services Ltd
30	Leeds Bradford International Airport
31	Leicestershire Aero Club Ltd
32	London Ashford Airport
33	London Southend Airport Company Ltd
34	Manchester Airport Group Plc
35	Marshalls of Cambridge Aerospace Ltd
36	Met Office
37	Mid-Wales Airport Ltd (Welshpool)
38	Montclare Shipping Co. Ltd (Elstree)
39	NATS (En Route) Plc

	Organisation
40	NATS (Services) Ltd
41	Newcastle International Airport Ltd
42	Norwich Airport Ltd
43	Oxford Aviation Services Ltd
44	Vantage Airports UK Ltd
45	Pembrokeshire County Council
46	Radarmoor Limited (Wellesbourne)
47	Redhill Aerodrome Ltd
48	Rochester Airport Plc
49	Safeskys Ltd
50	Serco Ltd
51	Shenley Farms (Aviation) Ltd (Headcorn)
52	Sherburn Aero Club Ltd
53	Shetland Islands Council (Tingwall)
54	Shuttleworth Old Warden Aerodrome
55	Stobart Air Ltd (Carlisle Airport)
56	Sywell Aviation Ltd
57	Tatenhill Aviation Ltd
58	AgustaWestland Ltd
59	West Wales Airport Ltd
60	Westward Airways (Land's End) Ltd
61	Wolverhampton Airport Ltd

APPENDIX D

Evidence collection

- D1 As the main method of data collection a questionnaire was devised and sent to the relevant airport operators, ANSPs at the airports, prospective ANSPs, and airline industry groups. An initial letter garnering a response was sent on 22 June 2012. Following the initial questionnaire, a second round of information gathering was conducted with respondents where it was felt there was a need for additional clarification through face to face interviews or written requests for additional information. Table 10 lists the responses that have been received to date²⁵.
- D2 The CAA was to hold an evidence review session with affected parties on 18 December 2012; due to unforeseen events the session was cancelled. Briefing was, however, provided to the affected parties and comment was invited. Where appropriate this has fed into the CAA's analysis.

Table 10 – Responses received to date

	Written	Interview	Workshop
Heathrow	X	X	X
Gatwick	X	X	X
Manchester	X	X	X
Stansted	X	X	X
London City		X	
Luton		X	
Aberdeen	X	X	
Birmingham International	X	X	X
East Midlands International	X		
Edinburgh	X	X	

²⁵ Requests were sent to other organisations but, to date, they have declined to provide a response.

	Written	Interview	Workshop
Glasgow	X	X	
Newcastle	X		
Bristol		X	
Belfast City (George Best)	X		
Liverpool (John Lennon)	X		
Southampton	X		
NATS Services Ltd (NSL)	X	X	X
LFV	X		
Vantage ATS (formally Peel ANS)	X	X	X
Serco	X		
European Low Fares Airline Association (ELFAA)	X		
International Air Carriers Association (IACA)	X		
International Air Transport Association (IATA)	X		

Table 10 Note:

Other organisations did attend the workshop however these have not been included on the list as they did not form part of the initial evidence collection process.

APPENDIX E**ATCO licensing**

- E1 Civil ATCOs must hold an ATCO licence and it is through the requirements associated with the licence that controllers are regulated and enabled to practise. There are two major stages towards gaining an ATCO licence:
- E2 Initial training leading towards the granting of a Student ATCO licence; and
- E3 Unit specific training leading towards the issue of an ATCO licence.
- E4 Initial training courses are provided by a number of ATC training organisations that have been certified to do so by the CAA. In the UK NATS, Global Aviation Training Services (ATS) Limited, and Resource Group Limited are the only organisations approved by the CAA to provide Initial ATCO training programmes.
- E5 Following initial training, a Student ATCO licence permits the controller to provide an ATC service at an aerodrome or ATC centre, but only under the supervision of a fully qualified ATCO, under an approved unit training plan. The purpose of unit training is to teach the controller to apply local procedures and to enable them to gain the skills that they will need to become an ATCO at that unit. Currently this can only be conducted by an ATCO that is already validated on the unit. Upon successful completion of the unit training plan, the controller must then pass their rating examination to obtain a full ATCO licence.
- E6 It is difficult to state the exact time required to train a new controller as it is dependent on the skills and abilities of the controller and how quickly the controller is able to accrue quality training time on representative traffic presentations. Unit training plans are subject to continual review and assessment of the trainee controller in order to gauge when they would be ready to take their rating examination. Responses suggest that unit specific training for a new controller could range from six to twelve months with experienced controllers likely to be able to achieve a new rating in less time. It has also been noted that it would not necessarily be possible to train all the required ATCOs simultaneously; therefore the process of re-staffing an ATC unit could take a number of years.

- E7 The ratings and rating endorsements that an ATCO receives indicate the type of ATC service they are able to provide along with the specialist tasks within those ratings, and where appropriate, the surveillance equipment used to provide the service. Evidence from NATS indicates that the success rate for students seeking a unit validation at NSL units is approximately eighty per cent, although there are differences in success rates between the different units.
- E8 At the end of the process, ATCOs are qualified to provide certain specific services at a particular location. At the airport level ATCOs are generally required to be validated on both the aerodrome and approach services, with the exception of some airports within the London TMA where ATCOs based at the airports are validated only on the aerodrome service as the approach service is provided centrally by NERL.

APPENDIX F

Map of UK licensed aerodromes



Source CAA