
NATS' Response to the CAA's Firm Proposals on NATS Price Control Review 2006-2010

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1 INTRODUCTION AND SUMMARY OF RESPONSE

The CAA has issued its proposals, in the May Firm Proposals¹ document. This document sets out NATS' considered response². It focuses on the issues which, in NATS' view, are not yet satisfactorily resolved or specified, and does not deal in detail with all the topics covered in the May Firm Proposals document and earlier papers and responses.

NATS acknowledges that, in its Firm Proposals, the CAA has made some adjustments to address key concerns raised by NATS in its response to the initial proposals published by the CAA in November.

Notwithstanding the adjustments that the CAA has made, elements of the proposals still present significant additional risks to the business and remain of concern to NATS, notably the proposed service quality regime and the proposed level of operating cost efficiency, the rationale for which NATS still believes to be inappropriate.

To address these issues, NATS has raised a number of specific points with the CAA and requested that the CAA addresses these in its paper to be published in September 2005. Many of these points require clarification of a number of technical issues. One relates to the need for the CAA to recognise the likely cost implications of potential European restructuring through the Single European Sky. A further point relates to the need to clarify the interaction of the performance of NATS' ageing legacy systems with the proposed service incentive regime.

NATS remains concerned at the level of risks presented by elements of these proposals. However, it has concluded that, subject to the points identified in this paper being addressed satisfactorily in the CAA's formal proposals to be published in September, it would be prepared to accept the CAA's proposals. Should the CAA modify its Firm Proposals in response to comments from other stakeholders, NATS would expect further consultation before giving its response.

¹ "NATS Price Control Review 2006-2010: CAA's Firm Proposals" (Civil Aviation Authority, May 2005).

² NATS is responding on behalf of its regulated subsidiary, NATS (En Route) plc (NERL). References to NATS and NERL are interchangeable.

2 UKATS OPERATING EXPENDITURE

2.1 Introduction

The operating cost projections for CP2 in NERL's 2005/06 business plan represent efficient and economic performance, at least comparable with external benchmarks. The CAA has based its proposals on a lower level of expenditure, based on judgements which in our view are inappropriate given the supporting analysis. We do not believe this to be in customers' interests.

In addition, the CAA's proposals do not take into account a number of specific risks faced by NATS regarding operating costs, and NATS requests that the CAA gives consideration to additional costs that might arise from European re-structuring, pass through of radio spectrum costs, and an allowance for bad debts.

2.2 Operating expenditure projections

NATS' latest business plan (2005/6 plan) reduces operating expenditure (opex) by £106m over CP2 compared to its earlier previous business plan (2004/05 plan). This represents a reduction of nearly 5%, as shown in the following table.

	2006/7	2007/8	2008/9	2009/10	2010/11	CP2 Total	Delta	% reduction
NERL opex, P&L basis, outturn prices:								
2004/5 Business Plan	418	436	434	475	461	2,224		
2005/6 Business Plan	410	420	419	438	430	2,118	106	4.8%

Despite this significant reduction, the CAA has proposed an even more challenging opex projection. The table below compares CAA's opex projection for UKATS with that in NATS' latest plan. NATS' opex figures are shown on a consistent basis to CAA's figures, and are in constant 2003/4 prices.³ The CAA's proposals are £28m lower for UKATS than NATS latest plan.

	2006/7	2007/8	2008/9	2009/10	2010/11	CP2 Total	Delta	% reduction
UKATS opex, CAA basis, 2003/4 prices:								
2005/6 Business Plan	356	366	358	366	350	1,796		
Opex in CAA's Firm Proposals	348	357	359	364	340	1,768	28	1.6%

NATS' 2005/6 plan reflects the intention of the new management team to achieve improved efficiency without damaging the business. It represents a very demanding opex target, and will be challenging to deliver at a time of major change for the business, with a major investment programme and a large part of the workforce moving location. Further reductions are difficult to find because there is no scope for bringing forward the structural change and new systems implementations such as iFACTS. NATS has been unable to identify further savings to close the gap to CAA's projections without increasing the risk of achieving the

³ The most significant differences between the CAA's basis and the basis in NATS' accounts are that the CAA's basis includes inter-company opex, and pension costs are on a cash basis rather than an accruals basis.

main business objectives.

The further opex reductions proposed by the CAA risk affecting service performance in CP2 and constraining investment in new capacity, which are so important to customers in the medium and longer term, and would restrict NATS' ability to respond to the many challenges it faces – meeting demand, minimising delays, transforming the way we do business, and leading the way in Europe.

The CAA's assessment was driven by a number of factors, including benchmarking of selected corporate functions, international benchmarking and top down efficiency analysis. The selection of a profile and target by the CAA is a matter of balancing the risks of too easy a target for NATS – which would imply prices slightly higher than they would otherwise have been – and too stretching a target - which could put the programme of business and system transformation at risk, with an impact on the customers which would ultimately be much greater. NATS believes that the CAA's interpretation of this analysis is inappropriate and has led to an assumed level of savings that is over-ambitious.

NATS' analysis of these issues – benchmarking of corporate functions, international benchmarking and top-down efficiency analysis – is set out in Appendix 2.

2.3 NATS' Proposals

The CAA's opex assessment does not make any allowance for the costs of restructuring that might arise in CP2 due to European integration under the Single European Sky developments. Such integration would be likely to have significant medium term benefits to airlines, but in the short term could involve additional restructuring costs. These costs are difficult to predict and no allowance has been made for them in CP2. In section 8.2 we propose an approach for dealing with such costs should they arise.

The CAA's opex assessment does not include allowance for any increase in radio spectrum costs. Ofcom is currently consulting industry on the use of the radio spectrum⁴. NATS has informed Ofcom that the issue has not been covered in the CP2 review and the assumption is that Ofcom will not increase the radio spectrum costs for NATS during CP2. However, to cover the possibility that a new charging scheme might be introduced during CP2, and thereby to remove an uncontrollable financial risk, NATS considers that the CAA should include a pass through for radio spectrum costs. Further detail is provided in section 6.1.

NERL also requests that the definition of Controlled Revenue in the Licence be clarified to enable NERL to recover its revenues in full. Further detail is provided in section 6.3.

3 SERVICE QUALITY

NATS recognises the importance of service performance for customers and understands the reasons behind customers' support for the retention and strengthening of the delay term. However, the CAA's Firm Proposals significantly increase the financial risks facing NERL. This chapter explains NERL's concerns.

⁴ "Independent Audit of Spectrum Holdings – Emerging Issues: a Consultation Document" July 2005.

3.1 Par Value - Penalties and Bonuses

The Firm Proposals set a par value of 45 seconds - at the mid point between the stretch target of 30 seconds in the business plan and NATS' assumed delay performance of 60 seconds with base case traffic forecasts. Although 45 seconds is more realistic than the CAA's previous proposal of 32 seconds, it still gives NERL very little upside and represents a high exposure to financial penalties compared with NERL's projected financial performance.

As the CAA states, it is broadly equal to NATS' best performance in the last eight years with the exception of 2004. The latter saw NATS' best ever performance but it was a year with no system changes. During CP2, in addition to continuing to service forecast traffic growth, NERL has more system changes planned than ever before, and they are more closely sequenced. Moreover, an inappropriately low par value for the activation of the delay term provides a disincentive to the rapid implementation of the investment programme because it gives rise to a conflict of resources between current service performance and the delivery of the investment programme. NATS still considers that 1 minute would be a more appropriate value.

The Firm Proposals provide for a maximum penalty of approximately £24m per annum – 2.4 times the CP1 limit. The CAA paper notes that this is a reduction from the maximum included in the November proposals (£27m), but it remains a significant amount. Its potential impact on NERL can be seen by comparing it with the forecast profit for CP2 - £15m profit after tax over the five year period as a whole based on the CAA's allowed revenues and NERL costs from the 2005/06 business plan. A comparison with the service quality regimes in operation in other regulated utilities indicates that this represents a high potential financial exposure relative to its projected financial returns.

Delay is affected by the pattern and the overall level of demand. For a fairly constant pattern of demand, delay has an exponential relationship with traffic, so that as demand approaches capacity, delay increases sharply, in order to maintain the required safety performance.

We have assessed the relationship between traffic volume and delay performance for upside and downside variations around the base case. Making the assumption that the pattern of traffic is constant, the table below shows the impact on revenue of different combinations of traffic volume and associated delay bonus/penalty, centred on an assumption of 45 second delay with CAA's central traffic forecast. The figures are for 2008, as an illustrative year in the middle of CP2.

Estimated Delay for different traffic levels for 2008 (assuming 45 sec with CAA central forecast)

Traffic compared to CAA central forecast	Delay in sec/flight resulting from traffic forecast	Delay incentive (£m)	Accrued revenue (taking account of traffic & delay) (£m)	Net difference to CAA central forecast (£m)
+7%	100	-16	504	+1
+5%	79	-10	505	+3
+3%	55	-3	507	+5
CAA central forecast	45	0	503	-
-3%	35	3	498	-5
-5%	32	4	494	-9
-7%	26	5	490	-13

The table shows that if traffic increases, the reductions in revenue from the delay incentive are closely hedged with higher revenues from the higher traffic, although the rate of volume growth is much higher than the additional revenue it generates. For example, handling 5% more traffic increases NERL's revenues by only £3m (0.6%), which is not a strong incentive to provide the extra capacity. However, if traffic volumes are below the base case, the hedge is less effective, and NATS' revenues fall.

There is no real upside opportunity for NATS, but there is a significant downside risk. This means that, given the risk of exogenous shocks to volumes, the overall expected level of revenue is below the level of funding which CAA's proposals assume. A par value of 1 minute would provide a more even balance between incentive and penalty.

3.2 Early Morning Delays

NATS considers that the new time period stated in the Firm Proposals document is more appropriate than what was previously proposed (i.e. 05:00-09:00 UK local instead of 04:00-10:00 UTC). NATS requests that two further changes are made to the definition of the measure to be used for early morning delays to ensure that it fulfils its intended purpose.

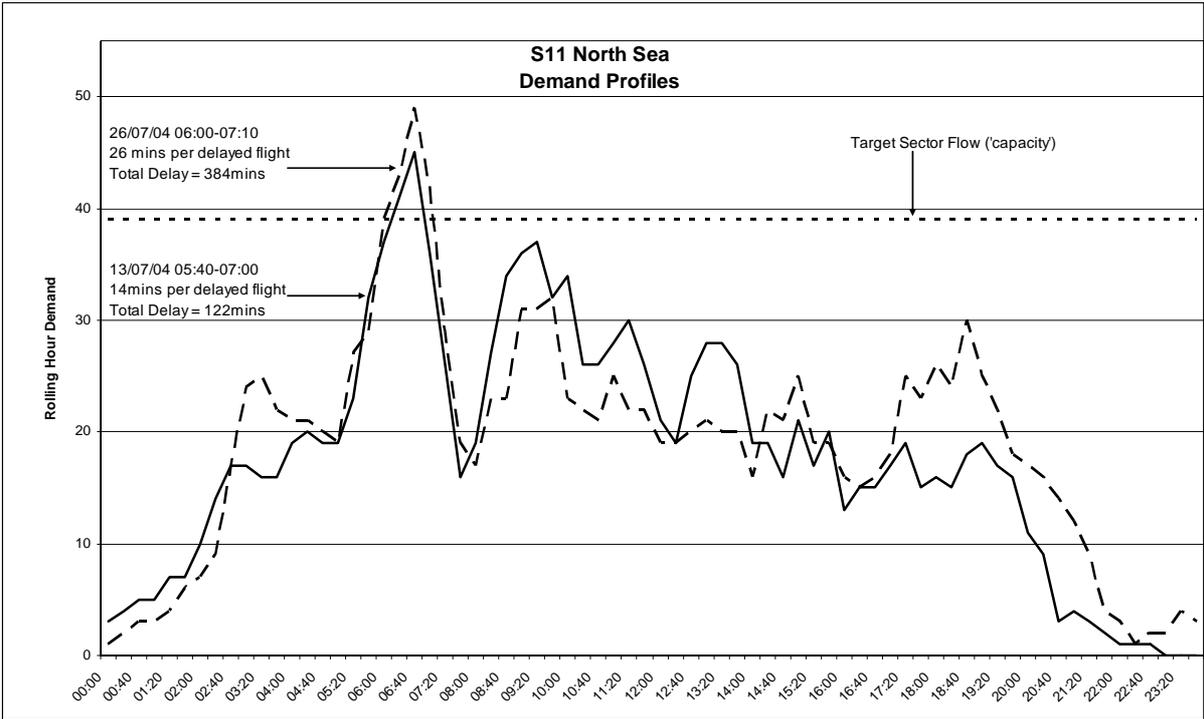
Firstly, NATS requests that the measurement of morning peak delays should be based on the time of entry into UK airspace rather than Estimated Off-Blocks Time (EOBT). This is for two main reasons. The first is that an analysis of sample data has indicated that flights that do not arrive in UK airspace until some 2-3 hours after the end of the defined morning period could still be included because their EOBT was before 09:00 UK local time (in the case of long distance flights to the UK). The analysis indicated that such flights could constitute as much as 16% of all flights delayed by NATS, so this is clearly a significant element. The second factor is that there are frequent occasions when EOBT is not updated when it should be, leading to inaccuracies in the delay figures recorded. Using the time of entry into UK airspace rather than EOBT to measure early morning delays would overcome both these problems.

Secondly, NATS suggests that CAA clarifies its definition of first rotation. NATS understands that the intended focus is on first flights into, out of or across UK airspace rather than also including the return trip, as implied by the use of 'rotation'. We therefore suggest that all references to the first rotation should be changed to early morning flight.

3.3 Long Delays

NATS remains opposed to the inclusion of an additional weighting on long delays. It is difficult for NATS to target action to reduce long delays, for three main reasons:

- There is an inevitable fluctuation in the occurrence of long delays, as illustrated in the graph below, which reflects a typical daily demand profile. This shows a significant difference in average delay per delayed flight (one below the 15 minutes threshold, the other well above it at 26 minutes per delayed flight) on two days in the North Sea Sector 11, despite a very similar traffic demand flow and the same level of capacity (service) being provided.



- Under normal operating conditions, NATS has no control over the amount of delay attributed to individual flights as this is the result of the traffic demand and the algorithms in the Central Flow Management Unit (CFMU) system that allocates the slots.
- As they are often the result of a combination of events, NATS is also vulnerable to the uncertainties inherent in the attribution of the causes of these delays.

Hence, NATS remains concerned that an incentive is being based on something which it has only limited ability to influence.

Another factor is that, in recent years, while the overall level of delay (and the average delay per flight) has fallen, the average delay per delayed flight has increased. It is therefore possible that a focus on long delays might have the consequence of increasing the overall level of delay, which would not necessarily be in customers' best interests.

3.4 Delay Term in the Charge Control

To reflect the CAA's proposed par value of 45 seconds in the more complex delay term in the CAA's Firm Proposals requires an assumed distribution of delay into the various categories (e.g. early morning flights, long delays, etc). Whilst the CAA has based its analysis on the actual distribution in 2003, NATS considers that 2004 would be more appropriate. The pattern of delay in 2004 implies that the permitted weighted average of delay should be 1.06 minutes per flight rather than the 1.00 in the CAA's Firm Proposals⁵.

The pattern of delay in 2004 is likely to be far more representative for CP2 than the pattern of delay in earlier years. This is because of two recent changes connected with early morning flights. First, there has been a marked tendency for UK departures to leave earlier (in the hour 0600 - 0700), which can result in increased interaction with North Atlantic arrivals. Second, there has been a significant increase in UK domestic routes from more Airports, which has led to more flights in the early morning period at the start of the business day. These changes in the pattern of flights have resulted in a higher proportion of delays in the early morning period in 2004 compared to earlier years. This pattern is continuing into 2005 and is expected to continue in CP2.

NATS therefore requests that the weighted average delay be changed from 1.00 to 1.06 minutes per flight, in order to reflect properly the CAA's policy decision of a par value of 45 seconds per flight.

In addition, NATS requests some technical modifications to the specification of the delay equations in the current draft of the proposed changes to the Licence. Currently the equations are hard to understand and mean that the maximum delay penalty depends on the volume of traffic and is not an absolute cap. NATS believes that the delay equations should be changed so that instead of the delay incentive being $S_t \times D_t$ in the allowed revenue formula, it would simply be S_t . The F_t term should then be scaled so that the delay term is in line with the CAA's policy decision on the scale of the incentive.

3.5 Service quality proposal

It is acknowledged that a corollary of establishing incentives for NERL to improve service quality is for NERL to take on and manage a degree of financial risk. However, the scale of the proposed delay penalty is significantly greater than in the current incentive regime and poses a substantial level of risk to NERL, particularly when compared with projected financial returns.

Whilst NATS accepts that in conventional business models such risks can be part and parcel of everyday business management, it is concerned that certain issues could impact on its viability and prejudice its ability to provide customers with the level and consistency of service required. Examples include a scenario where there are multiple and persistent failures of the current ageing legacy system infrastructure, or there is failure of an entire operational site. NERL has plans within its long term investment programme for addressing these issues but the solutions will not be fully implemented until CP3.

If these scenarios materialised, the size of the financial penalty could reach a level beyond

⁵ The breakdown of delay into the four categories of 'shortfirst', 'longfirst', 'shortother' and 'longother' is 31%, 15%, 39% and 16%, respectively. Assuming a par value of 0.75 mins/flight, this gives a weighted par value of 1.06 mins/flight.

which further penalties are unlikely to act as an incentive and alternative, more radical solutions and action plans would be required. To deal with such circumstances, NATS proposes that at the point that liability for delay penalties reaches a material proportion of the annual penalty cap in any given year (e.g. 60% or more, a level which is 50% higher than the current cap on delay penalties), then NATS would be required as a priority to formulate a remedial action plan, for agreement with all key stakeholders, including the CAA and customers. Such a plan might require the CAA to support essential changes to opex and capex requirements and might require that, during implementation of the plan, the CAA modifies or suspends the service quality regime.

4 COST OF CAPITAL

There are a number of approaches that can be adopted to determine the constituent components that are used to derive the weighted average cost of capital. What is important, however, is that whatever approach is adopted it should be consistent i.e. that the cost of capital should either be based on current market rates or on long-run time series data, but not an amalgam of the two.

Thus, in its consultation with the CAA in March 2005, NATS argued that if the CAA intended to use a risk-free rate based on current market rates on the basis that historical data was not meaningful, it should also use current market levels to determine the equity risk premium (ERP).

Following these discussions, NATS commissioned NERA to do further research into the relationship between the risk-free rate and the ERP in recent years. This research, which was based on analysts' dividend forecasts for each company in the FTSE index, shows that the ERP has increased from 4% in 2000 to 5% in 2004, at a time when the risk-free rate fell substantially. A "top down" approach, using 3 year earnings growth forecasts for the FTSE All Share Index, suggests an even greater increase in ERP – from 3% in 2000 to over 6% in 2004.

NATS strongly believes that a consistent approach should be utilised in determining NERL's cost of capital. Thus, if the CAA continues to believe it appropriate to utilise a risk-free rate of 2.5% that is based on current market rates, it is NATS' view that the ERP should also be based on current market rates and that, based on NERA's research, this would result in an ERP of at least 5%. An increase in the ERP to 5% would, in turn, result in an increase in the allowable cost of capital from 6.75% to around 7.0%.

NATS supports the arguments presented by NERA that more robust estimates of the weighted average cost of capital (WACC) parameters will be derived using historical time series evidence. There is significant market evidence that shows current or short run data can be subject to significant biases and measurement error due to factors such as excess volatility, illiquidity and/or supply side factors such as low government gilt issuance.

NATS notes that recent regulatory precedent has taken into account time series evidence on WACC parameters in setting the cost of capital. In its recent (December 2004) Final Determinations, Ofwat used the top end of a 2.5% to 3.0% range for the real risk-free rate, "based on a period average level of yields on medium-term index-linked gilts rather than

recent yields which appear historically low".⁶ Ofgem (2004) also used a risk free rate of around 3.0% in setting the cost of capital for the DNOs. The Competition Commission e.g. BAA plc (2002) has also noted that current yields should be used with caution when estimating the risk free rate because of market volatility: "We accept, however, that markets can be volatile and that it would be unwise to place too much reliance on the most recent figure (on yields) if it is substantially different from previous figures",⁷ and "There appears to be widespread recognition that gilt yields have been affected by special factors, including an increased demand from pension funds as a result of the introduction of the MFR requirements in 1997; just before the decline in gilt yields started. The strong demand has placed upward pressure on prices of both conventional and index-linked government securities. Relatively low UK Government borrowing in recent years could be another factor contributing to the upward pressure on gilts prices (and hence lower yields)",⁸

5 CAPITAL EXPENDITURE

5.1 Introduction

Delivery of the investment programme is essential to the achievement of future safety, service and efficiency improvements. Airline customers recognise this and have confirmed that they attach great importance to the delivery of the investment programme and do not wish NERL to be dis-incentivised from delivering the necessary investments.

NATS is reassured that the CAA has included an allowance in CP2 prices for 100% of planned capital expenditure. An allowance for less than 100% of NERL's plan, for example at the notional 80% included in the CAA's November 2004 consultation paper, would have required NATS to re-plan the investment programme, with revised delivery dates, to the detriment of the service it could provide to customers.

Customers require NATS to deliver the investment programme and associated benefits on time and the allowance for capital expenditure in CP2 prices not to be set too high, but at a level appropriate to NATS' ability to deliver. The principal issue under consideration has therefore been how to ensure that NERL is incentivised to deliver the capital expenditure programme as planned.

5.2 Consideration of incentives

Customers are concerned that the treatment of capital expenditure does not provide strong enough incentives on NATS to deliver planned investments on time, and proposed additional financial incentives on NATS with revenues linked to achieving explicit capital expenditure milestones, or triggers.

⁶ Future Water and Sewerage Charges 2005-2010: Final Determinations, p222, Ofwat (2004)

⁷ Competition Commission report on BAA plc: A report on the economic regulation of the London airports companies (Heathrow Airport Ltd, Gatwick Airport Ltd and Stansted Airport Ltd), para 4.47, p174.

⁸ Competition Commission report on BAA plc: A report on the economic regulation of the London airports companies (Heathrow Airport Ltd, Gatwick Airport Ltd and Stansted Airport Ltd), para 4.48, p174.

As noted in the CAA's Firm Proposals, approximately 70% of the capital expenditure planned in CP2 is already incentivised by the service quality regime and by the opex efficiency incentive properties of the RPI-X price cap. The remaining 30% relates to projects that are not complete until CP3 – principally, the replacement and upgrade of the systems for London Area Control and London Terminal Control to CASPIAN.

The CAA has considered the practicality of applying investment triggers to the latter 30%. NATS agrees with the CAA's decision not to do this: although, in principle, the establishment of triggers with financial incentives appears attractive, it carries a significant risk of unintended consequences and the significant difficulties of applying it to a regime that is fixed for five years make it impractical.

The CAA therefore proposes to measure NATS' project management capability in respect of CASPIAN against a target of reaching CMM⁹ level 3 by September 2006, the date by which a milestone plan for the CASPIAN programme will be delivered. Increasing project management capability to this target represents a significant challenge. However, NATS recognises the importance of on-time delivery of the investment programme to all stakeholders and therefore accepts this proposal for transparent and public assessment against this target as representing a practical approach for incentivising the delivery of the investment programme according to plan.

5.3 Other measures

Other measures have been proposed by the CAA, including post implementation reviews, modification to the Service and Investment Plan, and reviews of the benefits from the introduction of revised supply chain management disciplines. Whilst these will increase the regulatory burden, NATS believes that these measures should provide additional comfort to customers of our planned improvement in cost effective project delivery.

6 STRUCTURE OF THE EN ROUTE PRICE CONTROL

6.1 Radio spectrum costs

NATS is surprised at the approach adopted by the CAA towards radio spectrum costs. The CAA states (App 2, para 13-14) that it does not propose to adopt any explicit end-of-period RAB adjustment mechanism for radio spectrum costs. This compares with the proposal for an end of period RAB adjustment included in the CAA's November paper in recognition of the fact that NERL does not have control over these costs, which may be radically affected by the arrangements being developed by Ofcom for radio spectrum to be charged at market prices.

NATS had understood that no major changes were proposed in this area. The CAA's change of position leaves NERL exposed to a risk that it has almost no control over and NATS seeks clarification of the basis on which the CAA has changed its position.

⁹ CMM: Capability Maturity Model – a model for product and service life management and process improvement.

NATS understands the argument that it needs to have an incentive to exercise whatever degree of influence it may have over the development of Ofcom's proposals. While NATS would seek to ensure that any change to the regime for radio spectrum costs is integrated into the price control arrangements, it needs to be recognised that NATS' influence is extremely limited, while the potential impact on its cost base is significant. In recognition of the scale and lack of control of the potential risk, NATS believed that the pass through into the RAB had been accepted.

The May Firm Proposals say that at the next price review the CAA will seek to identify any additional costs that NATS incurs during CP2 and that it will expect to treat efficient expenditure in a manner which is consistent with its duty not to make it unduly difficult for NERL to finance its relevant activities. NATS recognises that this is intended to provide some assurance that it will have some redress should Ofcom's proposals cause it significant difficulties. However, the proposal does not provide the clarity that is normally the goal of incentive regulation. Indeed, it produces the risk of some unintended disincentives, in that it implies that the CAA would only take action if the additional radio spectrum costs caused financing difficulties and it risks undermining the incentive normally provided by price control regulation to make efficiency savings.

NATS therefore requests the CAA to consider a pass through for radio spectrum costs.

6.2 CAA/DfT fixed fee arrangement

In its May Firm Proposals, the CAA agrees with NATS that, in principle, NATS' revenues should not depend on CAA/DfT outturn costs. However, the CAA concluded that, since NATS is not materially disadvantaged by the current arrangements and that change would be likely to increase complexity, it did not propose to change the current arrangements.

NATS considers that the CAA/DfT should use the regular recovery mechanism created by Eurocontrol and used by all other member States in Europe to recover their costs. The CAA/DfT already uses this mechanism to adjust for differences between planned and actual costs and, therefore, no additional complexity is created. Differences between recovered and planned costs should be adjusted through this mechanism also – in line with other member States.

The current practice is irregular and should cease. Customers should be provided with the total transparency of NATS and CAA charges. It is an important principle that NATS should not have to bear any risk relating to variations in the revenues due to the CAA/DfT.

NATS requests that the CAA/DfT uses the recovery mechanism for its volume risk.

6.3 Bad debts

The current wording in the Licence is unclear over the treatment of bad debts. On the understanding that the wording in the Licence allows it to recover its revenues in full, NERL's 2005/06 business plan includes no allowance for bad debts in the cost projections for CP2.

It would not be appropriate for NERL to bear the risk of bad debts because, unlike other industries, NERL is obliged to provide a service and does not have the right to choose whether to provide a service to particular customers. Moreover, it is Eurocontrol, rather than NERL, which carries out debt collection, meaning that bad debts are outside NERL's control.

NATS therefore requests that the definition of “total controlled revenue” be clarified to state unambiguously that it will be reduced for bad debts so that NERL is able to recover its allowed revenues in full.

6.4 Exempt flights

The CAA notes that the Single European Sky Charging Regulation might require the UK Government to remunerate NATS for services provided to flights which hitherto have been exempt from paying charges. The CAA proposes to deal with the uncertainties in the revenue stream by means of a Government revenue term which would provide a mechanism to share any potential revenue stream equally between NATS and Eurocontrol charge payers. NATS agrees with the CAA that this provides NATS with the incentive to secure a good arrangement for its customers while giving some benefit to users as soon as any additional income is received.

NATS would like the Government revenue term clarified to ensure that there are no unintended interactions with the income from the MoD contract.

6.5 Other issues

NATS reserves the right to review its position before the CAA's final position paper in the event that the recent terrorist events are shown to have a material effect on the assumptions underpinning the CP2 proposals.

There are also a number of minor issues with the draft wording of the charge control conditions that NATS would seek to resolve with the CAA, including:

- The definition of distance units in LR_t needs to be clarified to be clear that it is on the same basis as D_t , that is, it is only distance units taken into account in calculating CSUs.
- The definition of WAD_{t-1} in the Licence should be checked. It currently relates to delays in relevant year t , rather than delays in relevant year $t-1$.

7 OCEANIC

7.1 Oceanic Operating Expenditure

The Oceanic price control proposed by the CAA is extremely challenging. Of most concern to NATS is the operating expenditure allowance.

The operating expenditure (opex) allowance the CAA proposes for the Oceanic price control is about £2m lower (in outturn prices) than the opex in NATS' 2005/6 Business Plan.¹⁰ This

¹⁰ This is the difference when the opex allowance is on the same cash pension costs basis as the CAA's Firm Proposals. The difference between the opex allowance and the opex forecast in NATS' accounts for the Oceanic business is substantially greater, at about £4m (in outturn prices), or nearly

represents about 2.5% of Oceanic opex. NATS considers the CAA's projections to be very ambitious, especially as NATS' 2005/6 Business Plan already includes significant reductions in staff numbers despite growing traffic.

The CAA has calculated its assessment for NATS' Oceanic opex with a theoretical methodology using an assumed Real Unit Operating Expenditure (RUOE) reduction of 2% p.a.. Notwithstanding NATS' belief that RUOE is not an appropriate approach, NATS would make the following points in relation to the CAA's methodology:

- The range of RUOE figures for other regulated industries varies considerably, with there being no obvious "average" figure (the figures quoted by the CAA vary from 0 - 0.9% per year for sewerage to 4.6 - 5.7% per annum for electricity transmission).
- The Oceanic business is very labour intensive, which will tend to mean the RUOE will be lower than for other regulated companies.
- There is no evidence to suggest that an RUOE as high as 2% p.a. would be appropriate for the Oceanic business.
- NATS believes that a figure of 1% would be more appropriate.

NATS is also unclear why the CAA has chosen to apply its opex methodology for the Oceanic business in a slightly different way than for UKATS. The CAA has started its calculation for Oceanic opex with the 2004/5 figure rather than the 2005/6 figure which was used for the UKATS business. NATS calculates that if the CAA had used the same starting point as for the UKATS business, forecast opex for the Oceanic business would be much closer to that in NATS' 2005/6 plan.

7.2 Oceanic Traffic Risk

The arguments that support risk sharing for the Eurocontrol business apply equally to the Oceanic business.

NATS understands that the CAA has not included such a risk sharing arrangement because the CAA wants to keep the formula simple.

However, NATS believes that if no allowance is made for traffic risk on the Oceanic business, then an extra allowance for taking this risk should be given in the revenue requirement. Normally this would be reflected through a higher cost of capital for the Oceanic business, but NATS understands the CAA's desire to have a single cost of capital for the whole company for simplicity. Traffic risk is very significant when the prices are fixed for five years. NATS therefore believes that the traffic risk should be incorporated by an additional allowance in the allowed revenue requirement.

7.3 Other Oceanic Issues

NATS supports the CAA's view that there should be no service quality term, for the reasons set out in its February Response to the CAA's November 2004 Consultation Paper.

5%.

NATS agrees with the CAA's proposal in paragraph 11.34 on uplifting the Oceanic RAB in line with the calculations recorded year by year in the regulatory accounts and taking account of the efficiency roll-forward mechanism.

NATS agrees with the CAA proposal to retain the current wording of Licence condition 25 for the Oceanic business. This makes it easier to revise the Oceanic price control between reviews in circumstances where NATS is proposing a significant improvement to the service which has the support of users despite the impact on charges.

8 REGULATORY POLICY STATEMENT

8.1 Introduction

NATS agrees with the CAA that clarity and consistency of the regulatory framework are essential to the effective working of incentive regulation. In support of this objective, this chapter sets out the areas which NATS seeks to have included in the Regulatory Policy Statement that the CAA is planning to issue with its September paper.

The chapter covers the following topics:

- Future European developments,
- Consistency of approach (cost of capital, cash pension costs, single till),
- Large variation in pass through items,
- Regulatory asset base,
- Volume risk beyond 2010,
- Operating efficiency roll-forward,
- Treatment of financing issues,
- Licence termination and investment incentives, and
- Regulatory reporting.

8.2 Future European Developments

Emerging developments in Europe might provide opportunities that would benefit UK aviation as a whole over the medium term, but which would entail additional expenditure for NATS in the short term. The CAA's proposals have led to a reduction in NATS' normal operating cost contingency to a very low level - 1% of opex - which is not sufficient to cover these potential new requirements. NATS could therefore be placed in the position where it is unable to fund developments supported by its customers.

Hence NATS seeks a degree of flexibility or contingency in the regulatory framework which would enable it to respond positively to such developments. For example, if such events arose, and it was recognised that – while the developments were apparently in customers' long term interests – the price control had not covered such costs, there should be a consultation exercise on whether to allow the extra costs. Regulatory action would only be appropriate if the changes were material and outside the normal sphere of joint working.

It is possible that during CP2 there might be a radical change in charging schemes, for example it is conceivable that a joint charging area might be established with the IAA. The detailed wording of the Licence needs to be such as to allow this to occur without necessarily needing a reopening of the revenue controls.

8.3 Consistency of Approach

NATS is seeking a commitment from the CAA for consistency over time of a number of decisions in the CP2 Firm Proposals.

8.3.1 Cost of Capital

The CAA has adopted a pre tax approach to the cost of capital, and has used an effective tax rate in the calculation. For CP2, NERL's effective tax rate is forecast to be 11%, which is well below the marginal tax rate of 30%. The effect of this was that the cost of capital generated by the CAA's calculation was significantly lower than if the marginal tax rate had been used.

In CP3 and beyond, NERL's effective tax rate is forecast to be well above the marginal tax rate.

There is a serious regulatory risk for NATS that the CAA will switch its approach to the tax rate used in the cost of capital during CP3 so as to use the marginal tax rate. This would represent a lack of consistency and would mean that NATS could not expect to recover its reasonable costs over time.

NATS therefore seeks a commitment from CAA to a treatment of tax in future control periods that is consistent with its treatment in CP2.

8.3.2 Cash pension costs

In its opex allowance in the CP2 Firm Proposals, the CAA adopted a cash approach to pensions rather than an accruals approach. NATS supports the use of a cash basis for the regulatory treatment of pensions, but it has the effect of reducing the allowed opex in CP2, by the order of £40m (in outturn prices).

In CP3 and beyond, NERL's cash pension costs are forecast to be slightly above the accruals pension costs.

There is a risk for NATS that the CAA will switch its approach to pension costs in CP3 and beyond because it is convenient to do so at that point. This would represent a lack of consistency and would mean that NATS would not expect to recover its reasonable costs over time.

NATS would therefore like the CAA to commit in its Regulatory Policy Statement to using an approach to pensions in CP3 and beyond that is consistent with the cash approach adopted in CP2.

8.3.3 Single Till

NATS is in the final stages of agreeing a 15 year contract with the MoD. Over the 15 year

period, the contract price is based on a reasonable allocation of costs and provides a fair contribution from MoD towards the joint and shared infrastructure costs. Renewal of the contract therefore has substantial benefits to civil customers who would otherwise have to pay substantially more.

The CAA's Firm Proposals assume NATS is able to conclude the negotiations with MoD and sign the contract. NATS has priced the contract on the assumption of a continuation of the single till arrangements, and therefore seeks a commitment that the CAA intends to continue to adopt the single till approach in CP3 and CP4.

8.4 Large variation in pass through items

Under the Firm Proposals, the variation in the outturn of the items subject to pass through is allowed by inclusion in the Regulatory Asset Base at the start of CP3. NATS agrees that this is the most appropriate mechanism for adjustment in normal circumstances. However, in extreme circumstances, the accumulated adjustments might become large enough to affect NERL's overall cash flow or financial performance.

NATS is therefore seeking a commitment from the CAA in the Regulatory Policy Statement to allow an adjustment within CP2 for the pass through items in the unlikely event that NATS suffers serious financial difficulties as a result of the fact that the adjustments would otherwise be in CP3. Such an adjustment would be neutral in present value terms for both NATS and airlines, but would ensure that NATS was able to continue to operate during CP2 without being in financial distress.

8.5 Regulatory Asset Base (RAB)

NATS would like the CAA to restate its future regulatory policy for remunerating the Regulatory Asset Base (RAB) in the future, along the lines of the CAA's Regulatory Policy Statement in its March 2003 Decision¹¹ paper, namely:

"The CAA would determine the required revenues in order for NATS to be expected to earn its regulatory cost of capital on the RAB based on the CAA's projections of demand, costs and relevant non-regulated revenues (currently NATS' prices are set under a "till" that includes various non-regulated activities). These projections could be informed by a range of evidence, NATS' own projections would be important, as would other evidence such as benchmarking data."

NATS believes the current practice of publishing the RAB annually should be continued. This removes unnecessary risk for NATS and therefore helps to keep the cost of borrowing lower than it would otherwise be. NATS would therefore like the CAA to set out in full the equations for rolling the RAB forward, as the CAA did at the time of the Composite Solution.

The RAB should be restated for inflation and rolled forward by:

- Actual capital expenditure less disposals.
- Projected depreciation allowed in the price controls.
- Movements in working capital.

¹¹ "NATS' Application to Re-open the Eurocontrol Charge Control: CAA Decision", CAA, March 2003

- Differences (whether positive or negative) in the actual cash cost of pensions for existing employees and that assumed in the price controls.
- Any increases in radio spectrum charges above a specified threshold level and the cumulative financing costs of the increases.
- Cumulative financing costs of the difference between (a) actual cash pension costs for existing employees and actual capital expenditure and (b) that assumed in the price controls.
- The operating efficiency roll forward benefit from CP1 in the March 2006 RAB (for the Oceanic business only).

In addition, at the end of CP2 there might be adjustments for the operating efficiency roll forward and the RAB clawback adjustments.

8.6 Volume risk beyond 2010

NATS would like the CAA to restate its future regulatory policy for volume risk, along the lines of the CAA's Regulatory Policy Statement in its March 2003 Decision paper. This is that the NATS should not revert to bearing 100% of the volume risk and that the CP2 arrangements would be the starting point for consideration for CP3.

8.7 Operating efficiency roll forward

The operating efficiency roll forward mechanism is designed to provide incentives to reduce opex even at the end of the control period. It is designed primarily for 'underlying opex', and does not work well for 'opex investments' which involve higher up-front costs and then lower future opex. In fact, it can lead to perverse incentives at the end of the control period, with NATS having no incentive to undertake restructuring. This is not in NATS or customers' interest.

NATS wants its commercial incentive to reduce costs to be as far as possible the same as for non-regulated companies. NATS believes this is best achieved by excluding "redundancy" and "major site relocations" from the operating efficiency roll forward mechanism. NATS still clearly has a strong incentive to minimise these costs, as they would be one-off costs borne by NATS during CP2.

NATS anticipates CAA setting out the detailed equations for the operating efficiency roll forward mechanism in its final decision, and seeks exclusion of "redundancy" and "major site relocations" from these.

8.8 Treatment of financing issues

NATS would like the CAA to reconfirm the statements it made in its March 2003 Decision paper on financing issues, namely:

"It is clearly vital that NATS should be able to attract sufficient capital into its business on an ongoing basis in order to invest to meet future demand for its services and to maintain its current operations.

Over the long-term, revenues should be sufficient to cover the cost of

the efficient provision of operations and should remunerate capital investment by means of the inclusion in price limits of appropriate depreciation allowances and provide for an expected return consistent with the regulatory cost of capital. The ability of NATS to maintain an adequate level and trend of critical financial indicators to allow reliable access to sources of finance is a factor that the CAA would take into account.

This is with a view to ensuring that, provided NERL is efficiently managed and financed and otherwise complies with the provisions of its Licence, it will not find it unduly difficult to finance activities authorised by its Licence. Where appropriate, and without prejudicing the exercise, or extending the ambit, of the CAA's objectives under section 2 of the Transport Act 2000, account is taken of NERL's obligation to use all reasonable endeavours to maintain an investment grade issuer credit rating."

8.9 Licence Termination and Investment Incentives

NATS would like the CAA to restate what it said in its earlier regulatory policy statements on investment incentives in the event of licence termination.

8.10 Regulatory Reporting

A number of additional regulatory reporting and compliance requirements were placed on NERL at the time of the financial restructuring in 2003, at a time when NATS' financial position was less robust. Now that NATS has a more robust financial structure, with significantly reduced gearing, NERL believes these additional requirements should be removed.

In addition, a number of the provisions of the original Licence appear to NERL to be of negligible benefit while imposing additional costs on NERL. NERL also considers that some simplification of the regulatory accounting requirements could be achieved without the loss of any useful information.

In recognition of the requirement for NERL to strive for increased efficiency and the CAA's duty, subject to its other objectives, to minimise the regulatory burden, NERL anticipates working with the CAA to reduce the regulatory burden.

APPENDIX 1: ACRONYMS

ACC	Area Control Centre
ANSP	Air Navigation Service Provider
ATC	Air Traffic Control
ATM	Air Traffic Management
CASPIAN	Commercially Available System Promoting Integration Across NATS
CFMU	Central Flow Management Unit
CMM	Capability Maturity Model
CP1, CP2 etc	Control Period 1, 2 etc (regulatory price control period)
CSU	Chargeable Service Unit
DfT	Department for Transport
DNO	Distribution Network Operators
ERP	Equity Risk Premium
EOBT	Estimated Off Blocks Time
ERG	Economic Regulation Group (of the CAA)
MFR	Minimum Funding Requirement
MoD	Ministry of Defence
NATS	National Air Traffic Services
NERA	National Economic Research Associates
NERL	NATS (En Route) plc
NSL	NATS (Services) Ltd
Ofcom	Office of Communications
Ofgem	Office of Gas and Electricity Markets
Ofwat	Office of Water Regulation
PAT	Profit After Tax
PRU	Performance Review Unit
RAB	Regulatory Asset Base
RPI	Retail Price Index
RUOE	Real Unit Operating Expenditure
SES	Single European Sky
TC	Terminal Control
TFP	Total Factor Productivity
UKATS	UK Air Traffic Services
UTC	Universal Co-ordinated Time
WACC	Weighted Average Cost of Capital

APPENDIX 2: OPERATING EXPENDITURE

A1.1 Benchmarking of Corporate Functions

The CAA refers to the results of the corporate benchmarking studies, and summarises these as identifying efficiency gaps of “around 20%”.

While this generalisation might not be unreasonable for 2004/5, NATS’ plan already assumes a significant reduction in any efficiency gap by the end of CP2. The corporate benchmarking was based on NATS’ 2004/5 business plan, which significantly reduced the efficiency gap over the period of the plan. Specifically, the 2004/5 plan closed the efficiency gap for IT during CP2¹², and largely closed the gap for Finance.¹³ The efficiency gap in the Facilities Management area was significantly reduced, but NATS is constrained from reducing it further by the rate at which the company can vacate and close its inherited property.¹⁴ As shown in the table in section 2.2, the costs in NATS’ latest 2005/6 plan are considerably lower than in the 2004/05 plan, which further improves NATS’ ranking in the benchmarking.

Using the benchmarking results for 2004/5 as the basis for requiring further reductions compared with the latest business plan thus implies some double-counting of potential savings.

A1.2 International Benchmarking

NATS welcomed the CAA’s inclusion of ANSP cost benchmarking in its assessment of operating costs, as NATS considers that cost benchmarking is much more informative and relevant to ANSP performance assessment than unit rate comparisons.

The final Solar Alliance report on ANSP benchmarking for the CP2 review¹⁵ showed that NATS had the 3rd highest unit cost (of the 13 ANSPs in the study) in 2002 and 2003 in terms of (gate-to-gate) cost per flight-hour. A Purchasing Power Parity adjustment to the 2002 data showed a slight improvement in NATS’ ranking, to 5th highest unit cost.

Much of the cost difference between NATS and the average of the other 12 ANSPs was found to be attributable to exceptional costs and higher depreciation and interest costs, costs which directly relate to NATS’ investment programme. Excluding exceptional, depreciation and finance costs, in both 2002 and 2003 NATS’ operating costs per (en-route) flight-hour were broadly the same as the average for the other 12 ANSPs.

¹² Based on NATS 2004/5 plan, the benchmarking found a 28% gap in IT in 2004/5, which the 2004/5 plan eliminated by 2010/11. However, NATS commissioned an independent review with a specialist IT benchmarking consultant (Compass), which suggested that NATS was already broadly in line with the reference group, even before the further reductions in NATS plans.

¹³ Based on NATS 2004/5 plan, the benchmarking found an 18% gap in Finance in 2004/5, which the 2004/5 plan reduced to 5% by 2010/11.

¹⁴ Based on NATS 2004/5 plan, the benchmarking found a 27% gap in Facilities Management in 2004/5, which the 2004/5 plan reduced to 17% by 2010/11.

¹⁵ Civil Aviation Authority, Cost benchmarking NATS relative to selected ANSPs Final Report on benchmarking with existing data, 20 May 2005 – Solar Alliance & Steer Davies Gleave.

Only NATS and Austro Control showed improved cost-effectiveness between 2001 and 2003.

Whilst it did not contain any detailed analysis of complexity, the Solar Alliance report noted the widely-held belief that managing air traffic in more dense airspace was different in kind from that in less dense airspace. NATS considers that its ranking with respect to cost-effectiveness is strongly influenced by the degree of airspace complexity, particularly in the south-east of England. Analysis by the PRU has confirmed that NATS' Area Control Centres are faced with high complexity, particularly London Terminal Control. In the latest ACE report¹⁶ London TC and Manchester ACC had the first and second highest density (adjusted to take account of concentration of traffic) and London ACC's (Swanwick Centre) complexity was 57% above the average for all ACCs in the analysis. NATS is currently engaged in further work with the PRU and other ANSPs to develop better metrics of complexity, which will allow better understanding of the impact of complexity on costs.

In summary, NATS recognises that its past unit cost performance has appeared to be expensive in comparison with other ANSPs, although much of the difference can be attributed to exceptional costs and higher depreciation and interest costs. NATS is also faced by very high airspace complexity – as has been confirmed by past and ongoing PRU analysis. The PRU's analysis has also demonstrated that NATS' cost-effectiveness is on an improving trend and NATS' current business plan will see this trend continue.

A1.3 Top-Down Efficiency Analysis

The CAA's top-down efficiency assessment was based on high level comparisons with other industries of Total Factor Productivity (TFP) growth and Real Unit Operating Expenditure (RUOE). The result of this analysis was that the CAA concluded that NERL should be able to reduce RUOE by 2% per annum in the period to 2007/08 before increasing the pace of RUOE reductions to 3% per annum during the remainder of CP2. However, as we describe below, the basis for this conclusion is unclear.

Total Factor Productivity growth

The CAA's Firm Proposals note that TFP growth in the transport sector has been 1.5% above the economy as a whole (which has TFP growth of a little over 1%), rather than the 2.5% quoted in the CAA's earlier papers for transport and communications combined. This is a significant reduction.

The other two reasons originally given by the CAA for a high TFP were that NATS is labour intensive and that there is a "privatisation effect". The CAA appears to accept that its argument that TFP is higher for labour intensive industries is not correct, although it does not make this explicit in its May paper. To assume a separate "privatisation effect" would be double-counting, as an important reason for out-performance in the transport sector is due to deregulation and privatisation (for example of BA and airlines generally, BAA, Railtrack/National Rail and buses).

However, despite appearing to accept that lower TFP growth is appropriate, the CAA has not significantly changed its RUOE target for NATS.

¹⁶ ATM Cost-Effectiveness (ACE) 2003 Benchmarking Report – PRU April 2005

Real Unit Operating Expenditure reductions

In its earlier paper, the CAA noted that RUOE performance in other regulated companies has varied widely. The figures quoted by the CAA vary from 0 - 0.9% per annum for sewerage to 4.6 - 5.7% per annum for electricity transmission. This variation is not surprising, as the movement in RUOE depends on many factors including labour intensity, whether economies of scale are growing or falling and technical progress in the particular industry.

The range of numbers in other industries indicates that different factors apply in different industries and that it is difficult to determine the appropriate number in each case. The CAA concludes that a broad average of these very different numbers is 3% to 4%, and that this should be adjusted down to between 2% and 3% for NATS to take account of the fact that NATS is more labour intensive. The assumption of 2% to 3% per annum savings over and above the 2005/06 business plan is a somewhat arbitrary assumption. It is not possible, from external comparisons of changes over time, to conclude with confidence what the appropriate rate of price change for a company such as NATS should be.

NATS therefore considers that the CAA's own analysis leaves a large area of judgement and that the proposal carries an unnecessary risk to the longer term interests of customers.