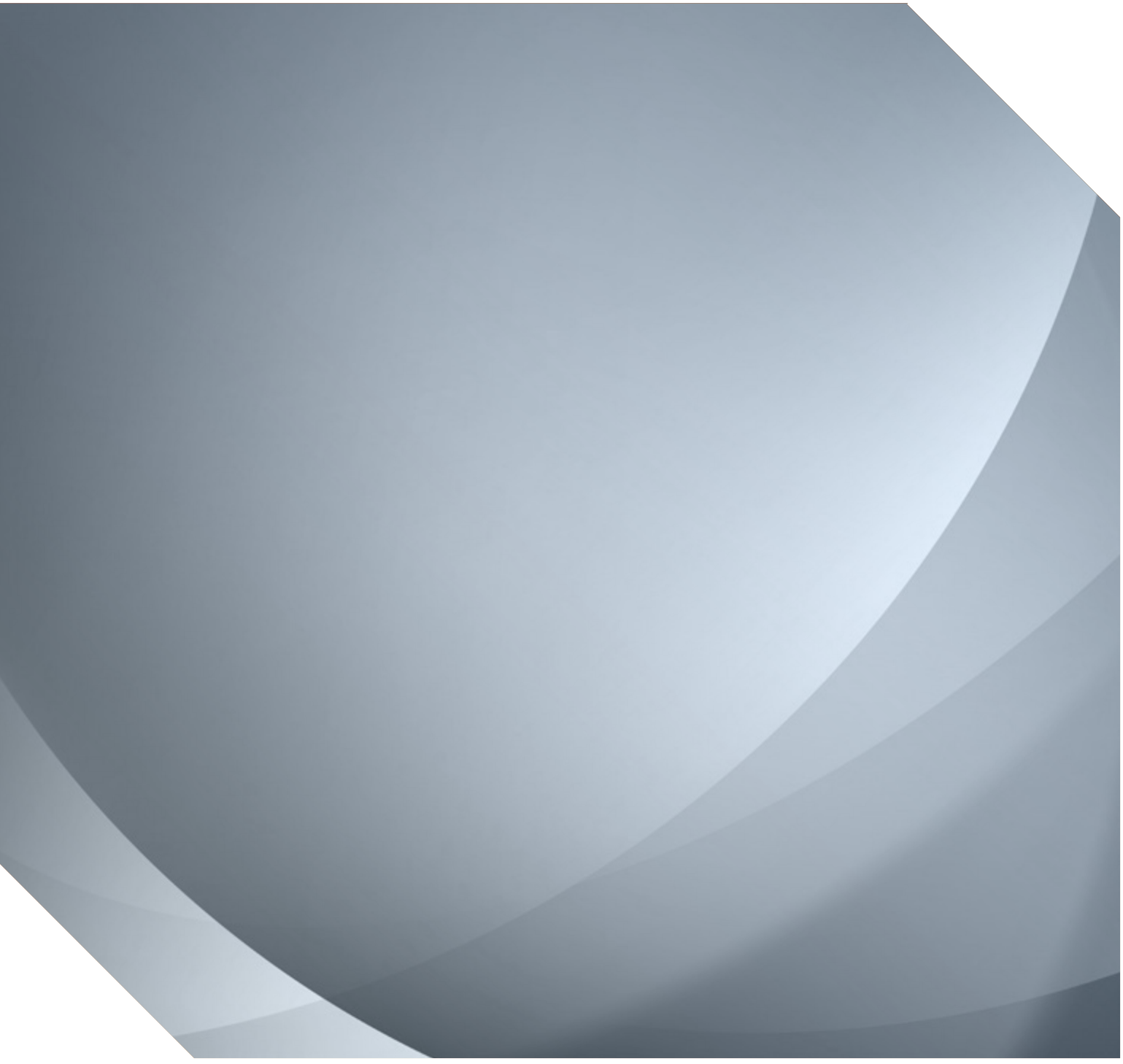
Civil Aviation Authority

Approach to terminal air navigation service regulation in RP2 – a consultation

CAP 1132



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Markets and Consumers Group

CAP 1132

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Executive summary

1. We are consulting on our approach to the regulation of UK terminal air navigation services (TANS) for Reference Period 2 (RP2, 2015 to 2019) of the Single European Sky Performance Scheme.

2. As the balance of available evidence and stakeholder comment does not currently support the existence of market conditions for TANS at UK airports with over 70,000 annual instrument flight rule (IFR) we have to set performance targets for TANS providers covering cost-efficiency as well as capacity (measured by delay), which would be required in any case. Our aim is to regulate in a way that will not hinder the development of a contestable market or cut across the provisions of existing contracts between air navigation service providers (ANSPs) and airport operators. The cost-efficiency target, therefore, will be a charging-zone target, monitored at airport level with contracting as the delivery mechanism.

3. In setting performance targets we will take into account the results of a benchmarking study undertaken for us by Capita and NATS (Services) Limited's (NSL's) draft business plan for RP2. We do not endorse the content of these documents at this stage but are publishing them for stakeholder comment.

4. We will also take account of responses to this consultation as an input to the development of the terminal component of the UK-Ireland FAB Performance Plan for RP2.

5. We plan to consult jointly with the Irish Aviation Authority on the UK-Ireland Functional Airspace Block (FAB) Performance Plan for RP2 in February 2014.

CHAPTER 1

Introduction

Introduction

1.1 This consultation sets out our approach to the regulation of TANS in the UK under the Single European Sky Performance Scheme, which comprises the performance regulation[1] and the charging regulation[2]. The responses to this consultation and amendments made to the approach outlined within will feed into the UK TANS component of the UK-Ireland FAB Performance Plan for RP2 of the Performance Scheme.

Consultation

1.2 Responses to this consultation should be made in writing to us by 8 January 2014. We expect to make responses available on our website after the period for written comments expires. Any material that is regarded as confidential should be clearly marked as such. Please note that we have powers and duties with respect to information under section 102 of the Transport Act 2000 and the Freedom of Information Act 2000. Responses should be sent to rod.gander@caa.co.uk.

Structure of this document

1.3 This document is structured as follows:

- Chapter 2 considers our overall approach to the regulation of TANS services in the UK.
- Chapter 3 presents Capita's benchmarking study, of NSL's operations at UK airports with over 70,000 IFR movements. The report is on our website at http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15602 .

1 Commission Implementing Regulation (EU) No 390/2013 of 3 May 2013 laying down a performance scheme for air navigation services and network functions

2 Commission Implementing Regulation (EU) No 391/2013 of 3 May 2013 laying down a common charging scheme for air navigation services.

- Chapter 4 presents NSL's draft business plan for TANS in RP2. The plan is on our website at http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15603 .
- Chapter 5 sets out the next steps in our process for setting TANS performance targets for RP2.

1.4 The remainder of this chapter provides background to the provision of TANS within the UK and why we regulate these services.

Background

1.5 The provision of TANS within the UK has historically been subject to only limited economic regulation. We currently certificate about 60 organisations to provide ANS in the UK. These range from those who provide services at a number of airports (such as NSL and the Manchester Airport Group) to airports of varying sizes that provide their own ANS (for example Newcastle Airport or Shuttleworth Old Warden Aerodrome) and providers of more specialist services (such as the Met Office).

1.6 The UK TANS market has never been a statutory monopoly. Airports have been free to provide their own TANS or to contract an independent provider. The main provider at the larger airports has been NATS, which was previously part of the CAA. Following the Transport Act 2000 (TA 2000), NATS was separated from the CAA with the formation of a public private partnership (PPP). A new company NATS Holdings Limited was formed, which includes a number of subsidiary companies including NATS (En Route) Plc (NERL), which is licensed to provide air traffic service in en route airspace and NSL which provides TANS. TANS providers are exempted from the need to hold a licence under TA 2000 at least until 31 December 2019[3].

1.7 The Performance Scheme applies to airports with at least 70 000 IFR air transport movements per year[4]. In the UK the airports that met this threshold in 2012 were:

- Heathrow Airport;
- Gatwick Airport;

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

4 Movement numbers are taken from Eurocontrol data.

- Manchester Airport;
- Stansted Airport;
- Edinburgh Airport;
- Luton Airport;
- Birmingham Airport; and
- Glasgow Airport.

1.8 NSL is the current provider of TANS at the airports covered by this regulation. However, Birmingham Airport will be switching from NSL to providing TANS on a self supply basis during 2015.

1.9 The approach service to London airports (including Heathrow, Gatwick, Stansted and Luton) is provided by NERL from Swanwick Terminal Control Centre. Currently NERL levies charges directly on users of the service instead of airports levying charges. The mechanism for charging for the London Approach service is being reviewed for RP2, and was the subject of a separate consultation activity (http://www.caa.co.uk/docs/33/CAP%201098%20London%20approach%20CONDOC.pdf). The outcome of the London Approach consultation and this consultation on TANS will inform our approach to target setting and development of the RP2 performance plan.

1.10 In March 2012 the Department for Transport (DfT), under section 16 of the Civil Aviation Act 1982, requested that we undertake an assessment of market conditions pursuant to Annex 1 of the charging regulation[5]. The study found that on the evidence available market conditions were not present for the provision of TANS at airports with over 70,000 IFR air transport movements. It found a number of barriers to entry that were impacting on the development of competitive market conditions, in particular:

- a lack of clarity and uncertainty around the relationship between NERL and the tower operations; and

5 CAA (2013), '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', CAP1004. The report is on our website at www.caa.co.uk/cap1004

- NATS Deed of a Trust of a promise covering pensions for staff employed by NATS at the time of the PPP[6].

1.11 We are considering how to address these issues and how we can support the development of market conditions within the provision of TANS, which will be the subject of a separate stream of work. This activity and document focuses on the requirements for developing TANS targets for RP2 of the Performance Scheme.

European process

1.12 For RP2, the European Commission has taken a more gate to gate approach to ANS performance than in RP1[7]. Whilst in RP1 there was some provision for TANS cost and capacity (delay) reporting, this has been expanded for RP2 with requirements for TANS target setting for cost-efficiency (subject to assessments of market conditions) and capacity in performance plans. The Commission has also made provision for the establishment of an EU-wide terminal cost-efficiency target from 2017, subject to further work by its Performance Review Body.

6 In its draft Business Plan NSL made some proposals which it considers would help mitigate these issues.

7 RP1 covers the calendar years 2012 to 2014.

CHAPTER 2

Approach to the regulation of TANS

Aims of regulation

2.1 The aim of the Performance Scheme is to improve the efficiency and performance of air navigation services, including TANS.

2.2 Where contestable market conditions are not present the Performance Scheme mandates the economic regulation of TANS performance. The Scheme assumes that TANS providers normally charge airlines using their services directly. However, in the UK, TANS is provided under contract to the airport, with the airport paying the provider.

2.3 Given the stage of development of the UK TANS market we are concerned that if inappropriate regulation is applied it could hinder the development of a competitive market. To avoid doing so, we intend to apply the Scheme in a proportionate manner. In particular we aim:

- not to cut across the provisions in current contracts; and
- to ensure that airports are able to operate a fair and open tender process.

The performance and charging regulations

2.4 The performance regulation sets out the main scope of the Performance Scheme, which has four key performance areas (KPAs):

- safety;
- capacity;
- environment; and
- cost-efficiency.

2.5 Key performance indicators (KPIs) for each KPA are set out in section 2 of Annex 1 of the performance regulation. The Commission is currently developing RP2 EU-wide targets for the KPIs that apply to en route; and has made provision to establish an EU-wide terminal cost-efficiency target in 2017, subject to collection of sufficient data. Performance

plans must demonstrate consistency with and contribution to the achievement of EU-wide targets, where they are established.

2.6 For terminal capacity and cost-efficiency (until 2017 at least) performance plans must contain targets. For capacity the requirement is for a target at the national level, broken down for monitoring at the airport level. For cost efficiency the requirement is for a target at the charging zone level.

2.7 Additionally there are Performance Indicators (PIs) that are reported on at the airport level but for which there are no European targets. These are on capacity and environment and are listed in Appendix A. For safety, target setting against KPIs is at the FAB level, with some KPI and PI reporting requirements at the ANSP level.

TANS KPIs

2.8 The TANS KPIs are:

- capacity - the average minutes of arrival air traffic flow management (ATFM) delay per flight attributable to terminal and airport air navigation services and caused by landing restrictions at the destination airport. The indicator;
  - is the average ATFM delay per inbound IFR flight generated by the arrival airport;
  - covers all IFR flights landing at the destination airport and all ATFM delay causes, excluding exceptional events; and
  - is calculated for the whole calendar year and for each year of the reference period.
- cost efficiency - the determined unit costs (DUC) for terminal air navigation services. The indicator:
  - is the result of the ratio between the determined costs and the forecast traffic, expressed in terminal service units, contained in the performance plans in accordance with Article 11(3)(a) and (b);
  - is expressed in real terms and in national currency; and
  - is provided for each year of the reference period.

2.9 Details on the cost-efficiency indicators are provided in the charging regulation. This forms the basis of our approach to the setting of the targets for this indicator.

2.10 Although in Europe TANS is most commonly financed by charges imposed on users of services by the ANSP, Article 4(3) of the charging regulation makes provision for financing by other revenues[8].

2.11 Article 2 (10) defines other revenues as:

- *'revenues obtained from public authorities, including the financial support from Union assistance programmes such as the Trans-European transport network (TEN-T), Connecting Europe Facility (CEF) and the Cohesion Fund, revenues obtained from commercial activities and/or, in the case of terminal unit rates, revenues obtained from contracts or agreements between air navigation service providers and airport operators.'*

2.12 We consider that, as in the UK TANS revenues come from contracts between ANSPs and airport operators, this exempts UK TANS from the requirements of the charging regulation covering the calculation of terminal charges in Article 12 of the charging regulation.

2.13 The regulation of UK TANS however does require the application of the requirements on the calculation of costs (Article 7) and the provision of information (Table 1 of, Annex 2) of the charging regulation.

2.14 Given that the cost-efficiency KPI is set at the charging zone level the CAA intends to establish a charging zone level target with the expectation that contracting for TANS will provide the mechanism for its achievement. To assess the level of the target and form its initial views we will consider:

- NSL's draft business plan for the provision of TANS; and
- Capita's study on UK TANS charge/IFR benchmarking[9].

2.15 We will also consider evidence presented in response to this consultation before our consultation on the performance plan.

8 Article 4(3) says 'The determined costs of terminal air navigation services shall be financed by terminal charges imposed on users of air navigation services, in accordance with the provision of Chapter III, and/or other revenues'.

9 We will also take account of Birmingham Airport's forecast costs for TANS as a self provider.

The application of the approach to the cost of capital in Article 7 of the charging regulation

2.16 Article 7 sets out an approach to calculating the cost of capital for TANS using a weighted average cost of capital (WACC). However, the underlying purpose of WACC is to identify what returns on capital will compensate risk (risk being defined as the expected variability in cash returns). But in reality risk is not compensated in the same way in capital-intensive and capital-light businesses. In the latter, it is the return on sales that is generally the prime metric, rather than return on capital. Converting the former into the latter means that even large changes in WACC might not alter the overall returns in the business very much, not enough to compensate the real risks to cash returns. So a more direct assessment of profitability (such as return on sales) might be more appropriate than allowing a return on capital..

2.17 At UK airports that contract out TANS provision, assets are often owned by the airport or by third party leasing companies, rather than by the TANS provider. In some cases these assets and properties are leased to the TANS provider who includes these lease costs in the charges it makes to the airport. We consider this as an important enabler to the development of market conditions for the provision of TANS which should make it easier for airports to switch providers. TANS provision in the UK is therefore more of a service based operation than a capital focused business model.

2.18 The charging regulation states that where assets do not belong to the ANSP, but are included in the calculation of the cost of capital, they shall not be counted twice. We consider that:

- where a price regulated airport[10] owns the assets the return on this asset will be taken account of within price controlled airport charges; and
- where a non-regulated airport owns the assets the return on the asset is likely to be already factored into its airport charges.

2.19 Consequently, in the UK, where an ANSP does not own the assets, they shall not be included in the cost of capital calculations.

2.20 In theory assets used to provide TANS could be identified and an appropriate cost of capital calculated for them. However, when airport

10 Heathrow, Gatwick and Stansted are currently price regulated.

charges are set on a single till basis[11] separating out assets and calculating a cost of capital could lead to double counting as the cost of capital would be remunerated through the airport charges levied by the airport operator on users. If the CAA calculated a cost of capital there could be the following complicating factors:

- an airport may have a different cost of capital than that of an ANSP providing TANS. For a strict calculation we would have to calculate the ANSP cost of capital at each airport; and
- given the ownership of the assets rental charges associated with their use may well be included within the contract as an operational cost.

2.21 In its initial data submission for RP2 in June 2013 NSL, in agreement with us and DfT, did not present a WACC but, for reporting purposes, presented the profit it earns as a pre-tax return on sales on its contracts.

Transparency and commercial sensitivity

2.22 Article 9 of the charging regulation calls for a level of cost transparency. Cost transparency was also an issue raised in CAP 1004 (see footnote 6). We consider that airports should gain cost transparency on TANS provision through the competitive tender process. Table 1 in Annex 2 of the charging regulation will need to be completed. This table must be completed in aggregate at the charging zone level, but also at each airport with over 70,000 IFR movements. We are aware that while data submissions to the Commission have been made at an airport level, for reasons of commercial confidentiality only aggregate data for the eight airports has been made publicly available.

2.23 While we consider that some degree of cost transparency would assist in the development of market conditions for TANS provision, transparency at the individual airport level could be counter-productive as it could reveal too much information to potential bidders for TANS contracts and could lead to detrimental effects, such as:

11 The single till is a regulatory concept under which the revenue from all the airport operator's activities at the airport (e.g. including retail and car parking) are taken into account when setting the airport's charges on airlines for aeronautical activities. The single till is considered to broadly reflect pricing at competitive airports.

- a fixation on contract margins that could lead to a 'race to the bottom', leading to insufficient margin that could deter market entry, innovation, resilience and service quality; and
- the maintenance of excess margins where the full contract price is known to potential bidders as it might reduce the incentive to compete vigorously. Bidders might only need to offer a contract at just less that the current contract price in order to win the contract. Where this is a more efficient supplier potential savings in the cost of the service would not be passed on to the airport or airspace users. Where the supplier is less efficient than the incumbent this may embed inefficiency in the market and reduce the scope for innovation as the margin is squeezed.

2.24 In general, European and domestic competition law considers the publication of contract prices and cost data as anti-competitive and not conducive to the development of full market conditions.

2.25 We intend, therefore, that the publication of data should be limited to the charging zone level. ANSPs would supply us with data for individual tower operations which we would handle in a way that maintains commercial confidentiality. ANSPs should share cost data, as appropriate, with their airport customers as part of their commercial contract negotiations.

Summary of approach to cost-efficiency

2.26 In summary our approach to cost efficiency is:

- to calculate determined unit costs at the charging zone level;
- to require ANSPs to cooperate in the publication of data at the charging zone level and to provide airport level data to us and in submissions to the Commission;
- to require ANSPs to present the cost of capital within the data as the difference between the cost of provision and contract price in any given year;
- to set a charging zone level target on the reduction of the determined unit cost over the RP2 period; and
- to not expect an immediate reduction in the current contract rates. However, we expect cost savings to be delivered during airport ANSP contract negotiations. We also expect airports to run a formal competitive tender process before awarding contracts.

Contracting for KPIs and PIs

2.27 We consider that safety, the environment, capacity and cost efficiency are all aspects which an airport would take into account when awarding contracts and, where appropriate, performance on them is likely to be incentivised in the contract.

2.28 We consider that airports should have in mind the performance targets, however, the exact transposition of the European KPIs and PIs into a contract may not be practicable as they are designed for regulation in the absence of market conditions. However, airports should be in a position to negotiate on all issues relating to ANSP performance as part of their contract negotiations.

2.29 We consider that airports are best placed to decide the areas and levels of performance needed to deliver the service they require for their customers. We expect as best practice that performance measure will form part of any contract negotiation. However we recognise that these may vary from airport to airport as airports seek to tailor their service to their customer base.

Implementation and Monitoring

2.30 Annual reporting of performance in relation to the targets set is required under Article 18 of the performance regulation. We will report performance to the Commission by 1 June in each year of the reference period.

2.31 In order to produce our reports we will require ANSPs to report their performance to us in line with any guidance published by the Commission. Current guidance is for performance data in a year to be provided by no later than 1 April in the following year. This will ensure sufficient time for us to assess the level of performance against the targets and consider the implications for any remedial action.

2.32 It is expected that ANSP performance reports will align with Commission guidance and extant reporting requirements set out in the Performance Scheme and Common Requirements legislation, and as a minimum contain:

- performance to date against the targets (presented in the appropriate format);
- for targets that have not been met, explanations why this is the case and any action that has been taken to correct it; and

- an indication of whether targets will be met in the following year. Highlighting, as appropriate, any foreseeable impediments to the delivery of the targets.

2.33 Under Article 18(2) of the performance regulation where the Commission witnesses a significant and persistent drop in performance, it may require the Member State to define, apply and inform the Commission of corrective measures designed to achieve the performance targets. In the UK this means that on behalf of the DfT we would produce, in consultation with the airport and the ANSP, a corrective action plan aimed at correcting the underperformance.

CHAPTER 3

Benchmarking efficiency of TANS provision

Introduction

3.1 In October 2013 we commissioned Capita to advise on the cost efficiency of NSL's TANS operations at seven of the eight airports with over 70,000 IFR movements at which it provides TANS[12]. Capita was asked to benchmark NSL's charges at these airports against TANS provision at other relevant UK airports and European services. This is the first time that we have commissioned such a study. As there are large variations in the service requirement (for example approach services for the London airports are provided by NERL at Swanwick rather than through the TANS contracts), context and asset provision by the TANS providers the study was a relatively high level review of the service costs.

3.2 Capita benchmarked the larger UK airports (Heathrow, Gatwick, Manchester and Stansted) against each other and comparable European airports, and the other UK airports in the study (Luton, Edinburgh and Glasgow) against each other and comparable European airports. Capita's report is available on our website at http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15602 .

3.3 We do not endorse the content of the study at this stage and would welcome stakeholder comments on it. We recognise, however, that as the published version of the report has been redacted to remove commercially confidential information, that stakeholder comments may be limited to the approach to the benchmarking rather than the results.

12 The airports covered by the study are: Edinburgh, Gatwick, Glasgow, Heathrow, Luton, Manchester and Stansted. Birmingham Airport is not covered by the study.

CHAPTER 4

NSL TANS draft business plan

4.1 NSL has produced a draft Business Plan covering the seven major airports that fall within the TANS criteria for RP2 where it provides ANS under contracts with the airport operator. The draft Plan serves as an input for our consideration in setting a charging zone level target for terminal cost-efficiency and a national target for terminal capacity. The plan is on our website at http://www.caa.co.uk/default.aspx?catid=78&pagetype=90&pageid=15603 .

4.2 NSL's forecasts for airport ATFM delay, are shown in Figure 1. In broad terms it expects to maintain historic levels of capacity performance, in the face of increasing traffic levels across the airports it provides services to in scope of the Performance Scheme.

Figure 1: ANSP Attributable (PRU)

Average Airport Arrival ATFM Delay - ANSP Attributable (PRU C,G,S&T Causes)

Mins / flight	Historic Performance **Average 2008-12**	Current Performance **2013 YTD**	RP2 Predicted Outcome **Average 2015-19**
Manchester	0.19	0.01	0.19
Luton	0.10	0.01	0.10
Gatwick	0.40	0.15	0.40
Heathrow	0.74	0.17	0.74
Glasgow	0.01	0.00	0.10
Edinburgh	0.21	0.02	0.21
Stansted	0.03	0.02	0.10
All Airports	*0.28*	*0.10*	*0.28*

Source: NATS Terminal Air Navigation Services (TANS) draft RP2 Business Plan (2015-19)

4.3 Compared to 2014, NSL is planning on total determined costs remaining constant in RP2, which, with a forecast increase in terminal service units of 2.0%, would result in a corresponding reduction of 2.0% per in real unit costs. These numbers exclude for comparison purposes Birmingham Airport's costs and traffic prior to March 2014 and are based on the terms of NSL's existing contracts with airport operators. These contracts all expire during the course of RP2 and therefore the expected competitive tendering processes may lead to a different profile of costs after the expiry of the existing contracts.

4.4 At this stage we have not conducted any detailed analysis of the draft NSL Business Plan and therefore do not endorse the levels of expected performance detailed therein, but welcome stakeholder views on its content.

CHAPTER 5

Next steps

5.1 We will need to establish a national terminal performance target for capacity and and a charging zone terminal performance target for cost-efficiency in the Performance Plan. We will set out our views on the appropriate UK targets for these KPIs when we to consult on the Performance Plan in February 2014.

5.2 We invite stakeholders to comment on the benchmarking study, draft NSL Business Plan and our proposed approach to developing appropriate targets for capacity and cost-efficiency for RP2. In particular, we would welcome comments on the extent to which we should consider that airports will be able to obtain lower prices and increased capacity through tendering for TANS provision when their current contracts come up for renewal.

APPENDIX A

Performance indicators

A1 The PIs that are reported on at an airport level are set out below. Airports already provide this information which is published by the Performance Review Body of the Single European Sky.

Environment performance indicators
(a) the additional time in the taxi-out phase defined as: (i) the indicator is the difference between the actual taxi-out time and the unimpeded time based on taxi-out time in low period of traffic; (ii) the indicator is expressed in minutes per departure for the whole calendar year
(b) The additional time in terminal airspace, defined as follows: (i) the indicator is the difference between the ASMA (Arrival Sequencing and Metering Area) transit time and the unimpeded time based on ASMA transit times in low periods of traffic; (ii) the indicator is expressed in minutes per arrival for the whole calendar year; (iii) ASMA is defined as a virtual cylinder with a radius of 40 NM around the arrival airport
Capacity performance indicators
(a) The adherence to ATFM slots as required by Article 11 of Regulation (EU) No 255/2010.
(b) The average minutes of air traffic control pre-departure delay per flight caused by take-off restrictions at the departure airport, defined as follows: (i) the indicator is the average air traffic control pre-departure delay per outbound IFR flight; (ii) the indicator includes all IFR flights taking off at the departure airport and covers delays in start up due to air traffic control constraints when the aircraft is ready to leave the departure stand; (iii) the indicator is calculated for the whole calendar year and for each year of the reference period.