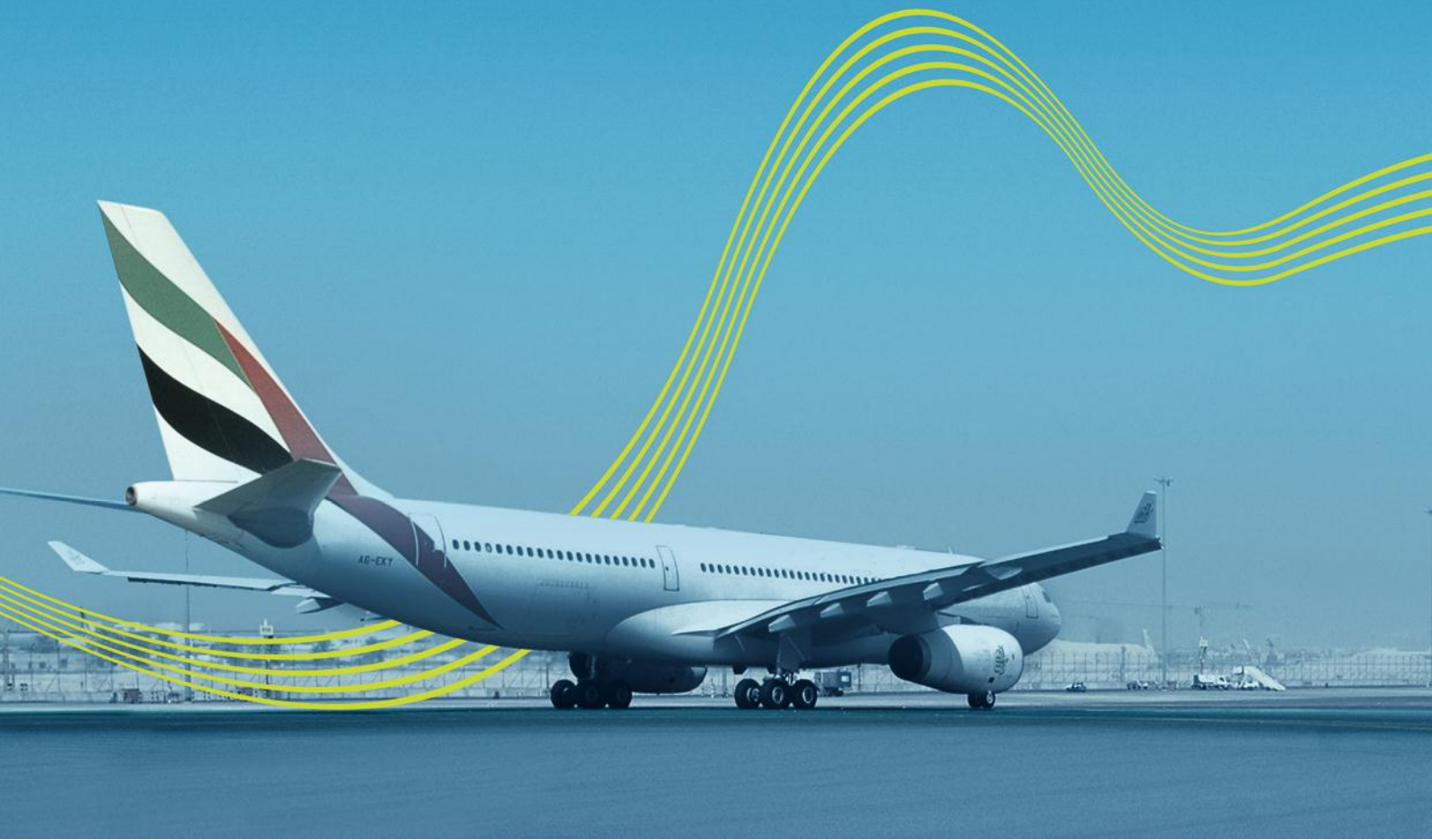
NATS

Performance
through Innovation

NATS Response to Draft UK-Ireland RP2 Performance Plan

April 2014



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1 Executive Summary

1.1 NATS welcomes the opportunity to respond to the Draft UK-Ireland RP2 Performance Plan. Our response relates to the CAA's proposals for UK En Route Airspace services provided by NATS (En Route) plc. (NERL) as well as to Terminal Air Navigation Services provided by NATS (Services) Limited (NSL).

1.2 NERL's Revised Business Plan (RBP) for UK En Route airspace is an ambitious and balanced plan that will be challenging to deliver. It fully meets customer and regulatory requirements for safety, capacity and environment at greatly reduced prices. Indeed, the 18% real reduction in prices proposed by NERL exceeds EU-wide targets. Importantly, NERL's combined RP1 and RP2 plans also exceed the EU-wide cost efficiency target for this 8-year period.

1.3 The plan includes the delivery of important strategic objectives, including the early implementation of the industry's Future Airspace Strategy, deploying SESAR technology and key airspace programmes such as the London Airspace Management Programme. These will deliver significant customer benefits, including fuel-enabled savings of approximately £180m per annum by the end of RP2.

1.4 The RBP is designed so that NERL can continue to deliver one of the best air traffic control services in Europe, safely, with low levels of delay and high fuel-enabled savings for customers. It builds on a track record of significant cost reduction since the PPP in 2001, achieved with no disruption through industrial action since 1982.

1.5 The CAA has acknowledged that NERL has made considerable progress in reducing its costs and in mitigating its pension liabilities. The CAA has also accepted key elements of the RBP, including the capital expenditure, staff profile and non-staff operating plans. Altogether, NERL is planning determined cost reductions of £390m in real terms over RP2.

1.6 The CAA has proposed significant further price reductions of £120m. We have considered whether we could fully absorb such price reductions while maintaining the benefits consulted on in the RBP, which have considerable customer support. Our analysis shows that this is not realistic. In our view, this is because the majority of the CAA's proposals are not sufficiently evidenced and they do not take account of interdependencies. Therefore, the proposals do not provide the required resources.

1.7 Also, the CAA's proposals reduce the likelihood that NERL will achieve its regulatory rate of return. This is because they introduce additional risk while at the same time reducing the absolute level of return, thereby impairing NERL's ability to absorb downside shocks.

1.8 Since the RBP was submitted, NERL accepts that the CAA has made airport regulatory decisions with respect to market conditions that have the effect of reducing NERL's cost of capital allowance by £15m in RP2 (assuming equivalent adjustments). NERL could also accept the risk of the CAA's proposed reduction in pay rate and pension cost allowances amounting to £25m, provided the pension pass through is maintained at 100%. In summary, NERL could accept further price reductions totalling £40m over RP2 on top of the £390m in our RBP. This is NERL's revised proposal.

1.9 Our analysis of the CAA's proposal of an additional £80m price reduction is that we would not be able to commit to and deliver the customer benefits under our RBP. This would lead to around £200m of lost and/or deferred customer benefits in RP2. This is clearly not in customers' best interests.

1.10 For this reason, we request that the CAA accepts NERL's revised proposal. Otherwise, we would need to discuss trade-offs with our customers and other stakeholders to rebalance our planned commitments to be assured of delivering them within the CAA's reduced revenue allowances.

1.11 The CAA is also proposing to make the delivery of elements of the UK's Future Airspace Strategy a condition of NERL's Licence. This would depart from the CAA's output-based regulatory approach which has been a previous strength. Instead, NERL proposes that the CAA's requirements be incentivised through the existing regulatory regime with progress being monitored through Service and Investment Plan reporting.

1.12 In relation to Terminal Air Navigation Services, NSL welcomes the CAA's general approach to regulation. The CAA's approach follows EU regulations while encouraging the development of a contestable market. However, NSL is concerned that the CAA has not provided sufficient evidence and justification for the proposed target for cost efficiency for TANS. There are also a number of areas where NSL requests clarification.

1.13 We invite the CAA to review the evidence and proposals presented below and to modify the performance plan before submission to the Department for Transport. This will enable us to deliver key customer benefits in RP2.

2 Introduction

2.1 This document responds to the UK Air Navigation Service (ANS) component of the draft UK-Ireland RP2 Performance Plan Consultation Document and the Draft FAB Performance Plan. We also address CAP 1157 & 1158[1], and the CAA consultant studies[2].

2.2 Sections 3 to 6 respond to the CAA's proposals for En Route airspace.

- Section 3 describes NERL's ambitious and balanced RBP
- Section 4 discusses how the CAA's significant further price reductions will reduce the overall customer benefits of NERL's RBP
- Section 5 sets out requests of the CAA in the area of cost efficiency to enable NERL to better meet customer requirements
- Section 6 identifies our concerns on the CAA's proposed targets for capacity, environment and safety, and makes recommendations for addressing these

2.3 Section 7 responds to the CAA's proposals for TANS.

2.4 The appendices are arranged as follows:

- Appendix A sets out our more detailed observations on the CAA's proposals
- Appendix B references our answers to the CAA's consultation questions
- Appendix C sets out our comments about the need for an effective appeal mechanism
- Appendix D comments on the proposed Licence condition for FAS incentivisation
- Appendix E provides additional evidence from PwC on NERL's employment costs
- Appendix F provides additional evidence from Oxera on the cost of capital

2.5 We note that under 'Background' in the consultation document, the CAA refers to the September STATFOR traffic forecast. We understand that following further study and updates, the CAA will adopt the February STATFOR forecast for the Performance Plan that it submits to the Department for Transport. Broadly we are content with that forecast.

2.6 We also note that the Oceanic service is not covered by this plan and we look forward to engaging in the CAA's consultation process on this service.

[1] CAA (2014), 'CAA's decision on the approach to the regulation of terminal air navigation service in RP2', February 19th; CAA (2014), Regulatory treatment of London Approach charges in Reference Period 2 (2015-2019) of the Single European Sky Performance Scheme: CAA conclusions', February 19th.
[2] This includes: 'NERL non-staff opex review – report by Capita for the CAA'; 'Assessing the efficiency of NERL's total employment costs in RP2: a research report for the CAA – report by IDS'; 'Estimating the cost of capital for NERL – report by PwC for the CAA'; and 'GAD analysis of pension costs for CAA's RP2 price control review of NERL.'

3 NERL's RBP is ambitious but balanced

Background to NERL's RBP

3.1 The CAA's mandate for Customer Consultation and NERL's Business Plan require the company to identify the priorities of airspace users and produce a plan to deliver the outcomes of greatest value to them. This must take account of the four Key Performance Areas (KPAs) of the Performance Regulation (safety, environment, capacity and cost efficiency). The CAA also requires NERL to give full regard to airspace users' preferences on the trade-off between charges, flight efficiency and delay.

3.2 In May 2013, we submitted an Initial Business Plan, which was based on two proposals: one service led and one price led. Through a detailed three month consultation process we received feedback from airlines to prioritise maximising fuel savings and service quality, but at the lowest price. This feedback was incorporated into our Revised Business Plan (RBP), which continued to offer excellent performance across safety, fuel savings and service quality, while addressing our customers' concern for price reduction. This balanced plan also included the investment and resources required to meet key customer requirements, including early implementation of the industry's Future Airspace Strategy (FAS).

NERL's RBP is carefully balanced to meet customer and regulatory priorities

3.3 In line with the CAA's requirements, NERL put forward a carefully designed and balanced plan for RP2. This takes account of the interests of all stakeholders and proposes high levels of service performance and fuel-enabled savings.

3.4 Through detailed assessment of the interdependencies between safety, service, cost and risk, NERL's RBP sought to balance £390m of direct cost savings with maintaining the capability to deliver projects enabling large indirect customer benefits. These include £180m per annum fuel enabled savings by the end of 2019 and less than 6 seconds of Air Traffic Flow Management (ATFM) delay per flight.

3.5 Figure 3.1 illustrates the stretching targets set in all key performance areas:

Figure 3.1 NERL RBP targets

	Cost Efficiency (real DC reduction per annum)	**Price Reduction** (real saving end RP2 v end RP1)	**Determined Cost saving** (real saving v 2014 NPP)	**Service** (NERL attributable En Route ATFM delay)	**Service** (resilience risk)	**Safety** (lower risk per flight)	**Fuel Saving by 2019**	**Capital Expenditure** (RP2 total 2012 prices)
REVISED BUSINESS PLAN	**-2.6%**	**-18%**	**£390m**	**< 6s**	**Low Risk**	**13%** (same as today)	**£180m** pa (276KT)	**£575m**

3.6 In particular, NERL's RBP recognises customer priorities for price reductions and therefore proposes:

- 18% real price reductions by the end of RP2
- £390m real determined cost reductions over the 5-year period

3.7 NERL's plan also responds to the challenges set by the CAA and exceeds EU-wide cost efficiency targets for RP2 both for determined costs (DC) and determined unit costs (DUC). Using the European Commission's methodology, the RBP delivers:

- 2.6% p.a. real reduction in DC compared with the EU-wide target of 2.1% p.a.
- 4.6% p.a. real reduction in DUC compared with the EU-wide target of 3.3% p.a.

3.8 This is shown in the Figure below:

Figure 3.2 NERL RBP DC and DUC real annual reductions compared to EU-wide target

£m 2012 prices	Base * 2014	Plan 2015	Plan 2016	Plan 2017	Plan 2018	Plan 2019	NERL 14-19	EU-wide Target	NERL out performance
DC (£m)	598.7	575.1	566.2	556.7	543.4	526.0	**-2.6%**	**-2.1%**	**-0.5%**
DUC (£)	60.98	57.30	55.17	53.25	50.87	48.20	**-4.6%**	**-3.3%**	**-1.3%**

*using the methodology proposed by the European Commission and referenced in the CAA consultation document

3.9 Significantly, the level of cost efficiency performance in NERL's RP2 plan (5 years) combined with the delivery of its RP1 plan (3 years) exceeds the comparable EU-wide target over this 8-year period. This is illustrated in Figure 3.3 below.

Figure 3.3 NERL's RP1 and RP2 cost efficiency compared to EU-wide targets

DC% Real Reductions p.a.	RP1 Plan (2011 - 2014)	RP2 Plan (2015 - 2019)	Combined (2011 - 2019)
EU-wide Targets	-0.4%	-2.1%	-1.5%
NERL	1.7%	-3.6%*	-1.7%

*as measured from the RP2 start point of NERL's RP1 plan. The 2.6% reduction in Figures 3.1/3.2 is measured from the RP2 start point of the EU's ambition for NERL's RP1 plan

3.10 NERL considers that the RBP maximises overall customer benefits.

NERL's RBP is the most challenging plan in NERL's history

3.11 In order to deliver the important strategic objectives included in NERL's RBP, the company faces particular challenge in 3 key areas.

Stretching operating cost savings

3.12 NERL's plan includes £230m of operating cost savings over RP2. These include a high level of unsecured savings, such as savings reliant on unproven technology and working practice reform. They also include a large amount of unidentified savings - savings which will only be generated through innovation by NERL over the period.

Complex technology and programmes

3.13 The UK has some of the most complex airspace in the world due to the close proximity of major airports as well as the cross-roads nature of UK airspace between the North Atlantic and Europe. Future plans are focused on reducing the complexity of airspace through systemisation, the first steps of which are being undertaken under FAS. We will be deploying new route structures permitting a predictable and repeatable traffic pattern, and we will reduce the dependency on holding facilities. The scale of these projects is much greater than those undertaken in RP1 and will have a significant positive impact on fuel and cost savings going forward.

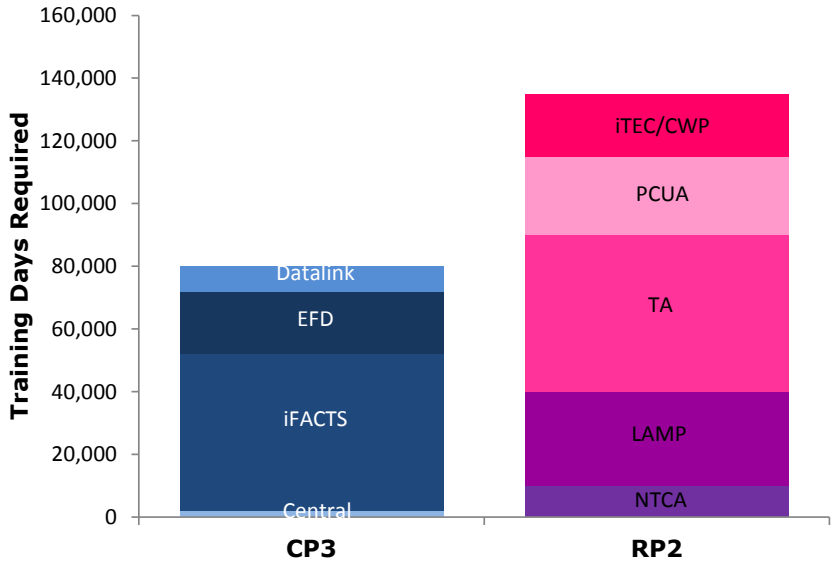
3.14 The programmes and projects that NERL has set out to undertake during RP2 are as follows:

- **LAMP**[3] - once in a generation redesign of the London Terminal Manoeuvring Area (TMA) delivering improved performance and efficiency
- **Transition Altitude (TA)** – major change affecting all of UK airspace and an enabler for future customer benefits
- **SESAR**[4] – fundamental change to infrastructure, tools and methods of operation delivering improved safety, capacity and fuel efficiency
- **Free Route Airspace and Dynamic Sectorisation** – significant changes to the flexibility and efficiency of our operation.

[3] LAMP – London Airspace Management Programme
[4] SESAR – Single European Sky ATM Research

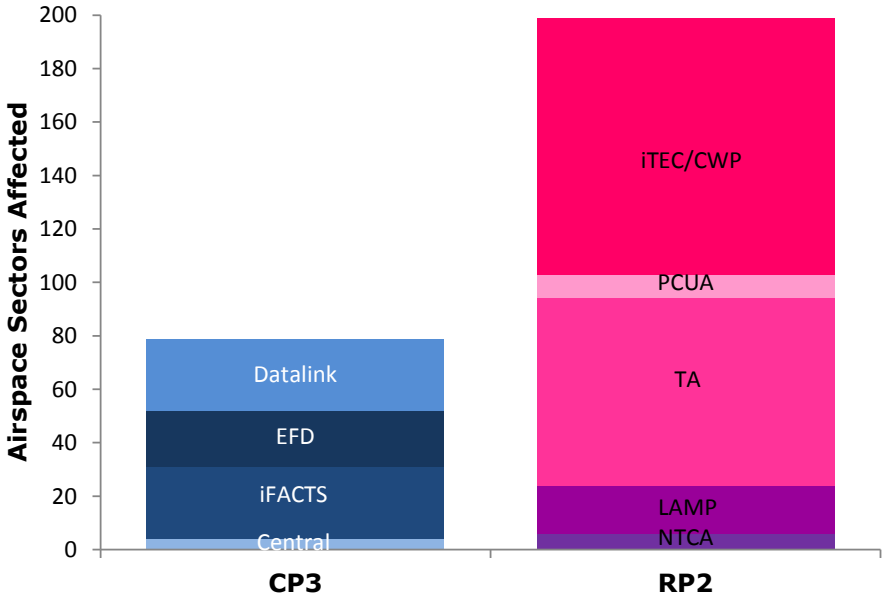
3.15 The scale and complexity of these projects can be seen in the Figures below.

Figure 3.4 Training requirements (days)



3.16 Figure 3.5 indicates the scale of airspace sectors affected by the projects. For example, Transition Altitude affects 3 times as many airspace sectors as iFACTS[5]. The iTEC[6] programme affects 4-5 times as many as iFACTS.

Figure 3.5 Airspace sectors affected



[5] Interim Future Area Control Tools Support
[6] interoperability Through European Collaboration

3.17 Moreover for all of these projects, NERL faces many factors outside of its direct control. This includes extensive collaboration with other parties (e.g. FAB, Borealis, the CAA, and the Airports Commission), which could affect the projects' cost and delivery.

3.18 NERL plays a key role in both the governance of FAS from the Deployment Steering Group and Senior Delivery Group down through the various supporting subgroups. Arguably, it is the single largest contributor to FAS in terms of effort across the stakeholder community. Under the CAA's proposals for reduced revenue allowances, NERL would need to carefully re-examine its commitments to these areas.

Reliance on staff engagement and goodwill

3.19 The RP2 plan includes a number of complex programmes that depend on changes in methods of operation and working practices to deliver customer benefits. Such reforms require a positive employee relations climate and the support of employees and their Trade Union representatives.

3.20 A good example is a programme such as LAMP – a once in a generation re-design of the entire London TMA including the Transition Altitude Project. Such a major change will affect every Air Traffic Control Officer (ATCO) in the business and will require significant ATCO involvement. Another example is the SESAR deployment programme that changes the operating systems used in the business. This will affect ATCOs and Engineers and other staff grades in developing, training, delivering and realising the programme benefits.

3.21 Additionally, the volume of development/simulation work and training is so large in RP2, as indicated in Figure 3.4 above, that we cannot resource this efficiently within contractual staff working hours without affecting service performance in the form of increased delay.

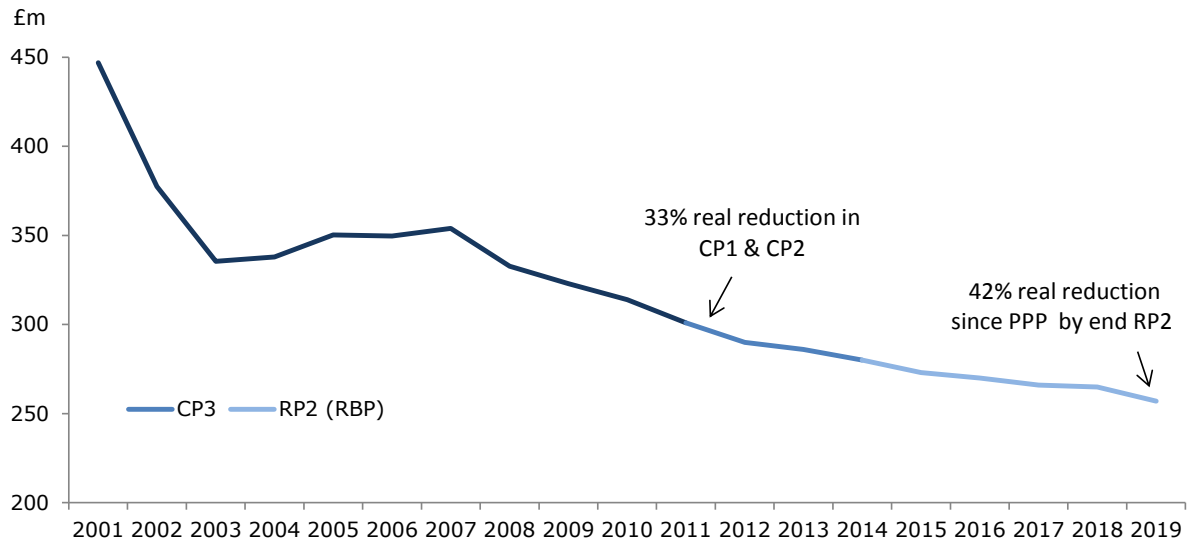
3.22 Therefore, NERL relies on maintaining a good level of employee engagement and support for delivering the RBP customer benefits. Specifically, the company depends on employees volunteering to work more than they are contractually obliged to do. We plan to utilise our voluntary ATCO overtime agreement to resource this work. As overtime is not mandatory, should employees decline to volunteer to work additional shifts then we will have to delay, or in some cases may not be able to deliver, key programmes in RP2.

NERL's RBP builds on progress which has been made over previous control periods

3.23 While NERL's RBP is itself challenging, it also builds on progress that we have made over previous control periods. NERL has a track record of significant cost reduction. By the end of RP2, NERL will have made a 42% real reduction in controllable underlying operating costs since PPP, as illustrated in Figure 3.6 below.

3.24 This has been achieved through strategic cost reduction with a focus on materially important areas including: centre closure (50%); property rationalisation; reforms of employee terms and conditions; pension reform (twice); voluntary redundancy (three times); working practice improvements; and technology enabled savings. NERL has also mitigated rising legacy pension costs and risks caused by adverse market conditions.

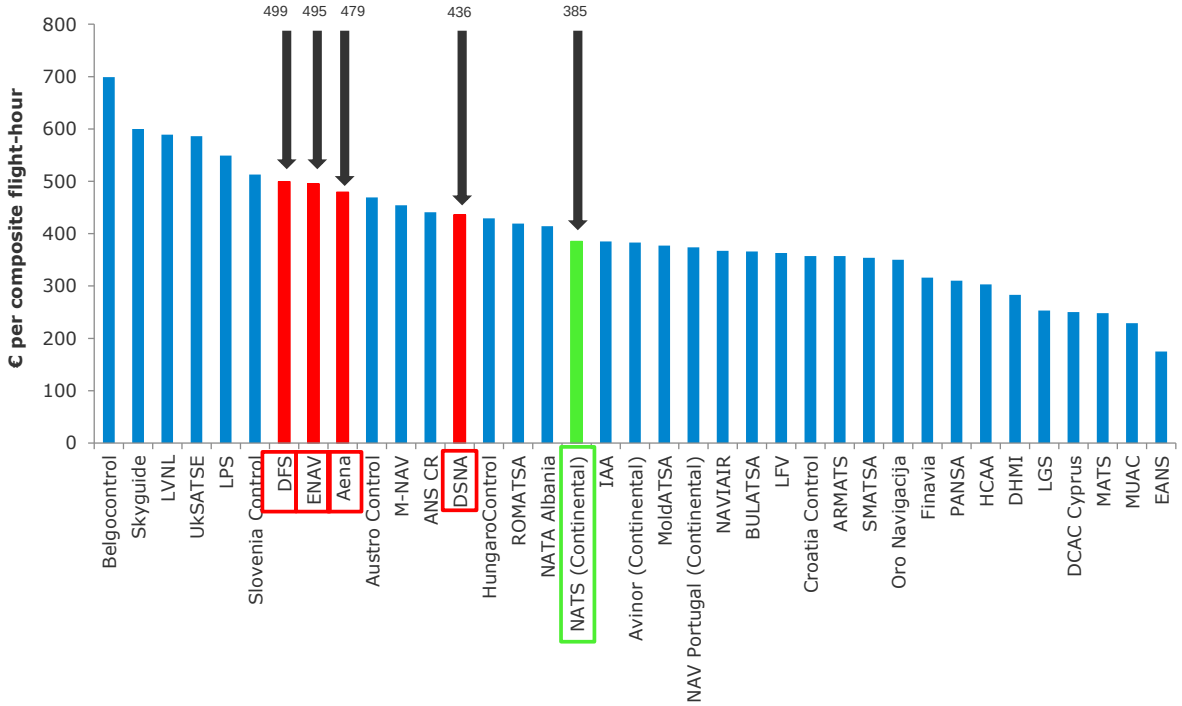
Figure 3.6 Performance since PPP: NERL real underlying operating costs (2008/9 prices)



3.25 These cost reductions have led NERL to become best in class for financial cost effectiveness as compared to the four other biggest ANSPs (DFS, Aena, ENAV and DSNA)[7]. This comparator group is used in Eurocontrol's ANSP cost effectiveness benchmarking reports as these ANSPs have similar economic and operating environments. NERL's costs per composite flight-hour are 19% lower than the average of these 4 ANSPs.

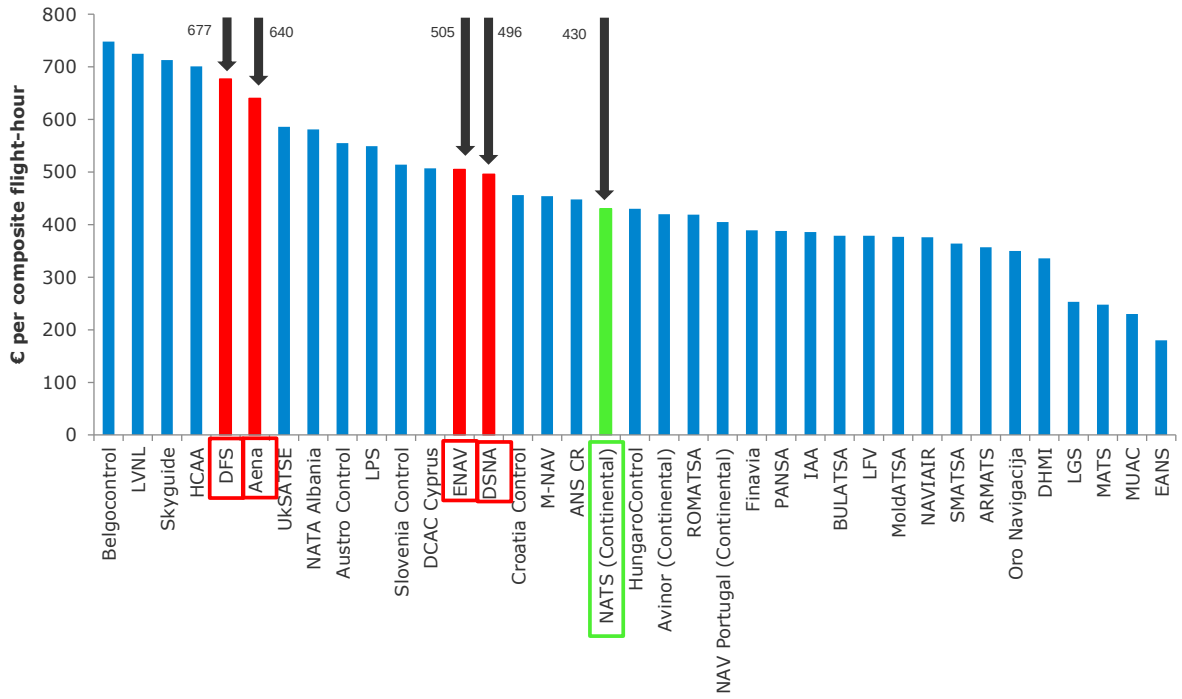
[7] DFS, Germany; Aena, Spain; ENAV, Italy; DSNA, France

Figure 3.7 NERL's RBP – benchmarks for financial cost effectiveness



3.26 Importantly NERL is also best in class for economic cost effectiveness, which includes delay. This is demonstrated in Figure 3.8 below which shows that NERL's costs are 26% lower than the average of the other 4 biggest ANSPs.

Figure 3.8 NERL's RBP – benchmarks for economic cost effectiveness



Source: ACE benchmarking (2011) analysis gate-to-gate.

3.27 NERL has already managed to become one of the best performing ANSPs in Europe with low delay, high-quality service, and substantial fuel-enabled savings with no industrial action since 1982.

NERL's performance over previous control periods has been achieved through good management

3.28 In CP3, NERL faced difficult and unforeseen circumstances. Traffic was 8% lower on average over CP3 than assumed by the CAA leading to a loss of £90m in revenue after risk sharing. Also, the pension deficit increased to £383m due to the difficult economic circumstances.

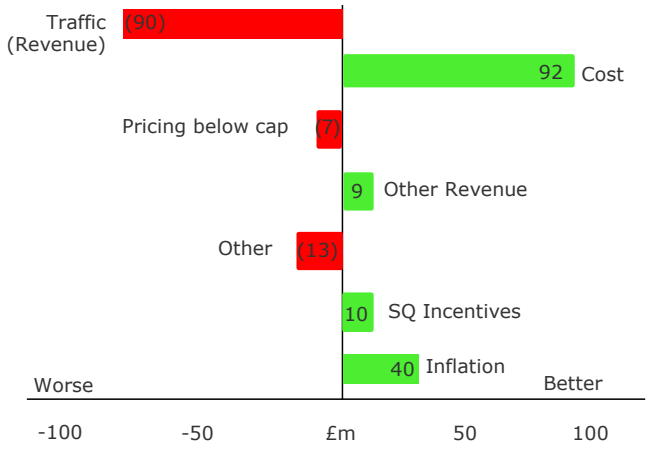
3.29 This required significant cost saving by NERL (enabled by lower than assumed traffic) to absorb these downside risks and to offset the revenue loss. Before inflation effects, NERL is on track to earn a rate of return consistent with the regulatory allowance set by the regulator in CP3. This is as a result of good management rather than a result of 'comfortable' outperformance of the CP3 plan as the CAA suggests. This is shown in Figure 3.9 below.

Figure 3.9 NERL return projected for CP3

CP3 Performance	CP3 Settlement	Actual performance	Variance	Actual performance excluding inflation	Variance excluding inflation
Regulatory Return	£322m	£363m	**£41m**	£323m	**1m**
Rate of Return	6.8%	7.6%	**0.8%**	6.8%	**0%**

3.30 The Figure below shows the net revenue losses expected in CP3 (£90m), the effect of pricing below the cap (£7m) and the action the company took to offset these (£92m).

Figure 3.10 NERL out/under performance in CP3 (£m outturn)



Note: service quality incentives were £5m in 2011, £6m in 2012 and £(1)m in 2013. Based on the December 2013 update to the RP2 plan provided to the CAA.

3.31 A breakdown of the £92m of operating cost savings shows that:

- £30m was in direct response to lower traffic and consequent reductions in FTEs required to handle the traffic. Staff numbers were cut by approximately 11% (400 FTEs)
- £20m was realised by a reduction in the size of our ATC training facility. This was achieved by harnessing iFACTS capacity benefits and recognising the lower traffic growth and the impact that these had on staffing requirements
- £20m was due to pay restraint during the period of recession (changing from a previous assumption of RPI + 0.5% pay awards to CPI + 0.25%)
- £15m was realised from the introduction of new technology (mainly iFACTS and EFD8), with greater than expected savings in Air Traffic Services Assistant (ATSA) staff numbers
- £7m mainly relates to more general austerity measures in response to the difficult economic climate in CP3.

3.32 As indicated above, NERL voluntarily priced below its revenue cap (£7m) recognising the difficult financial circumstances facing its customers in the early part of CP3.

[8] Electronic Flight Data.

There are fewer opportunities for future savings

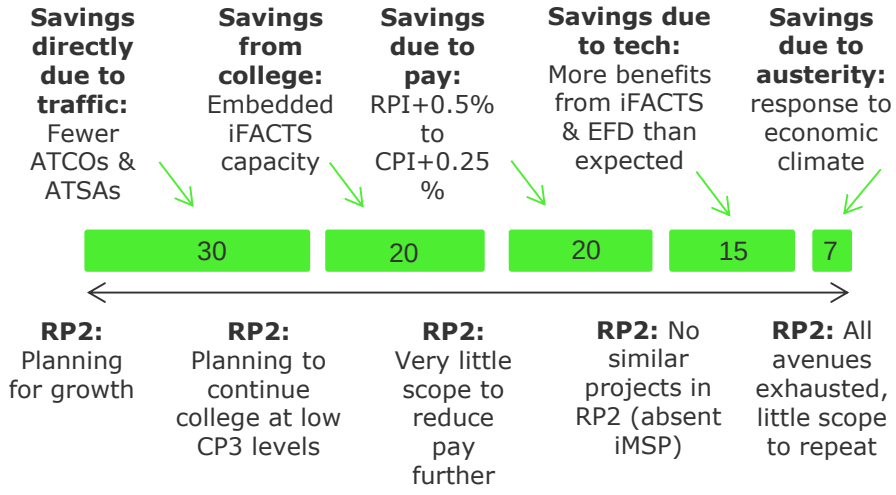
3.33 Crucially, all of the key drivers of the £92m opex savings in CP3 have been incorporated into NERL's baseline forecasts for operating expenditure in RP2 – i.e. these savings flow straight through to customer benefits in RP2.

3.34 However, given the scale of these savings, and that many of these arose due to traffic growth not materialising, there is significantly less opportunity for additional savings in these areas for the following reasons:

- There is planned traffic growth in RP2
- The scaled down ATC training college operation, including the consolidation of facility from Hurn to our Corporate and Technical Centre, means that this is now operating at minimum levels
- Actual pay awards were moved to a CPI-linked basis and as this change has been made there is no scope for similar levels of future savings
- Technological savings were made due to EFD and iFACTS. There are no similar projects planned for RP2
- General austerity measures have been exhausted

3.35 Figure 3.11 below summarises the savings made in CP3 and the assumptions made for RP2 in creating the RBP.

Figure 3.11 Scope for further savings in key operating costs



3.36 Finally, there is a risk that a material traffic shortfall could recur, e.g. a prolonged period of flat traffic volumes, rather than assumed growth of approximately 2% per annum. If this happens, NERL will not be able to repeat the scale of the actions taken in CP3 to offset revenue losses.

Summary

3.37 Overall NERL's stretching and balanced plan:

- Meets the CAA's requests and exceeds EU-wide targets
- Provides significant benefits to customers at a manageable level of risk
- Contains challenging operating cost savings and complex programmes

4 The CAA's significant further price reductions will reduce the overall customer benefits of NERL's RBP

The CAA has proposed significant cuts in operating costs relative to NERL's RBP

4.1 Even though NERL's RBP exceeds EU-wide targets (both for RP2 alone and when taking RP1 and RP2 together), the CAA has proposed even further real price reductions of 4.5% by the end of RP2, and a total real price reduction of 22% by the end of the period. This corresponds to a real determined cost reduction of £120m (in 2012 prices).

4.2 The composition of the proposed CAA adjustments of £120m is shown in Figure 4.1 below. Overall, the adjustments proposed by the CAA remove an additional 5.9% of the NERL determined cost base in 2019 compared to the RBP.

Figure 4.1 Impact of the CAA's proposed cuts (numbers may not sum due to rounding)

Area (2012 prices)	£m Impact (Total RP2)	£m Impact (2019)	Impact on 2019 price
Elimination of all operating cost contingency	£29m	£6m	1%
Elimination of All Employee Share Ownership Plan costs	£13m	£3m	0.5%
Reduction in allowance for employment costs	£16m	£6m	1%
Reduction in pension cost allowance	£17m	£8m	1%
Reduction in cost of capital allowance	£47m	£8m	1%
TOTAL	**£120m**	**£31m**	**4.5%**
As a % of TOTAL Cost Base in RBP	**4.4%**	**5.9%**	

4.3 Excluding allowances relating to the Regulatory Asset Base (depreciation and return) the CAA's proposed operating cost cuts represent an additional 7.1% reduction by 2019 beyond those already planned in the RBP.

4.4 The CAA may not consider these reductions to be large in relation to the RP2 package as a whole. However, they represent a considerable reduction to the variable costs under NERL's control and have major implications for customers and NERL's finely balanced RBP proposals.

The CAA has not provided sufficient evidence for its proposed cuts

4.5 The CAA is proposing to reduce NERL's revenues in RP2 by a further £120m (or 4.5% in real terms) on top of £390m of cost reductions (18%) in NERL's RBP. While the CAA's consultation document contains a short section entitled 'Interdependencies', this only refers to NERL's own assessment in its RBP.

4.6 In the consultation document the CAA does not present analysis or evidence of the impact of its own proposals on the changes in interdependencies (safety, capacity and environment). NERL has received no information or modelling requests to support the CAA's analysis and the impact on interdependencies was not on the CAA's agenda, or even discussed, at the open stakeholder meeting on 14 March 2014.

4.7 This is surprising given the importance of these interdependencies as stressed in the CAA mandate.[9] It also suggests that the CAA may not fully appreciate the extent of risk already included in NERL's RBP; for example, the extent of headcount reduction and the challenging capacity and environmental targets.

4.8 NERL has conducted its own review of the effect of the CAA's proposals. This reveals that there may be unintended consequences, namely that NERL will:

- be unable to deliver the same level of customer benefits set out in its RBP. Therefore, we would need to discuss trade-offs with our customers and other stakeholders to rebalance our planned commitments
- reduce the likelihood that NERL will earn the regulatory return that the CAA is proposing
- lack the necessary incentives to ensure efficient and necessary investments are undertaken[10]

[9] 'The CAA's process for RP2', July 2012
[10] Department for Business Innovation & Skills (BIS), 'Principles for Economic Regulation' April 2011.

4.9 Indeed good regulatory precedent exists in support of the need to create a more balanced overall plan. For instance, in its review of Heathrow, the CAA acknowledged the need to ensure the desire of present users to pay lower prices is balanced against the interest of future users and the need for timely investment. In particular, it acknowledged 'that reducing opex may, in some cases, impose some other risks on users, especially if HAL's reaction is to respond with service reductions or inferior performance.'[11] The CAA decided not to set the efficiency target at the top end of the range which had been identified by its consultants. Other UK regulators (e.g. Ofwat, Ofgem) have adopted similar approaches to ensure that their proposals are proportionate.

4.10 In addition to the lack of evidence for the overall balance of CAA's proposals, the CAA has not provided sufficient evidence to support its proposed changes in a number of areas, including reductions in employment costs and the cost of capital, and the introduction of an asymmetric pension pass-through. These issues are discussed further in section 5.

[11] CAA (2013), 'Economic regulation at Heathrow from April 2014: initial proposals', CAP 1027, April.

The CAA target for NERL exceeds EU-wide targets and contributions of other parties

4.11 NERL's RBP already exceeded EU-wide targets for RP2 (and when its plans for RP1 and RP2 are combined). This is evidenced in the Figure below.

Figure 4.2 Comparison of contributions to RP2 cost efficiency targets within the UK (DC)

£m 2012 prices	Base 2014	Plan 2015	Plan 2016	Plan 2017	Plan 2018	Plan 2019	UK 14-19	EU Target	(Out)/Under Performance
NERL	598.7	575.1	566.2	556.7	543.4	526.0	-2.6%	-2.1%	(0.5)%
MET	30.6	26.2	25.5	24.8	24.2	23.6	-5.1%	-2.1%	(3.0)%
CAA & DfT	51.3	57.5	57.6	57.6	57.7	57.2	2.2%	-2.1%	4.3%
UK Total	**680.6**	**658.8**	**649.3**	**639.1**	**625.3**	**606.8**	-2.3%	-2.1%	(0.2)%

*using the methodology proposed by the European Commission and referenced in the CAA consultation document

4.12 It is also apparent from the Figure that NERL and the Met Office are the only parties making a significant contribution towards the attainment of the EU-wide target.

4.13 Furthermore, the CAA's proposals go beyond the RP2 targets proposed by the European Commission in a number of other dimensions:

- use of the base case traffic forecast for price setting rather than the EU-wide concession to use the STATFOR low traffic forecast. This will make it relatively more difficult for NERL to outperform the traffic forecast and to earn additional revenue
- application of twice the bonus and penalty rate in apparent contradiction to the EU Charging Regulation (i.e. 1% for KPAs in each of environment and service quality rather than 1% in aggregate)
- application of an asymmetric pension pass through

4.14 The effect of this is to introduce even more risk into NERL's plan than will be permitted by other Member States/NSAs for their ANSPs. This is illustrated in Figure 4.3 below.

Figure 4.3 Regulatory targets for NERL compared to EU-wide regulatory targets

	RBP	CAA Proposal	EU
Traffic	Base Case	Base Case	Low Case
DC% p.a.	-2.6%	-3.7%	-2.1%
DUC% p.a.	-4.6%	-5.7%	-3.3%
Incentives (+/-)	1%	2%	1%?
Pension Pass Through	Symmetric	Asymmetric	Symmetric?

Further cuts undermine the foundations of the RBP and are not in customers' interests

4.15 When NERL created its initial business plan and revised it for customer feedback, it was careful to ensure that it contained a manageable level of risk and stretching performance targets.

4.16 This was achieved by planning: sufficient staff (which the CAA has accepted); an adequate level of contingency (which the CAA has removed); and ensuring that affordable and reasonable terms and conditions exist to maintain staff engagement and motivation (which the CAA's proposals undermine).

4.17 NERL has considered whether reducing headcount further could create savings to fund a sensible level of contingency and terms and conditions that staff value e.g. pay progression and employee share scheme. However, as explained below, NERL cannot see that this is workable without impairing the service levels required by customers or delaying projects with significant customer benefits.

Further cuts create risks to service resilience

4.18 If the CAA allows no operating cost contingency, then NERL will need to create this. Realistically this will have to come from cutting headcount in both operational and non-operational areas. This action will reduce the service resilience that our customers desire.

Further cuts impact delivery of complex technology and programmes

4.19 As with any complex technology programme delivered over a 5-year period, NERL expects some risks to crystallise resulting in the need for additional resources and costs. Examples of unplanned costs in programmes such as LAMP, TA, FAS and SESAR include:

- Additional training costs
- Additional overtime to protect service quality, especially during major transitions
- One-off transactional costs to secure changes to methods of operation or shift patterns to maximise new technology capability

4.20 As explained later, NERL's plan to accelerate the deployment of SESAR relies on parallel running of certain programmes e.g. iTEC and legacy systems during the deployment and transition phases. Without the resources of NERL's RBP these programmes will need to have fewer overlaps with the effect that delivery benefits will be delayed from RP2 into RP3.

Further cuts will affect employee relations

4.21 Many of the further cuts proposed by the CAA affect the affordability of valued staff terms and conditions (e.g. employee share scheme, pay rates and pay progression). To the extent that NERL has to withdraw and/or reduce these, this will affect the commitment of staff to improve working practices and to volunteer for overtime for the training and transition required for new technology. This could slow down the delivery of benefits to customers.

4.22 All this needs to be viewed in the context of the changes that NERL has already made over recent years, e.g. redundancy programmes and pension reforms.

A performance plan with the extent of CAA cuts is unrealistic

4.23 NERL does not consider that it can maintain a realistic performance plan in RP2 with the extent of the CAA's proposed further cuts (£120m on top of £390m already included in the RBP).

4.24 NERL cannot credibly fund the sensible level of contingency required over this 5-year period or the terms and conditions that staff value by further reductions in headcount (which the CAA states are realistic and credible).

4.25 Therefore, NERL will need to re-examine the planned outputs over this period with a view to adjusting them to reflect a lower level of resources. This will require NERL to consult customers and other stakeholders to develop another workable plan.

4.26 As a positive and constructive alternative, NERL has developed proposals for modifying the CAA's draft Performance Plan. This is in an effort to reduce prices beyond NERL's RBP while maintaining a balanced plan that delivers key customer benefits. These proposals are set out in section 5.

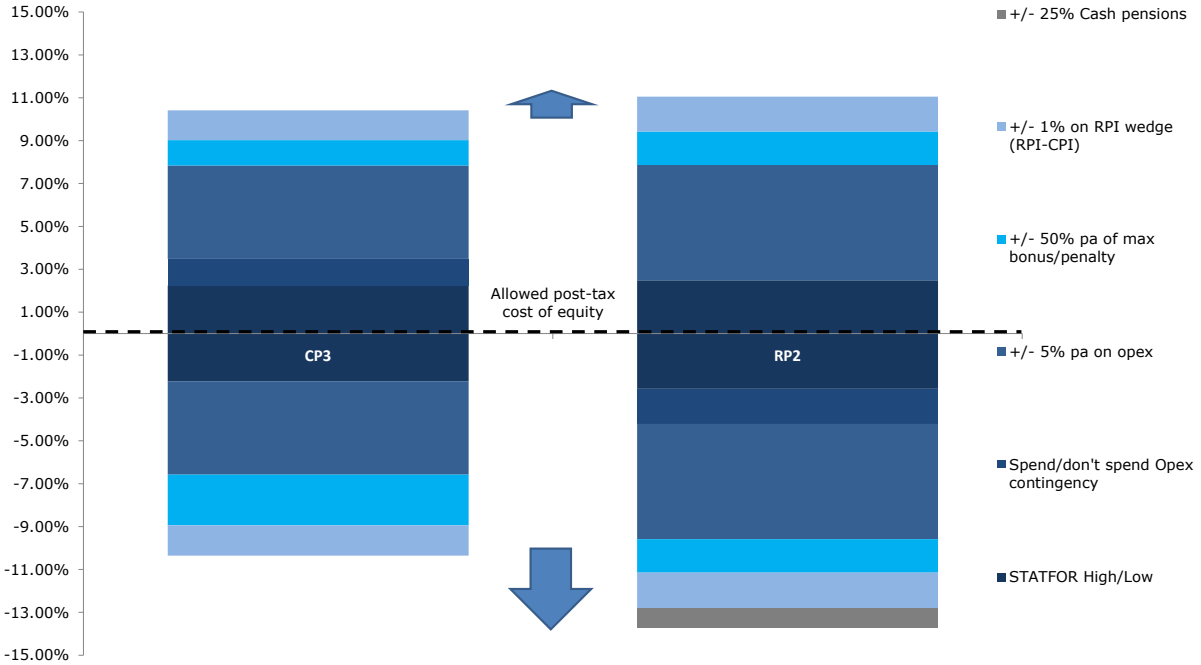
The CAA's proposals reduce the likelihood of NERL achieving its regulatory return

4.27 The CAA proposals reduce the likelihood of NERL achieving its regulatory return in RP2. This arises from the combination of:

- The absolute reduction in return (£45m) which magnifies the impact of shocks
- The scale and nature of cuts in other revenue allowances (£75m) as described above
- The introduction of new risks, for example the penalty associated with transition altitude and the asymmetric pension pass through of 80%
- The higher likelihood of risks materialising (e.g. tougher service quality targets than in CP3)
- The reduced ability of the company to absorb and mitigate risks (e.g. greatly diminished scope for further cost savings)

4.28 NERL's analysis in Figure 4.4 below shows the variation in the return on regulatory equity, also reflecting the smaller projected regulatory asset base in RP2. This illustrates how NERL's shareholders will be exposed to higher risk, in particular downside risk, in RP2 compared to CP3.

Figure 4.4 Upside opportunities/downside risks on regulatory return on equity: CP3 v RP2



4.29 Figure 4.4 shows, for each of CP3 and RP2, the allowed post-tax cost of equity allowed by the CAA based on the CAA's proposed cost of capital. This is marked by the dotted line.

4.30 For both CP3 and RP2, the same set of upside and downside scenarios have been assessed, including higher or lower pension costs, higher or lower operating costs (including crystallisation of risks), inflation variances, performance bonuses and penalties, and the impact of traffic variations.

4.31 Under these scenarios, the analysis shows that the range of possible outcomes for the real regulatory return on equity increases significantly in RP2 compared to CP3. In CP3 possible upside and downside risks were equal (a range of +/- 10%). For RP2, the range is wider. On the upside, the range increases slightly to +11%. Importantly, on the downside, an assessment of the same risks which reduced the return on equity by 10% in CP3, would lead to a 14% reduction in return for RP2. The level of downside risk is therefore far greater in RP2.

4.32 NERL's ability to absorb shocks is also significantly diminished as a result of the reduction in the allowed cost of capital and this is magnified by the increase in downside risks in RP2. For example, if there were to be a similar traffic shortfall compared to the CAA's forecast in RP2 as happened in CP3 (8% lower on average, £90m) then NERL would not have the same capability again to mitigate this. Without any mitigation, NERL's allowed return could be reduced by as much as around 2 *percentage points* (i.e. a reduction of over a third of CAA's proposed regulatory return for NERL in RP2 on an ARR basis).

4.33 The analysis above does not take into account the increased risks from the more uncertain regulatory environment arising from the interaction between the European Commission and the CAA. This is described in Oxera's report in Appendix F. Additionally, regulatory risk has increased as evidenced by the change in the CAA's change in approach to a number of areas: proposal for asymmetric pension pass through; removal of the Rolling Incentive Mechanism (RIM); proposed removal of allowances for operating cost contingency and for the employee share scheme.

Summary

4.34 Overall the CAA's proposed cuts:

- Do not appear to have considered interdependencies and trade-offs
- Introduce unmanageable risk and unbalance the RBP
- Will reduce the overall level of customer benefit compared to the RBP
- Exceed required EU-wide targets and contributions from other parties
- Reduce the likelihood of NERL achieving its regulatory rate of return
- Leave NERL more exposed to downside risks

4.35 Proposals for addressing these issues are set out in section 5.

5 Request of the CAA to enable NERL to better meet customer requirements

5.1 The sections below describe the CAA's proposals for the four KPAs and identify the potential adverse outcomes associated with these proposals.

5.2 NERL recognises that the CAA is focused on ensuring that customers receive the service they require at the lowest price possible. However, we believe that the additional price reductions proposed by the CAA (4.5% by 2019), over and above NERL's RBP (18% by 2019), will be more than offset by reductions in customer benefits.

5.3 Therefore, we have made a series of positive and constructive proposals as to how to maintain overall customer benefit while reducing prices beyond our RBP but not to the extent currently proposed by the CAA.

Pay and progression

The CAA's proposal to reduce and remove allowances for pay rate growth and progression respectively, is not supported by sufficient evidence

5.4 The CAA proposes to reduce allowances for pay rate growth to CPI (NERL's RBP assumed CPI+0.25% per annum). Additionally, the CAA proposes to make no allowance for NERL's pay progression within grades (NERL's RBP assumed 0.3% per annum).

5.5 This is on the basis of analysis in the IDS report that the pay and benefits packages at NERL are relatively generous compared to appropriate comparators, and that recent trends have been higher for NERL than for the market in general.

5.6 At the request of NERL, PwC has provided an independent review of the company's employment costs in relation to some of the assertions made in the IDS report and the CAA's RP2 proposals. The PwC report is included in Appendix E.

5.7 The key findings by PwC are as follows:

- Within the bounds of typical benchmarking accuracy, PwC cannot find sufficient evidence from the IDS report or elsewhere to suggest that the NERL job roles identified are paid out of line of market. Therefore the data presented does not support an argument for a pay adjustment.

- When undertaking any benchmark comparison, it is important to focus on total cash rather than base salary alone in terms of providing a fair assessment as to whether a company's pay offering is market competitive. PwC's review shows that whilst on a base salary basis, NERL may appear to be high against the market, a lower incentive opportunity results in current remuneration being broadly in line with the market.

- Organisations should structure their overall remuneration approach in such a way as to balance the business' needs. In the case of NERL, this means ensuring appropriately trained and qualified employees are engaged to deliver strong business performance and to minimise risk.

- While some data presented by IDS examines and questions individual elements of pay, it is important to look at the totality of pay and performance together (e.g. taking into account the benefits of NERL's lower staff turnover and sickness).

- The IDS adjustment for holidays and working hours overstates the current NERL position against the market. PwC would suggest a removal of this adjustment. If this is done, then this would result in the roles benchmarked at NERL being positioned above the market by only c.0.2% suggesting a greater alignment with the chosen market.

- The results of PwC's analysis of holiday and sick pay show that the benefit derived from low absence levels could create a saving of between £3m and £27m depending on the data source used.

- While PwC agree that a revised approach to pay progression is desirable, a move towards a new approach takes time and careful consideration needs to be given to the appropriate timescale of implementation of such change in light of NERL's employee relations environment, particularly given the costs of any industrial action. As such, any changes to process will require careful trade union consultation.

5.8 PwC has reviewed the comparator groups used by IDS. In PwC's view, if the move to a Single European Sky (SES) leads to closer working and ATCO mobility between ANSPs, then a key comparator group in future for ATCO roles would be International ANSPs (Air Navigation Service Providers). This reflects the complexity and unique skill-set of these roles and the move towards the SES programme. However, PwC acknowledges the difficulty in finding readily available data and in accurately job profiling these roles, and therefore suggest that current market comparisons are misleading.

5.9 Within the limitations of providing current comparator groups for ATCOs, NERL has considered the publicly available Eurocontrol (ACE benchmarking) reports. Figure 5.1 below shows the key ATCO productivity and employment cost indicators for NERL against a comparator group of the 4 other largest ANSPs in Europe. This data shows that NATS ATCO productivity is 24% higher than its benchmark group and that its ATCO employment costs are 15% lower than its benchmark group.

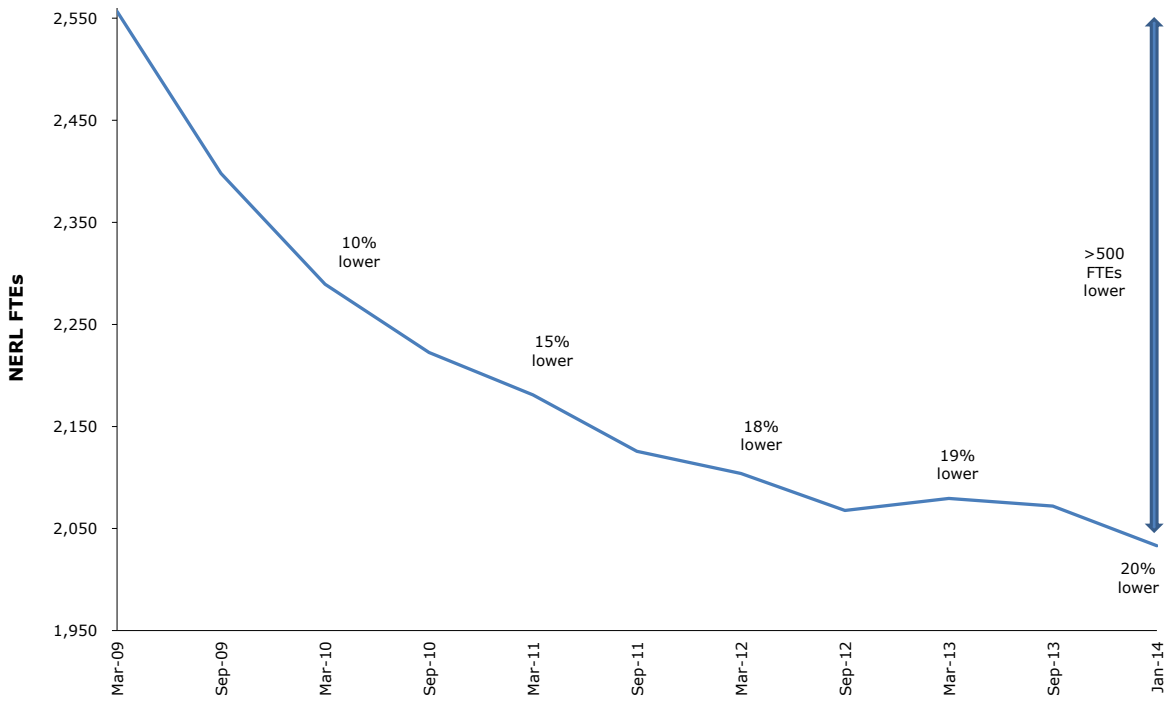
Figure 5.1 Benchmarking of NERL ATCO employment and productivity (2011)

	NATS	Weighted average - other Big 4 ANSPs	NATS v average
ATCO productivity (composite flights per ATCO hour)	1.00	0.80	24% more productive
ATCO employment costs (Euro per ATCO hour)	106	125	15% less expensive

Source: ACE benchmarking report 2011 – the most recently published

5.10 Recent productivity gains in non-operational areas have also been substantial. Since 2009 when the last IDS study was conducted, non-operational headcount has reduced by 20% compared to the levels employed today. Alongside this, traffic levels today are very similar to 2009 levels i.e. NERL is handling similar levels of traffic with 20% fewer non-operational employees. This is shown in Figure 5.2 below.

Figure 5.2 NERL FTEs – Non-Operational Grades



NERL requests that the CAA makes full allowance for pay progression in RP2

5.11 NERL accepts that linking revenue allowances for general pay rates to CPI (rather than CPI+0.25%) is more closely aligned to the CPI linkage of NERL's prices under EU regulations. We are prepared to accept this adjustment, leading to a reduction of £8m in revenue compared with NERL's RBP.

5.12 However, this is on the basis that the CAA reinstates the allowance for pay progression of £8m in RP2. This is on the following grounds:

- The evidence presented in the PwC report shows that the NERL roles benchmarked by IDS are within market and that the IDS data does not support an argument for a pay adjustment.
- The PwC analysis of holiday and sick pay shows benefits of between £3m and £27m derived from low absence levels. These benefits are reflected in NERL's prices.
- Pay progression is a critical issue for employers and their Trade Union representatives. Removal of pay progression because it is not affordable under the CAA's proposals would put at risk the cooperation required by employees to improve working practices, volunteer to work overtime to accelerate implementation of new technology and to continue to maintain high quality service provision. The value of these customer benefits far exceeds the £8m revenue allowance reduction proposed by the CAA.
- Before embarking on further changes to terms and conditions, it is important to consider the changes that NERL has already made over the last few years. Such changes have provided a substantial cost benefit through redundancy, pension reform, and improvements in service quality. Given the changes that have already been made, the likelihood of industrial action without the appropriate process and implementation (and the cost of training new ATCOs if turnover increases significantly), should not be ignored.

5.13 NERL's request is therefore as follows:

NERL RBP	CAA Proposal	NERL Proposal
£16m	£0m	£8m

All Employee Share Ownership Plan (AESOP)

The CAA has proposed the removal of the costs of the share scheme, reversing its previous position

5.14 The CAA states that it considers NERL's employee share scheme costs (c.£3m per annum) to be very high and is proposing to exclude this element of cost from the performance plan as it appears to be 'anomalous'. The CAA suggests that such costs should be absorbed by shareholders or out of the overall staff remuneration allowance.

5.15 NERL strongly disagrees with this approach for the following reasons:

- The All Employee Share Scheme was established by the Government and the Airline Group in 2001 at the time of the PPP. The aim was to encourage greater alignment between employee and shareholder interests e.g. to drive efficiency improvements which would ultimately benefit customers in lower prices.

- As there is no external market for these shares, the company accrues the cost of redeeming the shares following International Accounting Standard 2. Such costs have previously been regarded as a cost of employment and the CAA has always remunerated these costs in full.

- The annual cost (c. £2m-£3m) is quite modest at around half a percent of NERL's total operating costs.

- As the PwC report indicates, there is precedent for other regulated businesses passing through these costs as employment costs and NERL's costs are in line with the market. This includes the current practice of awarding staff one matching share for each share purchased, which is aligned to the most common combination offered by other companies. Further, Capita Symonds who led the CAA commissioned study on NERL's non-staff operating costs recognised that such costs are typical business costs and did not recommend removal of these costs from the performance plan.

- Were the CAA not to allow these costs, then they would need to be absorbed by overall staff remuneration allowances and/or by shareholders. This would not be compatible with PwC's findings that NERL's employment costs are within market, or of allowing NERL's shareholders an appropriate rate of return.

The CAA should allow the costs of the scheme with a growth in share price assumption reflecting the finally decided cost of capital

5.16 NERL requests that the CAA allows the costs of the All Employee Share Scheme, including matching shares, with a growth in share price assumption reflecting the CAA's final cost of capital decision.

5.17 On the basis of the CAA's existing cost of capital proposal, NERL requests an allowance of £11m in RP2 (£2m lower than the assumption in the RBP).

5.18 NERL's request is therefore as follows:

NERL RBP	CAA Proposal	NERL Proposal Based on CAA CoC proposal
£13m	£0m	£11m

Pension costs

The CAA has reduced the pension cost allowance and introduced an asymmetric pass-through

5.19 NERL recognises that its legacy Defined Benefit (DB) scheme represents a significant cost and risk. For this reason we have undertaken far-reaching pension reforms in 2009, and again in 2013. These entailed closing the DB scheme to new entrants, capping increases in pensionable pay, implementing tax-efficient salary sacrifice arrangements and introducing a new and significantly lower cost and risk Defined Contribution (DC) scheme. In addition, the company and its Trade Unions jointly approached Trustees with a proposal to index future service cost at CPI. This was accepted and implemented. These reforms will avoid costs of c. £475m in RP2.

5.20 The CAA commissioned an expert study by the Government Actuary's Department (GAD) on the reasonableness of the valuation supporting projected 2015-2019 contributions and the stewardship of the scheme. The GAD benchmarking analysis relies on comparisons with pension schemes from other businesses and sectors which are not directly comparable to NERL's DB scheme because of the restriction on the scheme's amendment powers to reduce or stop the future accrual of benefits. Mercer – NERL's actuarial consultants - believes that the industry sectors which are most comparable are gas and electricity as these have similar benefit protections. Relative to these sectors, Mercer has advised that the company has achieved significant reforms.

5.21 These reforms were made after extensive consultation with employees and their Trade Union representatives and were jointly agreed. As a result, changes have been made that have materially reduced the cost and risk of the company's DB pension scheme. This has happened without the industrial unrest that has taken place in other parts of Europe and which would have been very costly to customers.

5.22 NERL welcomes the CAA's acknowledgement of the considerable steps made by the company to mitigate its future pension liabilities within the constraints of strong legal protections put in place at the time of the PPP in 2001. While stating that the CAA as regulator stands behind NERL's covenant to honour its eventual pension commitments, the CAA considers that NERL should have an incentive to mitigate future liabilities and contributions which are ultimately paid for by customers. For the first time, the CAA proposes to introduce an asymmetric pass through. Under this arrangement should actual contributions exceed the level assumed by the CAA in RP2, only 80% of the difference could be passed through by NERL in subsequent reference periods. Further, the CAA has reduced revenue allowances projected by the company to meet these costs by a further 10% in 2018 and 2019.

The CAA's proposals are not proportionate and are not sufficiently evidenced

5.23 As a general point, the CAA offers no evidence that NERL previously required incentivisation to mitigate future liabilities and pension contributions. In fact, the pension reforms made by NERL, and initiated when the scheme was in surplus, point to

NERL acting as a commercially minded employer. This is supported by the pension studies by GAD in 2009, and again in 2013, which confirm that the assumptions used for the last two triennial valuations are within a reasonable range and that the Trustees' stewardship reports do not give rise to any concern. Regarding future incentives, the size of scheme assets and liabilities relative to NERL's provides every possible incentive for the company to continue its path of cost and risk mitigation i.e. further 'incentives' are unnecessary. In addition, and as the CAA noted in 2010, NATS takes the full risk for pension contributions attributable to NSL so it already has a natural incentive to act as a commercially minded employer in managing its pension liabilities and contributions.

5.24 Regarding the CAA's proposal to introduce an asymmetric pass through, NERL thinks this is ill-conceived and is not in the interests of the company and, tellingly, its customers. This is because:

- Previously, the DB Pension Scheme Trustees have obtained much assurance around the strength of NERL's covenant from the existence of a symmetric 100% pass through. This has been at the heart of their covenant assessment, this being the foundation for the Trustees' position on valuation assumptions (a requirement of the UK Pensions Regulator). Were the pass through to be weakened in the way the CAA proposes, then this would weaken the employer covenant and cause the Trustees to adopt more prudent assumptions in their triennial valuation of the scheme in line with guidance from the Pensions Regulator. This in turn would result in higher company pension contributions in the short to medium term than would exist with a symmetric pass through. This would be to the detriment of the company and its customers.

- As noted by the CAA in Appendix D (p144), Trustees are currently considering changes to the scheme's investment policy that would de-risk the scheme in future years. We know that the Trustees' covenant assessment (based on a 100% pass through) is instrumental in allowing the Trustees to accept the risks in the current investment strategy. Therefore, the introduction of an asymmetric pass through could incentivise Trustees to further accelerate the switch of investments from growth seeking assets to lower yielding assets (e.g. bonds) which is likely to mean lower overall asset returns in the short to medium term. Figures in the GAD report provide further evidence that this could be the case i.e. GAD noted that a higher proportion (c.65%) of the DB scheme's assets are currently invested in growth-seeking assets, when compared to the average for UK pension schemes (which is 50%). As an indication, Mercer has calculated that a reduction in annual returns of between 0.1% and 0.5% per annum on the scheme's £4bn of assets would reduce NERL's share of investment returns by between £3m and £16m per annum. In time this could in turn increase NERL's projected annual pension contributions by a significant percentage – all as a consequence of the CAA's proposed actions.

- Credit Rating Agencies and providers of finance have similarly obtained assurance from the existence of a symmetric 100% pass through. Were the pass through to be weakened in the way that the CAA proposes, then this could increase the likelihood of a future reduction in the company's credit rating and, potentially, an increase in the cost of its debt and cost of capital. This would be to the detriment of the company and its customers who would face higher charges.

- With reference to the CAA's 2014 final proposals for Heathrow Airport Limited's price control, GAD recommended and the CAA accepted that it should not change its policy on pension costs given the lack of any previous signal of policy change. Given the lack of any previous signal of a prospective change in policy for NERL's pass through arrangements, the company believes that the CAA should make no change in this case either. Note: this point applies equally to the CAA's treatment of the employee share scheme costs.

- The stewardship test which was established in CP2 and has now been used by the CAA at two regulatory reviews already provides the appropriate level of incentives for NERL to mitigate future liabilities and pension contributions.

- The CAA's reason for not making the 80% pass through proposal symmetric (i.e. applying to customers too) is that it considers that customers have borne the brunt of deterioration in pension funding in recent years and so it would appear unfair to limit the benefit of pass through to them should markets improve. This ignores the benefit to customers in CP1 and CP2 when pension contributions were lower than future service cost when there was a scheme surplus during that period.

5.25 Regarding the CAA's proposals to reduce revenue allowances for pension contributions in 2018 and 2019 by 10%, NERL notes the following:

- Uncertainty is not an appropriate reason for reducing such revenue allowances as market conditions could deteriorate as well as improve. In one year – 2011 - the compression of real interest rates to zero, and even slightly below, created a significant funding strain on the DB scheme which NERL had to address through the reforms made in 2013.

- No analysis is offered by the CAA on how the 10% reduction has been derived and, in fact, this looks quite arbitrary. It is worth noting that GAD did not make any such recommendation in its study.

- In practice, because the future service cost is likely to remain fairly stable between triennial valuations, the CAA's proposal effectively represents a reduction in deficit repair contributions by 30% in 2018 and 38% in 2019. This does not appear proportionate. This of course assumes material improvements in funding at the next triennial valuation date (31 December 2015) which may or may not materialise.

NERL requests that symmetrical 100% pass-through allowance is maintained

5.26 NERL acknowledges that there is uncertainty around any projection of pension contributions in the latter years of RP2 (e.g. 2018 and 2019). While not agreeing with the CAA's reasons, we could tolerate the risk of lower revenue allowances for projected pension contributions in 2018 and 2019 *provided the 100% symmetric pass through is maintained*.

5.27 This is because any such shortfall (approaching £15m) between actual and assumed pension contributions in those years would be added to the regulatory asset base, thereby enabling NERL to borrow funds to meet such higher pension contributions. Also, NERL would be able to fully recover any shortfall in future reference periods.

5.28 NERL requests that the CAA maintains the pass through at 100% with symmetry of treatment between the company and its customers.

5.29 NERL's request is therefore as follows:

NERL RBP	CAA Proposal	NERL Proposal
£374m 100% PPT	£358m 80% PPT	£358m 100% PPT

Contingency

The CAA proposes to make no allowance for any operating cost contingency, changing its previous regulatory position and going beyond customer views

5.30 The CAA proposes not to allow any operating cost contingency in the performance plan for RP2. As a matter of general regulatory best practice, the CAA states that it does not favour 'one way allowances for contingency in operating costs as this is likely to facilitate costings being padded over and above the best estimate'. In this regard it notes that it allowed contingency provision in CP3 on the basis that it then believed there was some merit in having a transparent aggregate amount rather than amounts hidden away in the various elements of the plan. The CAA notes that NERL has identified potential areas for additional costs but also recognises there may also be opportunities for additional savings which will only become apparent during RP2.

5.31 We address these points in the paragraphs below and set out the customer benefits for allowing an operating cost contingency.

The CAA's previous regulatory practice allowed operating cost contingency

5.32 The CAA made allowances for an operating cost contingency in CP1, CP2, and CP3. With the knowledge of this regulatory precedent, NERL produced an initial business plan for customer consultation in May 2013. Following customer consultation NERL produced its RBP which it submitted to the CAA in October 2013. Both plans explicitly included operating cost contingency which was discussed during the consultation. At no point prior to this process (e.g. in the CAA's July 2012 process letter for RP2) or during the process (e.g. including the CAA's 2013 review of NERL's plan) did the CAA signal a change in its regulatory stance.

5.33 The removal of operating cost contingency is likely to affect NERL's incentive to find greater efficiencies going forward. For instance, NERL's current RBP includes stretch savings in non-staff cost areas which it does not yet know how to achieve. In future regulatory periods there will be no incentive for NERL to take this risk.

NERL's operating cost contingency is not a one way allowance

5.34 In the knowledge of the CAA's previous allowance for operating cost contingency, NERL produced a business plan containing ambitious headcount and non-staff cost efficiencies, which the CAA accepted. This included efficiency savings that we do not yet know how to realise. This ensured that the costs in NERL's plan were stretching beyond best estimate, and were not 'padded'.

5.35 However, in order to ensure that there was an appropriate balance between ambition and realism (the PRB's own guideline) NERL included a modest amount of operating cost contingency. This was to ensure there was sufficient provision against the delivery risk in its planned programme and to enable a transparent and informed debate on whether this balance had been appropriately achieved.

5.36 As explained in Section 3, the cumulative effect of almost 12 years of cost savings since PPP produces progressively fewer and lower opportunities for additional efficiency savings. As highlighted in that section, with the traffic growth projected for RP2 and the nature and extent of savings already made, the inclusion of a modest amount of operating cost contingency will not create a one way allowance.

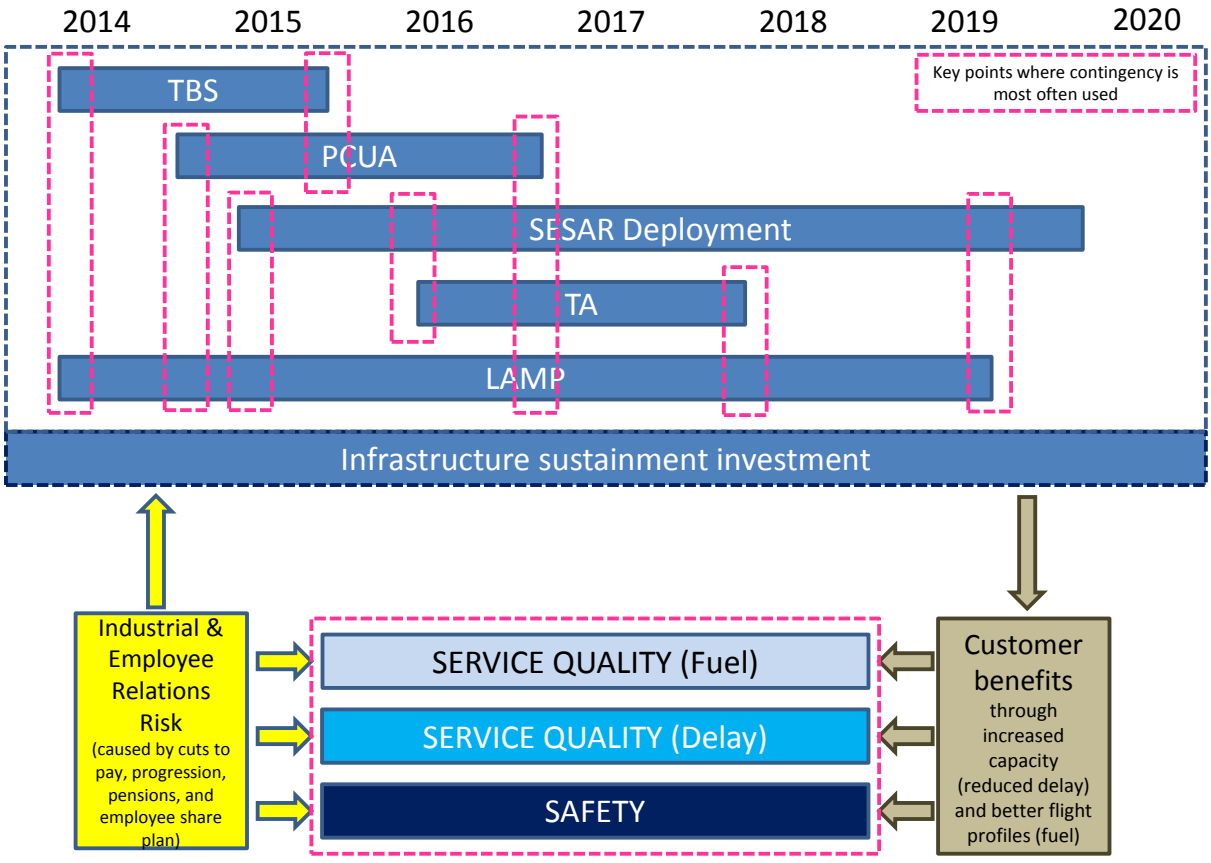
5.37 Our experience over CP2 and CP3 is that the costs unforeseen by the company and the regulator have been at least equal to, or exceeded, operating cost contingency allowances made by the CAA.

Customer benefits from the allowance of operating cost contingency

5.38 Unlike in any previous control period, in RP2 we intend to change the underlying systems, operating concepts and tools that our controllers use, while also changing airspace and raising the transition altitude. Each of these is challenging and is highly likely to draw on contingency.

5.39 The RBP has significant periods of parallel delivery between major programmes allowing us to deliver key customer benefits. These overlaps create critical points in terms of resource requirements to ensure continued effective delivery. This is illustrated in Figure 5.3 below.

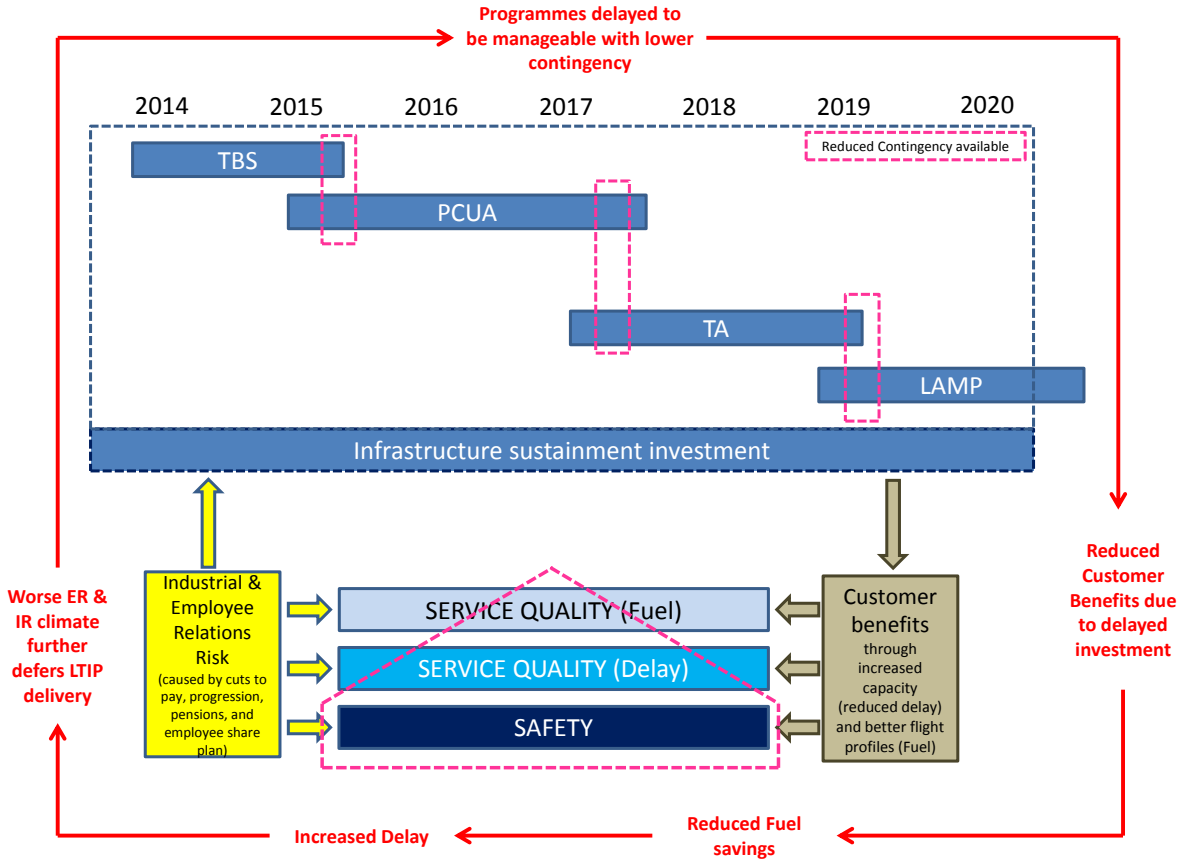
Figure 5.3 Long-term investment plan (LTIP) and the parallel delivery in projects



5.40 To some extent the requirement for parallel delivery can be managed through staff volunteering to work overtime, although their appetite to do this will depend on their attitude towards the pay and terms and conditions affordable under the CAA's proposals. In the past we have also been able to accommodate this through re-deploying operational staff onto programmes. However, as a result of the staff reductions in our RBP this will no longer be possible without adversely impacting the CAA's targets for service quality and fuel-enabled savings.

5.41 Therefore, an allowance for contingency is necessary to enable us to sustain the progress on the parallel delivery on key projects when risks crystallise, which they inevitably will. Without a contingency to secure the additional resources to mitigate such risks, there will be a knock-on effect on programme delivery and customer benefits. This is illustrated in the Figure below. Given expected traffic growth, the effects would be felt not only in RP2 but in subsequent reference periods.

Figure 5.4 Impact of programme delay in absence of contingency



5.42 The existence of allowances for operating cost contingency also enables NERL to deploy additional resources (e.g. through overtime) in operational areas to handle traffic peaks or periods of extended training. As safety will always be protected, any shortfalls in operational staff availability will lead to longer delays.

5.43 Another customer benefit of the operating cost contingency is the flexibility it enables for NERL to respond to changing customer priorities and requirements. This includes airspace changes to address new and emerging 'hotspots'. To an extent this is recognised by our customers in their feedback during and following the customer consultation, where they supported some level of contingency.

NERL requests that the CAA reinstate the operating cost contingency

5.44 NERL does not consider it a credible option to run the business without contingency. It will not be able to deliver the major RBP programmes without delay (e.g. SESAR, Transition Altitude and LAMP) and at the same time address unplanned operating costs.

5.45 Therefore, NERL requests that the CAA allows:

- the full amount of contingency in the RBP (Proposal A); or
- 50% of the contingency in the RBP, accepting some change to the plan outputs (Proposal B)

5.46 Proposal A will enable the company to fulfil the requirements and priorities that customers set out during customer consultation (i.e. NERL's RBP).

5.47 Proposal B would enable a higher level of direct cost savings than NERL's RBP. However, there would inevitably be a need for NERL to change its planned outputs as it would not have the same level of financial resources planned in the RBP. This would delay customer benefits at a level most likely exceeding the saving in direct costs. An illustration is provided in Figure 5.4. This shows TA delivery in 2019 and LAMP Phase 2 in early RP3. Further, we would have best efforts involvement in FAS and we will become a follower rather than a leader in SESAR delivery.

5.48 If the CAA decides to provide no operating cost contingency, then NERL would need to consult with customers and other stakeholders on more far reaching changes in its plan.

5.49 NERL's request is therefore as follows:

NERL RBP	CAA Proposal	NERL Proposal A	NERL Proposal B
£29m	£0m	£29m	£15m

Cost of capital

The CAA's proposed reduction of NERL's cost of capital is not sufficiently evidenced and is based on selective market evidence

5.50 In CP3, the CAA assumed a real vanilla weighted average cost of capital (WACC) of 5.5%[12]. In the RBP, NERL proposed a reduction of 60 basis points (bps) to 4.9%[13] in recognition of changes in market conditions.

5.51 The CAA is proposing an even further reduction of 70 bps and therefore a WACC of 4.2%. This proposed reduction is beyond what can be explained by known market movements and without sufficiently robust evidence. This is explained in detail in the accompanying Oxera report.

5.52 NERL has four key concerns with the CAA's proposals as follows.

The CAA's assessment of a 16% reduction in NERL's business risk in RP2 relative to CP3 is not sufficiently well evidenced

5.53 CAA is proposing to reduce NERL's asset beta from 0.60 to 0.505 – a significant reduction of 16%.

5.54 In the absence of market data on betas for air navigation services, material changes in the beta assumption from previous price reviews must be well evidenced in order to maintain regulatory stability and transparency. The evidence provided by the CAA's consultants (PwC) to substantiate such a material change in the beta does not meet this test.

5.55 In addition, using PwC's framework of risk assessment, Oxera's analysis shows that NERL is clearly higher risk than Heathrow and is closer in its risk profile to Gatwick. This implies that, as a minimum, NERL's asset beta should be 0.56—the same as Gatwick's—rather than 0.505.

5.56 Oxera previously assessed, from a qualitative point of view, that risk is expected to be at least as high in RP2 as in CP3. This implies that the CP3 asset beta of 0.60 is still appropriate.

5.57 Further, in the consultation document, the IAA SRD highlights the importance of the RAB-to-revenue ratio when considering asset betas. The IAA SRD comments that organisations with a small asset base in comparison to on-going revenues present shareholders with a greater risk than companies with a large asset base in comparison to on-going revenues. This view is supported by NERL. NERL has a marginally higher asset base to revenue ratio than the IAA and consequently we would expect the asset beta of the IAA to be marginally higher than that of NERL. However, both ANSPs have significantly lower RAB-to-revenue ratios than Heathrow and Gatwick. This expectation and observation are also consistent with Oxera's view that the asset beta of NERL should remain at 0.6 for RP2.

[12] This represents the vanilla accounting rate of return (ARR) of 5.5%. This is the rate that is applied to the RAB in CP3 allowing for the reinvestment of cash. The related headline vanilla WACC allowance is 5.7%
[13] This represents the vanilla accounting rate of return (ARR) of 4.9%. This is the rate that is applied to the RAB allowing for the reinvestment of cash. The related headline vanilla WACC allowance is 5.1%

The CAA's proposals increase risk to the company in RP2 compared with CP3 but without any corresponding increase in the cost of capital

5.58 The CAA has not presented any new evidence to substantiate why risk is decreasing relative to CP3. If anything, NERL's risk will increase as a result of the CAA's proposal for an asymmetric pension pass through with NERL recovering only 80% of the difference between actual and assumed contributions when the former exceed the latter.

5.59 Oxera also highlighted, in a qualitative manner, in its July 2013 report how the risks have increased from CP3 to RP2.

The CAA's choice of the cost of debt is based on selective market evidence and as a result understates the cost of debt for RP2

5.60 In previous regulatory reviews, the CAA used NERL's underlying credit rating to estimate the new cost of debt. For the first time, the CAA now proposes to use NERL's headline credit rating which includes an uplift to reflect the possibility of government support. This departs from the methodology used in previous reviews. Furthermore, as explained by Oxera in its August 2013 report[14], the ownership structure should not affect the cost of capital. Use of the headline credit rating by the CAA, means that its proposals take into account NERL's ownership structure.

5.61 The cost of new debt is also understated due to PwC's selective review of the available evidence. This is explained by Oxera's report attached in Appendix F (section 4.2) and arises through PwC's use of S&P's credit rating only, disregarding Moody's, and through the weight given by PwC to NERL's existing bond price. Correcting for the selective use of data would suggest that the cost of new debt should be approximately 2.3% rather than 1.75% used by the CAA.

5.62 Finally, PwC's allowance for debt fees is understated by 5bp.

[14] What is an appropriate cost of capital for NATS (En Route) plc in the context of the next European reference period (2015 – 2019)? – 15 August 2013, Oxera

The CAA's estimate of the total equity market return is towards the low end of plausible values. This compounds the effect of its proposals on the asset beta and cost of debt

5.63 The CAA's chosen point estimate of 6.25% is at the bottom of the PwC's range of 6.25–6.75%. While the CAA's range for the total equity market return can be reconciled with regulatory precedent, the point estimate chosen by the CAA is towards the low end of plausible values for the total equity market return.

5.64 This is especially true when the CAA's proposals on the equity market return are considered together with its proposals on the asset beta and the cost of debt. The combination of the proposed reductions for each parameter leaves NERL with very limited flexibility to respond to cash-flow shocks within the period. This was discussed in section 4.

NERL proposes that the real vanilla WACC on an accounting rate of return basis be revised to no less than 4.7%

5.65 NERL proposes a real vanilla WACC of no less than 4.7%. This would reflect:

- Market condition changes since CP3 as reflected in the RBP
- Recent regulatory decisions by the CAA since the submission of the RBP that impact equity market returns, and which are reflected in the CAA's proposals (6.25% for total market return)
- The same asset beta as in CP3 on the basis that there is insufficient evidence of a reduction in risk in RP2
- Refinements to improve the accuracy of the cost of debt component (increasing cost of debt to 2.55%)

5.66 NERL's proposal acknowledges the recent airport regulatory decisions (informed by the Competition Commission's analysis for Northern Ireland Electricity) in relation to market conditions, and in so doing, reduces NERL's cost of capital allowance by approximately £15m in RP2 relative to the RBP. This represents about a third of the £47m reduction that is being proposed by the CAA. The CAA has not provided sufficient evidence for the remainder of its proposed reduction.

5.67 NERL's request is therefore as follows:

	NERL RBP	CAA Proposal	NERL Proposal
Vanilla	4.9%	4.2%	4.7%
Pre-tax	6.8%	5.8%	6.5%

Note: the required tax uplift is calculated as 36.6% which the CAA had previously rounded down to 36%.

Summary of NERL's Requests

5.68 NERL believes that the best plan for customers is the RBP, updated only for changes to the cost of capital to reflect airport regulatory decisions made by the CAA since the RBP was published. This would deliver maximum overall benefit to customers, and due to a lower cost of capital than in the RBP, would reduce prices by c.19%.

5.69 Recognising the desire of the CAA to reduce prices even further, NERL has summarised the requests made in the sections above into two proposals (A and B). These are set out in the Figure 5.5 below and described in the paragraphs that follow. Both proposals will deliver more overall benefit to our customers than the CAA's proposal.

Figure 5.5 Summary of NERL's proposals

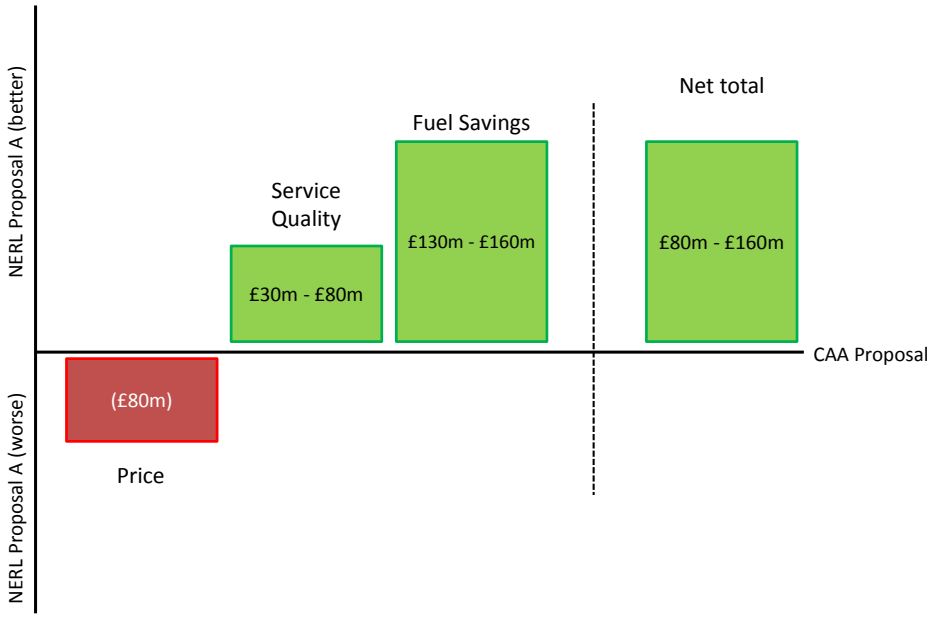
	NERL RBP	CAA proposal	NERL Proposal A (preferred)	NERL Proposal B
Price / Cost				
Real Reduction by 2019	18%	>22%	c.20%	c.21%
Real cumulative saving	£390m	£510m	£430m	£445m
Customer benefits				
Service Resilience (Risk)	Low	High	Low	Moderate
TA Delivery	Q1 2018	2019 *	Q1 2018	2019
LAMP Phase 2	End 2019	RP3	End 2019	Early RP3
FAS involvement	As planned	Withdraw	As planned	Best efforts
SESAR delivery	Lead	Follow	Lead	Follow
Industrial Relations				
Level of Risk	Balanced	Undeliverable	Heightened	Heightened

* The CAA proposed target date is 2017. With the assumptions made to operating cost, NERL cannot deliver this project until 2019.

5.70 Proposal A is NERL's strongly recommended option. This updates the RBP for: a) airport regulatory decisions that the CAA has made since the RBP was submitted; b) the CAA proposal for reductions for pension cost allowances *provided the pension pass through is maintained symmetrically at 100%*; and c) pay rates at CPI rather than CPI+0.25%. At the same time by maintaining operating cost allowances for contingency, employee share costs and pay progression at the level of the RBP, this will enable NERL to commit to the same key project deliverables and levels of service quality as in the RBP.

5.71 The chart below compares the estimated overall impact of NERL's Proposal A against the CAA's proposal, considering the key dimensions of price, service quality and fuel savings. This shows that whereas the CAA's proposal achieves a lower price, NERL's proposal provides a much better level of service quality and greater fuel savings. Overall, customers would benefit from NERL's Proposal A.

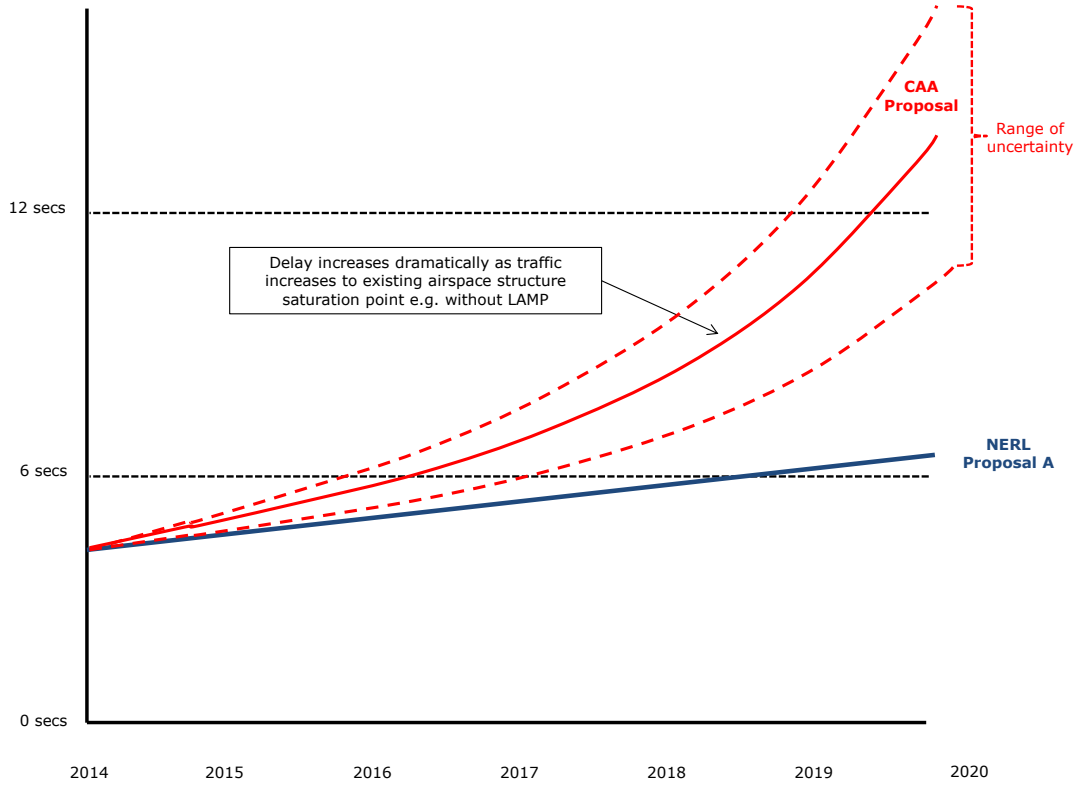
Figure 5.6 Comparison of NERL Proposal A against CAA Proposal



5.72 NERL's Proposal A increases direct costs to airlines by £80m compared with the CAA's proposal. However, the benefits of improved service quality (£30m-£80m) and higher fuel enabled savings (£130m-£160m) result in a higher overall net benefit (£80m-£160m).

5.73 The service quality benefit of £30m-£80m[15] arises by having fewer 'bad days' (i.e. where unexpected events lead to disruption) than would be experienced by customers under the CAA's proposals. The CAA's proposals (which would result in more 'bad days') would worsen service quality by between 5 and 10 seconds delay per flight by the end of RP2, compared to NERL's Proposal A (or by an average of between 2 and 5 seconds of additional delay per flight over the reference period). This is shown in the Figure below.

Figure 5.7 Impact of CAA's proposal on Service Quality: NERL proposals vs CAA proposals



[15] Using the PRB's methodology under which a second of average delay per flight in a year costs airlines c. £3m per annum. 2 seconds per annum average delay per flight costs £30m while 5 seconds costs £80m.

5.74 The enabled fuel savings benefit of £130m-£160m arises by avoiding a delay of at least a year in a number of key programmes that would result from the CAA's proposals (in particular LAMP). Other fuel saving programmes would also be affected. On the basis of a one year delay, NERL estimates that lost customer fuel savings would be between £130m (LAMP only) and £160m (LAMP and a number of other, smaller fuel saving programmes).

5.75 This analysis does not include the likely cost of the increased risk of some form of industrial action that could result from the CAA's proposals. Using IATA data, NERL conservatively estimates that the closure of UK airspace would cost airline customers c. £50m per day. At this rate, nearly all the savings in NERL's RBP would be lost in a week's industrial action over the 5-year control period.

5.76 Taking into account all price, service quality and fuel saving dimensions, NERL's Proposal A provides a net benefit to customers of between £80m and £160m more than the CAA's proposal.

5.77 As an illustration of trade-offs, NERL has also provided Proposal B. This adjusts Proposal A by reducing the operating cost contingency allowance from £29m to £15m. Figure 5.5 describes how Proposal B would provide some additional customer benefits compared to the CAA's proposal but that these fall significantly short of those in Proposal A.

5.78 For the reasons outlined above NERL strongly recommends that the CAA considers adopting Proposal A as this is clearly in the overall interests of our customers.

6 Capacity, Environment and Safety

6.1 NERL has reviewed the FAB NSAs' proposals on targets for capacity, environment and safety. In the paragraphs below we identify a number of concerns and make a number of recommendations for addressing these.

Capacity

The C2 target requires a transition allowance and higher par value

6.2 The CAA has not included any transition allowance for C2. This is unreasonable in the context of the scale of planned airspace changes. Moreover, without modification this could provide a perverse incentive to concentrate major transitions into short periods with more severe ATFM regulations in order to minimise NERL's exposure to penalties.

6.3 Each major airspace transition is likely to generate annual delays in the range of 300,000 – 400,000 minutes. Even this compares favourably with the DFS VAFORIT[16] implementation that generated more than 1 million minutes of delay on implementation in less complex airspace than the London TMA (Europe's busiest airspace).

6.4 Additionally, the C2 par value of 0.204 minutes/flight (12.24 seconds) is based on Eurocontrol data, which has been found to contain a 20% error rate (as acknowledged by the CAA in its consultation document). The equivalent figure using NATS data is 9.7 seconds. Without any transition allowance and with such a low par value, NERL is virtually guaranteed to suffer penalties during Phase 2 of the LAMP transition when capacity must be reduced while controllers become familiar with new airspace design.

6.5 Therefore, NERL requests that the CAA either introduce a transition allowance and/or increase the C2 par value and thresholds by 0.1 minutes per flight for each year of RP2 to accommodate Phase 2 of the LAMP transition. As in CP3, NERL would only expect to apply transition allowances for major transitions and, even then, only after consultation with customers.

The C3 target and thresholds are set incorrectly relative to their C2 counterparts

6.6 The CAA appears to have used data for a limited time period to derive the ratio of the C3 target and thresholds relative to their C2 counterparts. In so doing, the CAA is proposing a C3:C2 ratio of 2.2. NERL's own analysis of the 2010-2013 data suggests that the C3:C2 ratio should be 2.4.

[16] DFS VAFORIT is the project that introduced a new Flight Data Processing (FDP) system into Karslruhe centre in 2010.

The C3/C4 target exemption days should be set at 75

6.7 The CAA is proposing to allow 50 exemption days in RP2 (equivalent to the 40 days allowed for the 4 years of CP3) for major system and airspace transitions in determining performance against capacity targets.

6.8 However, as the scale of airspace changes (phase 2 of LAMP, iTEC and NTCA) in RP2 materially exceeds those in CP3, more exemption days are required in order to enable NERL to have a reasonable opportunity to avoid undue penalties. By their nature, such changes have to be implemented over night on a fixed AIRAC date rather than through a process of gradual implementation. Also, unlike CP3, NERL expects to have to implement such changes in the face of rising traffic levels. NERL would expect to continue to consult customers on transition arrangements and the number of declared exemption days for each transition.

6.9 Therefore, NERL proposes that the exemption allowance should be set at 75 days.

The C4 target penalty threshold should be raised by at least 20%

6.10 Using NMD[17] data which contains an error rate of 20%, the CAA is proposing a penalty threshold for C4 of 1650. This is the same level as for CP3 which was measured on the basis of NMD data corrected by NERL. If the penalty threshold is not raised, then NERL will face a risk of overall penalties far higher than the opportunity to earn bonuses.

6.11 Therefore, NERL proposes that the C4 penalty threshold for C4 should be set at 2150. This would be consistent with the CAA's stated approach (in Para 4.31 of the consultation document) of making full allowance for the implied difference between NMD data and the data corrected by NERL.

The C4 target penalty cap should be raised to a level equivalent to CP3

6.12 The CAA has proposed a penalty rate that would result in maximum penalty being accrued at a C4 score of c. 2420, compared with the CP3 maximum penalty threshold of 4260 (un-modulated). The score arising from the single system failure on 7 December 2013 was nearly double the proposed maximum penalty threshold. This shows how a single system failure could easily remove all incentive properties of this target for the remainder of the calendar year.

6.13 If this target threshold is set too tightly, then it creates a perverse incentive to apply more severe ATFM regulations. This could result in a higher level of cancellations (thereby reducing reported delay) rather than encouraging NERL to work with its customers to achieve a better overall outcome for airlines and their passengers (i.e. more delay but fewer cancellations).

6.14 Therefore, NERL proposes that the CAA should set the penalty rate such that the penalty cap is equivalent to CP3. This would be achieved by lowering the penalty rate by a factor of c. 0.7.

[17] Network Management Directorate

Environment

1% incentives applied to each of capacity and environment

6.15 The CAA's proposals apply 1% (of turnover) bonuses and 1% penalties to each of capacity and environmental targets, creating an aggregate bonus and aggregate penalty of 2% in the RP2 performance plan.

6.16 Article 15.1(d) of EU regulation 391/2013 states that: 'the maximum amount of aggregate bonuses and the maximum amount of aggregate penalties shall not exceed 1 % of the revenue from air navigation services in year n'. Article 15.1(c) clearly states that bonuses and penalties must be equal but does not refer to 'aggregate' bonuses. The use of the descriptor 'aggregate' in paragraph (d) clearly distinguishes between individual target incentives (as referred to in paragraph (c)) and must refer to the total of all bonuses and penalties across all targets in the performance plan.

6.17 On a plain reading of this text, NERL could be exposed to legal challenge from its customers on the CAA's interpretation of the EU regulation. This could undermine the integrity of the UK's and NERL's charges in RP2.

6.18 NERL understands from the CAA at the open stakeholder meeting on 14 March 2014 that its interpretation is based on a statement made by a Commission desk-officer at an NSA workshop. NERL requests that the CAA takes legal advice on the validity of its interpretation before submitting the draft Performance Plan to the DfT.

6.19 The CAA has suggested that a combination of the statement by the Commission desk-officer and subsequent Commission approval of the UK-Ireland FAB performance plan should provide the assurance that NERL requires. However, NERL's experience in CP3 of the Commission overturning NERL's n+1 recovery period as expressed in its existing licence and as approved in the UK's RP1 Performance Plan leads the company to require a far higher level of assurance.

6.20 NERL notes that if the CAA subsequently confirms that its interpretation (aggregate bonus and penalty of 2%) then NERL will have far greater exposure than all other ANSPs in Europe.

6.21 In summary, NERL requests robust legal opinion in support of the CAA's interpretation to maintain the legal integrity of its charges (and the UK's) in RP2.

Environmental incentives linked to TA are inappropriate

6.22 The CAA proposes that during 2017-2019, NERL's eligibility to earn environmental incentives will be contingent on the successful implementation of a harmonised TA of 18,000 ft in 2017. Implementation of this proposal would depend on a satisfactory outcome of the consultation planned for winter 2015/16 and regulatory safety approval from the CAA. This would expose NERL to increased financial risk based on the implementation of a project that is significantly dependent on external parties and developments and which in any case is an enabler of benefits and does not in itself provide any tangible benefits.

6.23 The earliest possible date for TA is November 2017, although this is not a firm plan. In fact, it would not be appropriate to implement TA in early winter for safety reasons (i.e. lower pressure at this time of the year). Furthermore, implementation has a significant dependency on the CAA's ability to resource the plan and complete its parts of the project, including guidance material, mandates and support for industry.

6.24 NERL proposes that the link between successful implementation of TA and incentives for environmental performance during 2017-2019 should be removed.

6.25 NERL's view is that any incentive based on delivery of investment inputs (as opposed to customer benefits) should be linked to the most appropriate investment and therefore if the CAA wishes to retain a link between environmental bonuses and a capital investment programme then LAMP would be a more appropriate programme.

6.26 NERL's commitment is to deliver LAMP by the end of RP2 provided that all industry partners deliver their obligations in line with the Future Airspace Strategy of the UK. These Partners include the CAA, DfT, airlines and airports. NATS commitment to delivery by the end of RP2 makes a number of assumptions which include, but are not limited to, items such as no change to Government policy and no additional consultation requirements.

FAB KEA target should be set at 4% throughout RP2

6.27 In the Draft FAB Plan the UK-Ireland FAB target for KEA is set at 3.36% in 2015, falling to 2.99% in 2019.

6.28 The proposed FAB target and profile are unlikely to be achievable, given current plans and performance. The latest available data (for 2013) shows a UK-Ireland FAB value of 3.96%. NERL's investments in RP2 are likely to result in a KEA value that, at best, remains the same and might in practice increase due to airspace changes e.g. LAMP which will deliver customer fuel efficiency benefits primarily from improved vertical profiles in the London TMA.

6.29 As acknowledged in the consultation document, IAA has already implemented free-route airspace, so there is no obvious reason to expect further improvements in horizontal flight efficiency in Irish airspace during RP2.

6.30 On the basis of the points made above, NERL proposes that the FAB KEA target should be set at 4% throughout RP2.

3Di target profile should be set at a more realistic level

6.31 The CAA has proposed a 3Di target profile set at 22.5 for 2015, falling to 20 in 2019. This is unlikely to be achievable, given the current NERL RBP.

6.32 The 3Di profile proposed through RP2 is more challenging than is achievable given NERL's RBP investment plan which has been accepted by the CAA. In January 2014, NERL submitted to the CAA a challenging but achievable 3Di profile based on the company's updated analysis taking account of the fact that most of the planned improvements are driven by LAMP. The CAA has arbitrarily assumed a different profile, without offering any supporting evidence or analysis. NERL requests that the CAA should adopt the profile submitted to it in January 2014.

3Di targets should be subject to traffic modulation

6.33 The CAA is not proposing that RP2 3Di targets should be subject to traffic modulation. Given that NERL's RBP was based on the base case traffic forecast, increasing traffic in RP2 will make 3Di targets much more difficult to attain. This will create far more risk of NERL suffering penalties than of earning bonuses.

6.34 Recent ICAO CAEP Working Group 2 and Modelling and Databases Group analysis indicated that the baseline for fuel efficiency is not static. Instead, it degrades with traffic growth (globally at c. 2% per decade). A significantly reducing target profile – as proposed for 3Di (and KEA) – becomes progressively more challenging with growing traffic over the 5-year reference period. Furthermore, the 2% figure derived by ICAO may understate the effect in dense airspace (i.e. much of the UK) where even small traffic recovery in already capacity constrained airspace can be expected to have a disproportionate impact on the ability to deliver more efficient flight profiles. In the light of this sensitivity to traffic growth it is appropriate to incorporate traffic modulation for environmental targets as well as capacity targets.

6.35 Therefore, NERL proposes that 3Di targets should be modulated if traffic deviates above or below base case traffic forecasts by more than 4% (designed to be consistent with the traffic modulation for delay).

3Di 'cap' and 'collar' arrangements should be based on the best and worst performance during RP1

6.36 The CAA has proposed a 33% 'cap' and 'collar' to limit the maximum possible bonus and penalty. However, it has not produced any evidence to indicate why these should represent the optimum levels at which to set bonuses and penalties. In RP1 the cap and collar were set based on the worst and best performance. This provided a clear, evidence-based rationale. The levels set at 33% below and above the par value appear to be arbitrary.

6.37 NERL proposes that the CAA should use the best and worst performance during RP1 to calculate the appropriate cap and collar.

Safety

Overly prescriptive approach to Just Culture

6.38 The FAB NSAs have proposed a Just Culture Policy which requires NATS to take note of, and incorporate in to its documentation, activities and processes. The policy also states that 'investigation and analysis of an incident/occurrence shall be assessed in the framework of a just culture' and provides an example of such a framework.

6.39 There is a danger that the overly prescriptive 'cookbook' approach proposed by the FAB NSAs will achieve a less effective outcome than the education and training approach set out in the NATS Just Culture handbook. This more mature approach relies on helping *all* employees to understand the desired outcomes and provides them with greater freedom to deliver those outcomes.

6.40 NATS believes that the FAB NSAs should provide this guidance as a framework rather than as a policy and also remove the example 'Decision Tree for determining the culpability of unsafe acts.'

Just Culture improvement target is expressed as an action rather than as a target

6.41 The target set on Just Culture improvement by the FAB NSAs in response to the requirement in EU390/2013 describes the way in which Just Culture training should be cascaded from the leadership level throughout the ANSP organisation. Thus the target is expressed as an action rather than a target.

6.42 NATS proposes that FAB NSAs should require the FAB ANSPs to improve their scoring on the Just Culture questionnaire (Appendix 1 to AMC 10 SKPI - JC - ANSP level) rather than providing prescriptive actions on how to achieve an improvement in Just Culture.

7 Terminal Air Navigation Services

Cost Efficiency

7.1 We welcome the CAA's general approach to the regulation of Terminal Air Navigation Services (TANS) which follows EU Regulations while encouraging the development of a contestable market.

7.2 The CAA has set out its proposals for this market at a high-level. However, it has not provided detail about how this would work in practice. We would like to work with the CAA to clarify a number of more detailed matters in the interests of creating a more predictable and transparent regulatory environment, and encouraging competition to develop in the market.

7.3 There are also a number of areas in which we would request the CAA provide a stronger evidence-base for its proposals. NSL has consulted widely with customers on its business plan. The TANS plan is a consolidation of individual plans of 8 airports each of which are tailored to the requirements of customers at those airports and their priorities for service quality relative to cost efficiency. The CAA has proposed changes to this plan without providing sufficient evidence as to why the cost reductions it proposes are appropriate.

7.4 We note the five considerations that the CAA has taken into account in setting an additional 1% cost efficiency target in relation to the previously published draft TANS plan. In our view, this provides only a limited evidence base as follows:

- The benchmarking undertaken compares airports with very different operations, and as acknowledged by the CAA itself, does not normalise for airport complexity
- The En Route business is different in nature and as such the cost efficiency target is not directly comparable
- The effect of the CAA's proposed target on the development of a contestable market is not considered in detail

7.5 The setting of a cost reduction target over and above the current contracts agreed with airports risks introducing misalignment between local customer requirements and priorities. It could also encourage TANS providers to focus on meeting the cost efficiency target at the expense of other factors for which targets are not set or for which no financial incentives are applied, but which are valued by customers.

7.6 NSL requests that the CAA provides further clarity in a number of key areas, as follows:

- The work which will be done by the CAA in order to enhance the contestability of the TANS market, including when the CAA is expecting to undertake another review of the market. It would be helpful if the CAA could include specific reference to how the tender exercises at Birmingham, Luton and Gatwick airports address the CAA's previous concerns.

- Clarify what evidence or actions the CAA would expect to see from NSL / the Industry to satisfy the CAA that market conditions are in existence at the next review.

- How the union-wide DUC targets for TANS, which according to the Article 10(3) of the Performance Regulations need to be set as of 2017, will apply given the target the CAA has proposed for RP2.

- How the contribution of individual airports, and TANS providers, to the charging zone level cost efficiency target will be assessed.

- The proposed process should an additional airport fall within the requirements for inclusion within the TANS target during the timeframe of RP2, e.g. moves from <70,000 IFRs to >70,000 IFRs, or vice versa.

Capacity

7.7 The CAA's proposal for a target that maintains historic performance is understandable and supports the business plan submitted by NSL. We also appreciate that financial incentives relating to capacity are not being proposed in the FAB Performance Plan due to capacity incentives already being included in the individual airport contracts. However, under Article 15 of the EC Charging Regulation, it is stated that justification should be provided where they are not being applied.

7.8 NSL believes there would be a benefit in the CAA outlining its rationale for not introducing incentive schemes in this area and how their proposals comply with the EU regulations, to avoid any ambiguity.

London Approach

7.9 NERL notes the proposals for London Approach contained in CAP 1158 and the CAA's Consultation Document. NERL welcomes the CAA's confirmation that London Approach charges during RP2 will be consistent with the revised EU Charging Regulation.

8 Appendices

Appendix A:

More detailed observations on the CAA's proposals

The tables below contain a range of comments - some are suggested formatting, presentational and typographical corrections whereas others are more substantive points of fact or policy. In order to distinguish between these, the formatting, presentational and typographical corrections are shown in italics.

(1) FAB Performance Plan

Page	Reference	Comment
14/50/58/ 60/64/75/	*General comment*	*The text in the boxes appears to be incomplete.*
14	*UK Traffic Forecasts*	*The text does not indicate that the UK is using STATFOR Base Case traffic forecasts, unlike other States using the Low Case traffic forecasts, as per the SSC decision on the EU-wide cost-efficiency target.*
27	Airspace Development	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate references are: • NSP SO3: Implement a seamless and flexible airspace enabling Free Routes • NSP SO4: Plan optimum capacity and flight efficiency • NSP SO5: Facilitate business trajectories and cooperative traffic management
29	LAMP	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate references are: • NSP SO3: Implement a seamless and flexible airspace enabling Free Routes • NSP SO4: Plan optimum capacity and flight efficiency • NSP SO5: Facilitate business trajectories and cooperative traffic management NSP SO6: Integrate airport and network operations

30	Centre Systems Software	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate reference is: • NSP SO7: Ensure network safety, security and robustness
32	CNS Infrastructure	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate references are: • NSP SO2: Deploy interoperable and effective information management systems • NSP SO8: Optimise CNS resource allocation and costs
33	CO2 & Fuel Saving	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate references are: • NSP SO4: Plan optimum capacity and flight efficiency • NSP SO5: Facilitate business trajectories and cooperative traffic management
34	iTEC FDP/NCW	The capex table does not reference the relevant Strategic Objectives (SO) from the Network Strategy Plan (NSP). Referencing the relevant strategic objectives highlights the alignment with the NSP produced by the Network Manager in accordance with Commission Regulation EC677/2011. The appropriate reference is: • NSP SO2: Deploy interoperable and effective information management systems
36/152/165	Capex	The capex numbers presented are financial year (not calendar year), nominal prices and relate to Total NERL (i.e. Oceanic and En Route), not just En Route. They also include some (but not all) capex that is not part of the RAB and is not traded through the single till (i.e. non-regulated business). NATS proposes that this data should either be clearly labelled in the final FAB Plan or corrected to 2012 CY prices, excluding non-RAB costs, or including all RAB costs (rather than only just some).

39	Additional comments	The Draft FAB Plan states that qualifying airports will also be required to respond to the effectiveness of safety management questionnaire, with the NSAs monitoring them accordingly. This is inappropriate because there is no requirement for the qualifying airports to read this plan. The text referring to qualifying airports is not relevant to the FAB Plan as currently written.
40	Safety – ATM-S	The FAB level target on ATM-Specific (ATM-S) occurrences is missing in the Ground score table. However, it appears erroneously in the overall score table. Proposed amendment: move the requirement to report ATM-S scores at FAB level in ATM overall table to the FAB level Ground score table
40	Safety – RI	According to the national level table, NERL is required to report on runway incursions. This is incorrect since NERL does not provide any runway ANS. Proposed amendment: remove the RI figures from the NERL part of the National level table.
52 & 87	Cost tables	There appears to be a disparity between the 2014 total cost figures in the two tables.
63	*London Approach*	*The table has not been completed with figures from page 142*
66	Safety	This claims that there will be an increased level of safety. This is not accurate. To be clear, NATS will reduce the accident risk per flight by 13% but this matches the increase in traffic to achieve a constant level of risk across the network as traffic grows. Proposed amendment: "No cumulative or additive effects have been noted and the plan is considered to deliver the same level of safety with increasing traffic density. The application and maintenance of SMS will provide an appropriate level of safety assurance coupled with NSA oversight activity."
66 & 174	Safety and Interdependencies	The 4th paragraph of section 3.3 claims that the ANSP individual contributions have been assessed by the FAB NSAs to ensure consistency. This is not obvious from the text on page 174 and the claim in Para. 3.3 appears to be questionable.
77	*Last paragraph*	*This seems to finish abruptly – are there some words missing at the end?*
84	Note 5	There is inconsistent messaging on IAA's use of RAT: "NERL uncertain whether IAA are using the tool in 2014" but Page 16 Action 5 states "IAA have been using the tool since 2012".
84/85/86	TA	A common transition altitude for the FAB is indicated in 2018, but the targets assume 2017.

87-109	*Table 1s*	*There appears to be a disparity between the presentation of the Irish and UK RP1 data in the CRCO reporting tables – the Irish tables show 2014 RP1 value on the right side of the RP2 table, whereas the UK shows separate tables for RP1 NPP and actuals and then for RP2 NPP.*
98	*Section 3.5 Cost of capital for 2010*	*Note that the "actuals" for 2010 are not the true actuals – the instruction was to tie back to published NPP (see UK Perf Plan Addendum Page 14 which shows 6.5%)*
98	*NERL Inflation in row 5.2 and subsequent costs in real terms in row 5.3*	*There are some small differences on the inflation indices arising from roundings - therefore the figures are <u>not</u> as per the published tables on the CRCO's ETNA database.*
99 & 100	*Met & CAA Section 5 inflation*	*The same issue arises as on the NERL table – all figures agree with submissions except for small differences arising from inflation.*
110	*Total UK Route*	*The table has not been consolidated e.g. Section 3 is blank.*
112 & 113	*Met and CAA*	*The tables/calculations are not complete.*
114	Total UK Route	The table has not been consolidated correctly because some figures are not up to date e.g. risk sharing.
114/131	Traffic risk sharing adjustment	The figures are not up to date.
115-133, 135-141 & 147-151	Additional Information	We have already indicated elsewhere the need for amendments to be made to the text. A full update and review will be necessary before submission in the final FAB Plan.
116	General Comments	The text does not include all the relevant comments: e.g. **Revenue discounting:** IFRS requires discounting of long term receivables. These are adjusted in statutory accounts for the impact of N+2 recoveries (e.g. traffic risk sharing, inflation, incentive schemes). The determined costs exclude this adjustment. **Lease reinstatement provisions:** Provisions are assessed annually for the lease reinstatement obligations on property leases. These are excluded from determined costs.

116	Para. 15	The latest independent actuarial triennial valuation was at 31 December 2012, not 2015. The schedule of contributions is agreed to 2023, not 2016. Proposed amendment to final sentences: 'From 2017, the cash contributions reflect the CAA's assessment of cash contributions. NERL's plan for RP2 reflected the Trustees' schedule of contributions with projected deficits at subsequent valuations spread over the remainder of the recovery period (in line with The Pension Regulator's code of practice for defined benefit schemes).'
118	*Para. 15*	*Missing word at end of first sentence.*
118	*Para. 16*	*Typos: replace 'deprecation' and 'pesniosn' with 'depreciation' and 'pensions', respectively.*
124	NERL Section g) Para. 2	The reference to Terminal needs to be updated to reflect the new (terminal charging zone) basis for London Approach.
127	*Paras. 18 & 20*	*Typos: replace '018' and '20113' with '2018' and '2013', respectively.*
128	Section c) NERL Paras. 1 and 2	The London Approach comments need to be updated to reflect the new (terminal charging zone) basis.
130	Section a)	Clarification is required on what items should be included here such as SESAR JU and associated pilot projects.
130/133	Spectrum charges	References to spectrum pricing charging being an uncontrollable cost are too specific to the spectrum charges themselves and not the potential mitigation costs of (for example) modifying radars. The latter could be cheaper than the former and hence would be in airline customers' interests. Proposed amendment: change the wording to include reference to the cost of mitigation for spectrum charging.
148	K, l & m	Leave as N/A, deleting all references to Additional Information as these did not apply to RP1
162	iTEC FDP & NCW Benefits	The safety benefits refer incorrectly to the "risk index". The reference should be corrected to the "weighted SSE index".
165	Benefits	The targeted 20% reduction is incorrect, in view of the re-assessment of the benefits achievable through truncated SIDs. Proposed amendment: replace '20%' with 'a targeted 12.6% reduction in CO2 emissions (with a stretch target of 20%). This is equivalent to 780 KT CO2 per annum (245 KT of aviation fuel p.a.) in 2025…..'

166	Supplementary Information, LAMP	This refers incorrectly to a 20% improvement in the risk index. The reference should be corrected to 'a 20% reduction in the weighted SSE Index'.
172/173	Safety and Interdependencies assessment	This text does not accord with the most recent version submitted by NATS: • The heading is incomplete • In the headings for Paras. 2c and 2d VR should be replaced by 'Staff Savings' • In the third bullet under Para. 2c 'VR' should be replaced by 'staff savings or VR'

(2) Consultation Document

Page	Reference	Comment
5	Figure 1	The table does not list the target on RAT ATM-S scores, and is inconsistent with the text in section 3.1. Figure 1 should include the requirement and targets on RAT.
8	*Figure 8 & FAB Plan 3.1(d).1*	*There is a disparity between the Irish Total Determined Costs for 2019 in real prices between these docs*
11	Para. 2.2	The list of stakeholders should include Military.
25	Para. 3.1	Second bullet point: This section states the following severity classifications SHALL be used – serious incident, major incident, significant incident, no safety effect and not determined. This is incorrect and not consistent with section 3.4. It should have included all severity classifications (e.g. D & E) for clarity within para. 3.4.
28	Safety Question 1 (safety benefits from a JC policy at FAB level)	NATS believes that a documented FAB Just Culture policy will help to facilitate an improving Safety Culture between the FAB ANSPs, NSAs and Departments for Transport. An improving safety culture is essential to improve safety reporting and understanding the true safety performance of the FAB.
28	Safety Question 2 (scope of the Joint Policy Statement)	NATS believes the FAB Just Culture Policy is too prescriptive in some areas, and does not allow the ANSPs sufficient flexibility in local application.
29	Safety Question 3 (JC targets on training)	This is addressed in section 6 of this response document
29	Safety Question 4 (other areas of JC)	A Just Culture is an essential component of an improving Safety Culture. NATS would like to work within the FAB to understand how we improve our reporting, learning and flexible culture with the aim of improving the FAB Organisational Safety Culture.
39	Figure 4.9	The applicable cause codes for C3 and C4 are not listed – clarification should be provided.
41	Para. 4.32	Clarification should be provided: it is not clear if this is per annum, particularly for the first bullet 'a bonus rate for C3 that would allow the maximum bonus to be earned if the impact score was zero and the traffic was as forecast.'

44	Para. 5.4	The FAB target for KEA: does not note that there are exceptional events or uncontrollable factors which could affect NERL's ability to meet the target. The report to the NSAs should also be required to set this out. Some of these factors are noted in the Ireland section (Para 5.6)
44	Para. 5.4	There is a significant analysis and reporting burden associated with KEA Environmental KPI, which is not incentivised. NATS will already be incentivised on a stringent performance regime associated with 3Di, and will additionally be exploring a FAB 3Di trial with the Irish. NATS has already suggested that the KEA target will not be met, and therefore these requirements will be triggered. The CAA should allow NATS to demonstrate that its projects are delivering fuel burn benefits greater than the targeted level of performance under KEA. Such benefit assessments already fall out of NATS' internal calculation mechanisms (supporting the delivery of projects) and will be shared with customers through the enhanced SIP process. Therefore, this reduces the analysis burden whilst still justifying that benefits are being delivered in excess of the targeted level of performance required by KEA (only that those benefits are not captured by the KEA metric). NATS proposes that the CAA should include a statement in the final FAB Plan indicating the priority given to 3Di over KEA.
103	Paras. 8.21-8.22	There seems to be a link missing between the two paragraphs. At the moment as it is drafted, it appears to be contradictory. The CAA says that 'maintaining historic performance from a low growth period into an expected high growth period is likely to provide some challenge to the ANSP' but then says 'Moreover, matching the historic outturn is not necessarily a stretching target.'
104	Para. 8.27	The paragraph fails to mention the largest single cause of delay i.e. weather (when considering all causes, as is implied).
104	Figure 8.5	The airport capacity targets have been set on all causes. Although there are no financial incentives associated with the targets, it should be noted that the ANSP itself has little control over the all cause metric.

(3) CAP 1157

Page	Reference	Comment
10	Chapter 4 - Enforcement	The CAA should acknowledge that there may be factors outside the control of the TANS provider which could cause it to miss the targets. In these cases it may not be appropriate to place the onus to ensure corrective action is taken, and in a sense the reputational risk, on the TANS provider. For example, many types of airport delay are caused by factors beyond the TANS provider's immediate control, e.g. weather, infrastructure, staffing, fleet mix. Also there are already incentives in place between NSL and the airports in many of the contracts.

(4) Other technical points

NERL has now reflected the intent of the CAA proposals in our detailed financial model. The table below sets out our estimate of some refinements to the calculations of the CAA's proposals that would increase the level of their accuracy. NERL requests that the CAA reflects these refinements in its final proposal document. We will contact the CAA to discuss these in more detail.

Area	**Refinements to reflect:**	**Inc/(dec) in DC**
Pay	Pay progression start date of 2015 (rather than 2014)	£3.3m
Pay	Pay assumption start date of 2016 (rather than 2017)	(£2.1m)
Pay	Fixed pay components that do not change with pay rate percentages	£1.1m
Pensions	Pension cost changes relating to items above	£0.3m
Pensions	CAA intent to reduce pension allowances by no more than 10%	£0.2m
Other	Adjustments required to reflect impact of CAA adjustments on MoD FMARS contract gainshare	£2.6m
Other	Adjustments required to reflect impact of pay adjustments on capitalised labour - Capex	(£1.4m)
Other	Adjustments required to reflect impact of pay adjustments on capitalised labour - Opex	£1.4m
Other	Adjustments required to reflect impact of pay adjustments on capitalised labour - Regulatory Depreciation	(£0.2m)
Other	Adjustments required to reflect impact of pay adjustments on capitalised labour - Regulatory Return	(£0.2m)
Total	***Determined cost impact which excludes capital expenditure**	**£6.4m***

Further, there is one other adjustment that we need to discuss with the CAA before we quantify its effect. This relates to the impact on capitalised labour of the CAA's proposed adjustments to pension costs in 2018 and 2019.

Appendix B:

Answers to the CAA's consultation questions

The CAA included some specific consultation questions in its consultation document. The table below indicates where our response to these questions is included in our overall response.

CAA consultation questions relating to the UK Performance Plan	Where we have responded
What would your organisation consider to be the safety benefits in having a documented policy on JC at FAB level?	Appendix A
Is the scope of the Joint Policy Statement sufficient?	Appendix A
Are the JC targets on training at NSA and ANSP level considered an appropriate recognition of JJC and sufficiently ambitious within the FAB context?	Appendix A
Are there other areas of JC you consider would be helpful in establishing a greater understanding of its application in relation to ATM throughout RP2?	Appendix A
Do you consider the adoption of a FAB capacity target in line with the Network Manager Reference values for the UK-Ireland FAB appropriate?	Section 6
Do you consider the scope and function of the proposed FAB capacity incentive mechanism appropriate?	Section 6
Do you consider the weighting of capacity incentives on NERL appropriate?	Section 6
Do you consider the proposed approach to incentivisation for the capacity metric C4 appropriate?	Section 6
Do you have any other views on the FAB or UK-only capacity targets?	Section 6
Do you consider adoption of the Network Manager Reference Values as FAB targets for the horizontal flight efficiency appropriate for RP2 in the UK-Ireland FAB?	Section 6
Do you consider the approach to incentivisation for the proposed UK 3Di KPI and implementation of a harmonised Transition Altitude of 18,000ft appropriate?	Section 6
Do you consider the proposed 'cap' and 'collar' calculation as 33% of the par value an appropriate level at which to set the maximum bonus/penalty payments?	Section 6
Do you consider the deadband proposed to be at an appropriate level?	Section 6
Do you have any other views on the FAB or UK-only environment targets?	Section 6
Do you consider the proposed UK En Route cost efficiency targets demonstrate sufficient contribution to and consistency with the EU target for cost efficiency?	Section 5
Do you have any other views on the UK En Route cost efficiency targets?	Section 5
Do you consider the proposed UK terminal capacity target appropriate?	Section 7
Do you consider the proposed approach to UK terminal cost efficiency appropriate in the context of developing a contestable market in terminal ANS?	Section 7

Appendix C:

Comments about the need for an effective appeal mechanism

1. The CAA has previously been required to agree the price control proposals with NERL before final implementation or, alternatively, to afford NERL the right to appeal the settlement to the UK Competition Commission (now the Competition and Markets Authority - CMA).

2. The revised regime introduced by EU 691/2010 renders that appeal ineffective as any final decision of the EC affecting CAA's/DfT's final settlement decision takes precedence over any CMA review, were it to be invoked. The absence of any final decision prior to that point prevents NERL challenging the economics of the final settlement decision earlier in the process. This lack of an effective appeal mechanism is contrary to Article 22 of EU 691/2010 which states that:

   > 'Member states shall ensure that decisions taken pursuant to the regulation are properly reasoned and subject to an effective review and/or appeal procedure'.

3. NERL requests that the CAA acknowledges the current deficiency in terms of NERL's effective appeal rights and:

   a. makes transparent the processes and reviews to which the National Performance Plan (NPP) will be subject both by CAA and DfT before submission to the EC, as well as following any requirement from the EC for a change to any part of the NPP; and

   b. supports NERL and DfT in proposing an effective appeal mechanism for adoption by the EC on a pan-European basis in time for implementation during RP3.

Appendix D:

Comments on the proposed Licence condition for FAS incentivisation

Introduction

1. The CAA proposes to hold NERL accountable through a Licence condition for the delivery of key elements of the Future Airspace Strategy (FAS). This includes harmonisation of the transition altitude, terminal airspace redesign under the London Airspace Modernisation Programme (LAMP) and implementation of the European ATM Master Plan.

2. The CAA has established that it has no right to waive breaches of the Licence and must carry out case by case reviews as to whether enforcement action is required for a breach. Similarly, NERL is obliged to report such breaches to its lenders. Recognising the risk to the continuity of service provision that would arise from a finance default, and the administration time wasted in addressing 'technical' Licence breaches (e.g. minor delays in reporting requirements), the CAA and NERL reviewed the Licence for RP1 to ensure any Licence conditions that could lead to a 'technical' breach were minimised, thereby minimising the risk of inadvertent financial default arising from a Licence breach.

3. The current proposal reverses these efforts by proposing the introduction of a Licence condition on terms that are outside the control of NERL. It therefore severely increases the risk of a Licence breach in circumstances that cannot be easily rectified, leading to a real risk of financial default.

4. In general, the NERL Licence is used to implement a performance-based regulatory regime, with measurement/incentivisation based on outcome performance not on an agreed programme of inputs. Although NERL agrees its investment plan through the regulatory planning process and Service and Investment Plan (SIP), it retains some flexibility to adjust the plan to reflect circumstances, while ensuring that it meets agreed performance targets. Any move to restrict that flexibility risks a potential conflict between the input and output based aspects of the Licence - i.e. a choice could arise between delivering to a date (to avoid a potential Licence breach), or delivering the required performance benefits.

5. If the CAA seeks to specify the project deliverables and timetable then this would indicate a degree of intervention that was not contemplated by the terms of the Transport Act. More broadly, there is a possibility of confusion between CAA's accountability for its own FAS deliverables and NERL's contributions to those FAS deliverables.

Planning

6. The use of the term 'best endeavours' with respect to the FAS Deployment Plan could require NERL to divert funds and effort from elsewhere to prioritise these areas over others (subject to meeting general obligations). It is not clear that this is a proportionate approach, given the general comments above. We consider that it is more appropriate for us to make balanced judgments of the best deployment of resources to meet our (performance output) obligations. Additionally, the areas to be prioritised are both vague and wide: while Transition Altitude (TA) and LAMP are very specific and targeted, the overall FAS programme is much wider, and the European ATM Master Plan includes most of our investment in future capabilities. This means that in practice NERL would be asked to prioritise much of the LTIP (not just TA/LAMP), leading to possible confusion as to which aspects of the programme should receive the most priority.

7. Under European legislation NERL is already under an obligation to implement the European Master Plan, as characterised through Implementing Rules and the ESSIP[18]/LSSIP[19] process

[18] European Single Sky Implementation Plan

as well as the Pilot Common Project (PCP) and common project process. We make commitments to this through our contribution to the National Performance Plan (NPP) and the LSSIP process.

8. It is appropriate that we should provide a plan for TA, and the SIP process is an effective way to consult. However, Project Definition will not be completed until spring 2015 and the next SIP consultation covering this will not commence before the 30 June 2015 date proposed for a detailed project plan. In addition, previous indications of the 'O' date were for Winter 2017/18 and NERL cannot commit to a 2017 date. Finally, the date for delivery is dependent on other factors outside NERL's control, notably the role of the CAA and the consultation process.

9. For LAMP, while it is similarly appropriate for NERL to provide plans, this is a phased programme that will be planned stage by stage. We will not have a plan to 2019 until much nearer that time. LAMP 1a is due to deliver late 2015, and planning later phases will not occur in detail until that stage is nearing completion. Stages will be delivered roughly every 2 years and each will be planned in turn, subject to experience and lessons learned from the previous ones, including the consultation process.

Reporting

10. It is unclear how the reporting aspects of the proposed Licence condition fit NERL's proposals for an enhanced SIP process, which include the introduction of a 6 monthly report on the programme at an additional SIP meeting. Customers have also proposed having a focal point which seems similar to the reporter proposed by the CAA. It therefore appears that the proposals in the new Licence condition would supersede some aspects of enhanced SIP proposals that have already been discussed (with customers and the CAA). It would be inappropriate to do both.

11. It is reasonable that NERL should provide a regular update on progress, and potentially this could be through an enhanced SIP process. It might be more useful to customers for this update to use an agreed format, rather than 'such information as the CAA may reasonably require'. It would also be necessary to be clearer about which programmes the report should cover - just TA / LAMP, or all major ATM programmes, which is a very different requirement.

12. The reporting requirements of this Licence condition could lead to a de facto on-going audit of the LTIP, generating significant costs, which have not been factored in to NERL's RP2 Plan and for which no contingency is available in the Draft FAB Plan. There was also no provision in NERL's RP2 Plan for 3rd party expenditure on a reporting process of this nature and there is no contingency allowance within the Draft FAB Plan to cover items of this kind.

Conclusion and recommendations

13. We do not consider that the new Licence condition is fit for purpose. Instead, the proposed reporting requirement should be met through the existing performance regime and SIP reporting. Any proposed prioritisation should be on TA/LAMP, not on the whole of FAS/ATM Master Plan, which is too broad and less precisely defined. Any additional reporting should be incorporated in the SIP process, and agreed between NATS/CAA, not just imposed by the CAA. Should any of this additional reporting be by a 3rd party it should be funded either by the CAA or covered by an additional allowance in NERL's determined costs.

[19] Local Single Sky Implementation Plan

Appendix E:

Additional evidence from PwC on NERL's employment costs

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NATS

PwC response to IDS Employment Cost Review

April 2014

pwc

1. Report overview

Background

The Civil Aviation Authority ("CAA") had commissioned IDS to prepare a report reviewing the efficiency of the employment costs of NATS (En Route) plc (NERL), a subsidiary of National Air Traffic Control Services (NATS), expected in the Second Reference Period (RP2; 2015 -2019).

The report was prepared by IDS over the summer of 2013 and following discussion with the CAA, the final version was published in December 2013.

As a result of this work, the CAA, in conjunction with the Irish Aviation Authority Safety Regulation Division, prepared a consultation document outlining a number of areas to support stakeholder consultation on the draft UK-Ireland Performance Plan of the Single European Sky Performance Scheme for Air Navigation Services (ANS). This consultation document provides supporting rationale for the decisions and targets contained therein.

The two reports referred to above are:

1. Assessing the efficiency of NERL's total employment costs in RP2, published by IDS in December 2013 (the IDS report); and

2. Draft UK-Ireland RP2 performance plan consultation document, published by the CAA in February 2014 (the FAB report).

The CAA have invited comments on the consultation document to be provided by 4 April 2014. PwC has been asked by NATS to provide an independent review of the two reports in order to advise NATS in its response to the consultation.

PwC review

PwC has been asked by NATS to provide an independent review of NATS' employment costs following some of the assertions made in the IDS and FAB reports.

The scope of our engagement is limited to:

i) a review of the IDS report from a reward perspective excluding pensions (which has been reviewed separately); and

ii) a review of the FAB report, limited to the targets contained within Section 6 of the FAB report around En Route Cost Efficiency UK.

This document has been prepared only for NATS and solely for the purpose and on the terms agreed with NATS. We accept no liability (including for negligence) to anyone else in connection with this document.

Contents

In this report, we provide a summary of our review and key findings within the following sections:

Executive Summary

1

Response to the IDS report (1 of 2)

IDS report findings

The focus of the IDS review was on:

- pay and benefits benchmarking;
- trends in wage and other employment costs over time;
- efficient workforce deployment to meet operational requirements;
- staff absence and turnover;
- European labour costs comparisons.

We understand IDS was asked to provide an assessment of how NERL's costs compare to the market, identify scope for improvement in particular areas and to provide an opinion as to whether the assumptions on employments costs in NERL's business plans are both challenging and achievable.

A series of conclusions were drawn as part of the 2013 review, however the following are those findings, stated in the Executive Summary of the IDS Report, which we have focussed on and explored further as part of our review:

Pay and benefits benchmark analysis (chapter 8)

- *In the absence of a substantial number of organisations in the UK carrying out the same or very similar activities, particularly for Air Traffic Controller (ATCO) roles, benchmarking was conducted on the basis of IDS' understanding of the mix and level of skills required by NERL roles, allowing read across to equivalents in the labour market.*
- *IDS focused on UK comparators because of the difficulty in drawing comparisons across jurisdictions and received little evidence of an active labour market.*
- *NERL basic salaries for the majority of non-ATCO positions are within +/-10% of the market.*
- *NERL total cash levels are broadly in line with the majority of non-ATCO staff.*
- *The impact of shorter hours and better annual leave entitlement at NERL increases NERL's position against the market.*

Sickness absence and labour turnover (chapter 10)

- *NERL's average of 3.9 working days lost per employee in 2012/13 is below the average level of sickness absence across the economy.*
- *The labour turnover rate across all staff groups at NERL in 2012/13 was 5.1%. This compares favourably with the all-sector average of 11.9%.*

International labour cost comparisons (chapter 11)

- *International comparisons are useful for measuring productivity and organisational performance. They are, however, of more limited value as a basis for judgements about pay levels for ATCOs in current circumstances.*

We agree with a number of the arguments and conclusions determined within the IDS report. However, there are certain areas where we have considered the possibility of an alternative approach to IDS.

As part of our review of the report, we have met with the authors of the IDS report and with a representative of the CAA to explore the rationale and data supporting specific points which were not clear to us.

Our discussion has highlighted specific instances where the position adopted by IDS differs from that of PwC and therefore we have focussed our review and analysis on these aspects.

Response to the IDS report (2 of 2)

PwC response

Following our analysis, there are a number of central themes coming out of our review of the IDS report which should be noted:

- **Focus on total cash** - When undertaking any benchmark comparison, it is important to focus on total cash rather than base salary alone in terms of providing a fair assessment as to whether a company's pay offering is market competitive. Our review shows that whilst on a base salary basis, NERL may appear to be high against the market, a lower incentive opportunity results in current remuneration being broadly in line with the market.
- **Comparator groups for ATCOs** - We have also reviewed the comparator groups used by IDS. In our view, an appropriate additional comparator group in future for ATCO roles is International ANSPs (Air Navigation Service Providers), reflecting the complexity and unique skill-set of these roles and the move towards the "Single European Sky" programme. However, we acknowledge the difficulty in finding readily available data and in accurately job profiling these roles and therefore suggest that current market comparisons are misleading.
- **Adjustments to Total Reward** - We believe that the adjustment that IDS has made in relation to comparing NERL to the market on a total reward basis is flawed for professional roles (that is, IDS have increased NERL's pay by a factor representing increased holidays / shorter hours.) The adjustment to holiday and working week is anomalous with best practice and over-states the position of NERL to the market. The average differential between NERL and the market on a total reward basis for all roles benchmarked is 5.8% with the adjustment and 0.2% without.
- **Positive impact of low absence** - Whilst we agree with IDS that the current benefits package, and specifically levels of holiday and sick pay, are high when compared to the market, this lends itself to a correspondingly low absence level. Using numbers in the IDS report, this could provide a cost benefit / saving to NERL of between £3m and £27m over 5 years.
- **Employee share cost is an employment cost** - Consistent with the view taken by international accounting bodies, we believe that the provision of an employee share scheme is a cost that should be passed through as an expense along with other tangible employee compensation costs.

Key findings

We summarise below the conclusions we have drawn from the central themes and other relevant elements of our review and analysis.

- Within the bounds of typical benchmarking accuracy, PwC cannot find sufficient evidence from the IDS report or elsewhere to suggest that the NERL job roles identified are paid out of line of market. Therefore, the data presented does not support an argument for a pay adjustment.
- Organisations should structure their overall remuneration approach in such a way as to balance the business' needs. In the case of NERL, this means ensuring appropriately trained and qualified employees are engaged to deliver strong business performance and to minimise risk.
- While some data presented by IDS examines and questions individual elements of pay, it is important to look at the totality of pay and performance together (e.g. taking into account the benefits of NERL's lower staff turnover and sickness).
- The adjustment for holidays and working hours overstates the current NERL position against the market. We would suggest a removal of the adjustment. This would result in the roles benchmarked at NERL being positioned above the market by c. 0.2% and suggests a greater alignment with the chosen market.
- The results of our analysis of holiday and sick pay shows that the benefit derived from low absence levels could create a saving of between £3m and £27m depending on the data source used.

Response to the FAB report

FAB report findings

In 6.24 of the FAB report, the CAA states that it considers "based on the analysis in the IDS report, that the pay and benefits packages at NERL are relatively generous compared to appropriate comparators and that recent trends have been higher for NATS than for the market in general, it would be inappropriate to allow for a level of pay progression as a whole over RP2 in excess of CPI. It has therefore made no allowance for a general upward drift in salaries in each category of staff due to increments and would assume a steady state where the average seniority of staff remains stable."

The approach outlined above by the CAA results in a saving during RP2 of £15.7m.

PwC response

Whilst we agree that the approach taken to pay progression within NATS is unusual and could be reviewed, we would seek to challenge the assertions made by the CAA, as follows:

1. *"Pay package is generous compared to the market"*

- In Section 2, we have sought to challenge this by demonstrating that current pay on a total cash basis is not generous when using alternative and arguably more appropriate comparator groups and by removing the adjustment for holiday and working hours.
- We have provided our understanding of market practice which demonstrates that current incentive practice is lower than, or comparable with, the market. Therefore, even if the benchmarks remain unchallenged provided by IDS, on a total cash basis, the lack of annual bonus brings the perceived high base salaries in line with and in some cases below the market.
- In Section 3, we have asserted the difficulty in providing a robust comparator group for ATCOs given their unique skill set. Therefore any attempt to make market comparisons can be misleading and overly-simplistic particularly given the long-serving, highly experienced staff at NERL when compared to the market which skews the current positioning against the market.
- In Section 4, we demonstrate that the approach taken by IDS on a total reward basis is inappropriate due to the adjustments that have been made by IDS to holiday entitlement and working week. We believe that the approach taken by IDS results in NERL pay figures being over-stated. The removal of the adjustment indicate that the current NERL positions are above the market by c. 0.2%.

2. *"Benefits are generous compared to the market"*

- We would agree that the current benefits package including holiday and sick pay is generous compared to the market. However, our analysis in Section 5 demonstrates the additional cost benefits that such programmes could provide in terms of low absence levels in the order of £3m to £27m, depending on which source is used.

3. *"No allowance for general upward drift"*

- Whilst we agree that a revised approach to pay progression is desirable, a move towards a new approach takes time and careful consideration needs to be given as to the appropriate timescale of implementation of such change in light of NERL's employee relations environment, particularly given the costs of any industrial action. As such, any changes to process will require careful trade union consultation.

4. *Broader context*

- Before embarking on further changes to terms and conditions, it is important to consider the changes that NATS has already made over the last few years which we understand have provided a substantial cost benefit being:
  - Redundancy programme;
  - Pension reform;
  - Improvements in service and quality targets.

Given the changes that have already been made, the likelihood of industrial action without the appropriate process and implementation (and the cost of training new ATCOs if turnover increases significantly), should not be ignored.

Focus on total cash

2

Focus on total cash

In this section we considered a number of aspects of the IDS report which comment on the market positioning of NERL in terms of total cash rather than focus on base salary.

Approach

- In order to test the view that IDS has taken with regards to specialist roles at NERL, we have focussed on the ATCE job family as being a set of specialist roles with perhaps a clearer comparator group than the ATCOs.
- The natural read across for ATCE roles is to the engineering sector which cover a number of similar roles across regulated and unregulated businesses and with a significant proportion operating in safety critical environments, or being particularly safety conscious due to the nature of the job.
- We considered a number of independent data sources for the engineering sector including a greater number of larger, private sector companies.
- Analysis undertaken to review current incentive practice within NERL against the market using IDS data on bonus market practice.

PwC view

- Unlike ATCO roles, the engineering sector is a more natural comparator group for the specialist NERL roles. The results of our review suggest that on a total cash basis, current NERL engineering roles are at or below market.
- It is likely that IDS' analysis on non-ATCO roles has been inflated due to its assumptions and valuation of total reward (to be addressed in section 4) and therefore the variance against market is more likely a result of this adjustment factor to NERL employee packages than necessarily a poor comparator group.
- Our view is that the benchmarking analysis may have been complicated by internal job bands and there may be an opportunity to simplify the job levels to support a more effective grading structure and pay bandings.
- The analysis that we performed (and provided on the following page) indicates that overall, the level of incentive is consistent with, or in some cases below, the market median.
- Our view is that a complete comparison of employee costs can only be made if incentive pay is incorporated into the definition of total cash.
- Given that incentive pay is offered to only a small part of NERL's employee base, it would seem sensible that employees are compensated with higher base salaries to help keep them in-line with equivalent roles in other markets.

Conclusion

When undertaking any benchmark comparison, it is important to focus on total cash rather than base salary alone in terms of providing a fair assessment as to whether a company's pay offering is market competitive. Our review shows that whilst on a base salary basis, NERL may appear to be high against the market, a lower incentive opportunity results in current remuneration being broadly in line with the market.

Incentives at NERL – comparison vs market (1 of 2)

We set out a comparison of incentives against the market data below:

ATCE & STAR Levels 1 and 2

The individuals at ATCE & STAR Levels 1 and 2 have been matched to IDS job levels 8 (the majority) and 9. These levels are commensurate with experienced middle manager and senior manager grades.

An incentive opportunity equal to 5% of salary is below the lower quartile market opportunity for all levels of management (10% - 20% of salary).

Maximum incentives as % salary	*Junior manager*	*Middle manager*	*Senior manager*
Upper quartile	20%	26%	40%
Median	15%	20%	30%
Lower quartile	10%	12%	20%
ATCE & STAR Levels 1 and 2		**5%**	

Source: IDS: Executive Compensation Review, Research File 85

ATCE & STAR Level 3 and below and others

The above group of individuals varies considerably in terms of seniority although we understand that any incentive arrangement ceased for this grouping in April 2013. Given the disparate nature of this group, we do not believe it is robust to attempt to make a direct comparison with the market.

Incentives at NERL – comparison vs market (2 of 2)

PCG

The split of the PCG by maximum incentive level is as follows:

Annual incentive opportunity	*Number of roles*	*Comparison vs market*
45%	31 (9% of PCG)	These roles could be seen as equivalent to those that report to (the majority) , or sit on, the Executive Committee within a FTSE 250 company. The median bonus entitlement for this level of role is as follows (Source: PwC Executive Reward Survey 2013): • Executive Committee – maximum 100% of salary • Reports to Executive Committee – maximum 50% of salary The total incentive opportunity equal to 45% of salary is therefore broadly in line with market practice, considering a small proportion of this is not subject to performance (in respect of the employee share scheme).
30%	103 (30% of PCG)	The total opportunity is in line with the market median for the senior management roles (30% of salary).
15%	208 (61% of PCG)	This is at the market medians of the junior management (15%) and below median of middle management (20%) groups.

The above analysis indicates that overall, the level of variable pay is consistent with, or in some cases below, the market median. It should be noted that we have not included the value of any all-employee share plans operated in the above analysis.

Comparator groups

3

Review of current comparator groups for ATCOs

Approach taken by IDS

In 2009, the IDS report prepared for the CAA concluded that "the lack of jobs in the UK directly comparable with air traffic controllers – who account for a large part of the NERL workforce – make the process of benchmarking difficult, particularly for some categories of staff".

However, in 2013, IDS have adopted a different approach in preparing the comparator groups for ATCO roles. In summary, IDS have taken the following approach:

- Concluded that International ANSPs are not appropriate comparators due to the lack of evidence in exit interviews showing mobility of ATCOs to International ANSPs and because of inherent difficulties in benchmarking UK roles to international comparators
- Used airline pilots as a benchmark comparator, at the request of NERL
- Used military and power control as an additional reference point albeit IDS recognise that neither are direct comparators for ATCOs given the unique three dimensional space in which ATCOs work.

PwC view on comparator groups

Our view is that at present there is no direct market comparison and therefore any approach to benchmarking is flawed for the following reasons:

- The airline industry is not an appropriate comparator. Whilst we understand the position that NATS takes in that both airline pilots and ATCO are the principal controllers of the safe flight of an airplane, the skills required to do these roles are different and the market from which these roles may be recruited vary considerably. There is a ready market for talent from the commercial sector which directly influences the pay rates for airline pilots which is not present for ATCOs
- Military and power control are not strong comparisons as they do not reflect the specific market pressures nor the three dimensional space in which ATCO works, as IDS suggests
- Analysis of exit interviews suggests some movement to International ANSPs in Middle East and UAE but this is limited. Over the 5 year period 2009 – 2013, there were 63 ATCO resignations with 23 known to be taking up operational roles in different international locations and only 2 people changing professions. Therefore whilst we recognise that International ANSPs may be a valid comparator in the future (explored on the following page), this is not appropriate today
- We recognise that there is some data to suggest individuals re-train and go into air traffic roles within airports where roles are made redundant. Therefore, whilst this does support IDS' argument that there is a market for talent, there is a requirement to re-train and the limited number of individuals who do opt to take this route would indicate this is a matter of personal preference rather than a basis from which to perform pay benchmarking
- The IDS report suggests that generalist (non-ATCO roles) are broadly in line with or below benchmarks but specialist NERL roles are above market. This would support the case that there is no direct benchmark for ATCOs as having a pool for talent (as is the case in generalist non-ATCO roles) could cause a dampening effect on pay.

Suggested approach to consider

Therefore, given the unique skill-set of ATCOs and lack of appropriate comparators, it is our view that benchmarking against any comparator group at present is flawed and leads to misleading results. In our view, therefore, control of costs should be sought through a review of the following:

- In terms of base pay, analysis as to whether pay is "high" could be reflected in assessment of productivity / efficiency. This is being explored separately by NERL.
- Removal of tenure based pay through to a pay for performance model may address cost efficiencies and improvements in productivity.

However, in the future, notwithstanding the potential issues caused by overseas comparators due to country specific pay and tax practice, we believe that International ANSPs will be a valid additional comparator. We explore this further on the following page.

International ANSPs – appropriate comparator for the future

International ANSPs

We recognise the difficulty in providing robust data for International ANSPs and the inherent difficulty in comparing roles from different territories.

However, it is likely that the move towards a Single European Sky will create much closer working with International ANSPs and as a result is likely to increase ATCO mobility creating an international pool for talent.

We provide below some of the key themes we understand from NATS of the Single European Sky programme that may increase ATCO mobility going forward making market comparisons in the future easier:

- **Common Training requirements for ATCOs** - in order to enable consolidation of training facilities across the EU and ensure common standards of performance e.g. safety.
- **Common ATCO Licence requirements** - in order to reduce regulatory and compliance costs mainly but is likely to enable easier transfer of staff.
- **Common working methods and procedures across states** - for general standardisation benefits.
- **Common ATC (Air Traffic Control) systems across states, Functional Airspace Blocks (FABs) or other ANSP alliances** – primarily the purpose of this is to reduce capital and maintenance costs. However, if an ATCO is using the same tools and platform then again this facilitates easier transfer of skills which again can facilitate easier mobility. There are already examples of cross-territory working for example, we understand from NATS that they are currently developing the iTEC platform with AENA (Spanish), DFS (German) and LVNL (Netherlands).
- **Inter-operability of ATC systems between FABs and ANSPs** – as above, whilst the principal aim is to reduce capital and maintenance costs, a flow-through from this could contribute to greater staff mobility.
- **Centre consolidation within and across states** which implies mobility of ATCOs between those countries.

Conclusion

We have reviewed the comparator groups used by IDS. In our view, if the move to a Single European Sky leads to closer working and ATCO mobility between ANSPs then a key comparator group in future for ATCO roles would be International ANSPs, reflecting the complexity and unique skill-set of these roles and the move towards the Single European Sky programme. However, we acknowledge the difficulty in finding readily available data and in accurately job profiling these roles and therefore suggest that current market comparisons are misleading.

Adjustments to Total Reward

4

Definition of Total Reward

Approach

- IDS have made adjustments to the data provided by NERL and the market in comparing total reward by adjusting for a value of holiday entitlement and to allow for differences in the number of hours worked per week.
- We have undertaken a review of the approach taken by IDS in defining Total Reward and compared it to the PwC approach and other consultancies to understand whether adjustments is the standard approach.
- We have then revised the original analysis undertaken by IDS to strip out the adjustments made.

PwC view

- Our view is that the adjustments for working week (save for the adjustment to part-time workers) and for holiday is anomalous with market practice for professional roles.
- From our broad calculations, the combined impact of the IDS report's calculation of hours and days holiday into the total reward comparison vs the market suggests the combined impact ranges between 8% and 14% of base salary.
- Based on data provided by IDS we have been able to assess the average impact of adjustments for working week and holiday entitlement by group of employees on a more detailed basis:
  - Based on the IDS methodology, NATS total reward is on average 5.8% above the market median
  - Removing the adjustments made for working week and holiday, NATS total reward is on average 0.2% above the market median

Conclusion

The definition of 'total reward' adopted by IDS is flawed and therefore comparative analysis of NERL against the market ought to be restated to strip out these adjustments.

The adjustment to holiday and working week is anomalous with best practice for professional roles and over-states the position of NERL to the market. The average differential between NERL and the market on a total reward basis for all roles benchmarked is 5.8% with the adjustment and 0.2% without.

Definition of Total Reward – adjustments for hours and holidays

IDS approach to calculating Total Reward

IDS have made adjustments in comparing total reward to incorporate the 'value' of holidays and to allow for differences in the number of hours worked per week.

PwC approach

PwC's approach is to make no such adjustments for holiday or hours worked (save for the pro-rating of employees who work part-time to full-time) for employees paid on annual salaries as these elements do not directly represent part of remuneration.

We have undertaken an analysis of other consultancy and pay data providers who confirmed that they also do not make any such adjustments for salaried, professional staff beyond the adjustment for part-time to full-time hours.

We would, however, expect to see such an adjustment to be made where individuals are employed on hourly rates e.g. within the retail sector, construction and within call centres.

An analysis of the broad impact of the adjustments made by IDS is set out below.

Working hours adjustment

The IDS report states that NERL contractual hours vary from 34 hours to 35 hours, compared to a market median of 37.5 days.

The broad impact on total reward on a median basis is therefore:

- For individuals working 34 hour s pw, 37.5/34 = **10.3%** of base salary
- For individuals working 35 hours pw, 37.5/35 = **7.1%** of base salary

Holiday adjustment

NERL individuals have a holiday entitlement between 26 and 33 days plus bank holidays. The market median quoted in the IDS report is 25 days plus bank holidays.

The value of holiday calculated by IDS is:

Holiday entitlement above 20 days plus bank holidays / 232 working days

Therefore, the value of holiday is:

- Market (25 days holiday) = 5/232 = 2.16%
- NERL (26 days holiday) = 6/232 = 2.59%
- NERL (33 days holiday) = 13/232 = 5.60%

The additional value as a percentage of salary for NERL individuals vs the market median is therefore **0.4% to 3.4%.**

Overall, the combined impact of the two adjustments is therefore between **8%** (1.071 x 1.004 – 1) and **14%** (1.103 x 1.034 – 1) of base salary, depending on the individual contractual hours and holiday.

Definition of total reward - impact of adjusting for hours and holidays

Detailed impact analysis

IDS provided PwC with the impact of adjustments made for hours and holiday entitlement for each group of employees. The data is shown below:

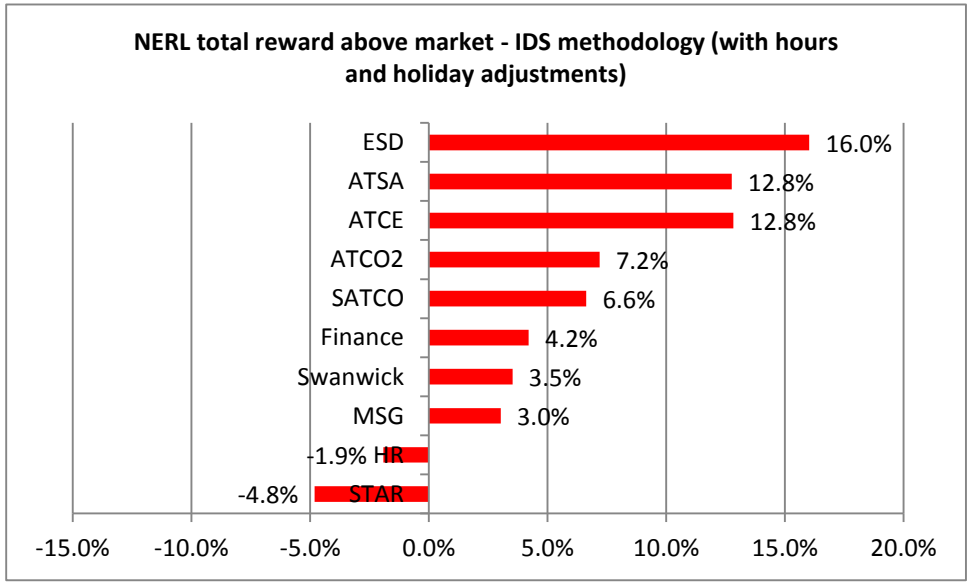
Group	Net value (NERL less market) of adjustment to NERL total reward
ATCE	5.4%
ATCO2	7.5%
ATSA	7.0%
Engineering Service Delivery	3.3%
Finance	2.9%
HR	2.6%
MSG	4.9%
SATCO	7.3%
STAR	6.3%
Swanwick	3.0%

We have used the output of the October 2013 version of the IDS report to restate the variances against the market if the adjustments for hours and holidays were removed. The figures have been calculated by removing the adjustment per role benchmarked by IDS and then averaging the resulting differential against the market.

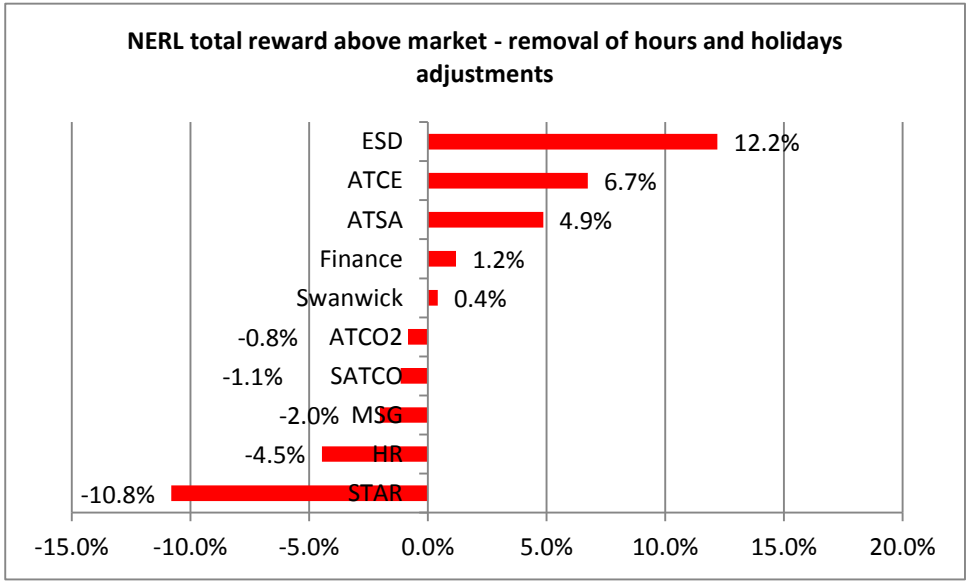
The graphs to the right show that the removal of the hours and holiday adjustments would be to place NATS broadly centred around the median total reward. The averages that are based on the highest number of roles benchmarked (and should therefore carry most weight) are:

- MSG – 7 roles (-2% differential vs market)
- STAR – 5 roles (-11% differential vs market)
- ATCE – 5 roles (+7% differential vs market)
- ATSA – 4 roles (+7% differential vs market).

The removal of the adjustments therefore puts all roles save for ESD within +/- 10% of the market median, although we understand that the analysis of ESD was based upon two roles only and therefore there is a question on statistical validity.



Average differential across all individual roles = 5.8%



Average differential across all individual roles = 0.2%

Impact of low absence levels

5

Impact of low employee absence levels

Approach

- Analysis had already been undertaken to understand how NERL compares to the public sector and appropriate comparator group within the private sector in terms of absence levels within the IDS report.
- Using data provided within the IDS report, it might be possible to conclude that there is a direct link with the associated benefit of having high levels of holiday and sick pay on low absence levels.

PwC view

- The levels of employee absence at NERL are low compared to the wider market in the IDS report. The results show that the lower levels of absence at NERL contribute a considerable saving as set out below.
- The average days lost per employee due to absence for various types of employer as provided in the IDS report and for NERL are shown below, alongside the results of a calculation of the relative saving to NERL of the observed sickness rates.
- Comparing market sickness costs with NERL sickness costs suggests the level of saving against the market over RP2 is between £3m to £27m, depending on the survey used.

Link to holiday entitlement

- The IDS reports that the average NERL holiday entitlement is 3 days above the market median. Whilst it is not possible to determine whether there is an inverse direct link between holiday entitlement and sickness days, there maybe some correlation. The extent to which NATS provides an additional 3 holidays per year on average may therefore be partially offset by NERL's sickness levels being up to 3 days lower than in other organisations.

Conclusion

- Whilst we agree with IDS that the current benefits package, and specifically levels of holiday and sick pay, are high when compared to the market, this lends itself to a correspondingly low absence level which provides a cost benefit / saving to NERL of between £3m and £27m.

	Average days lost per employee (FTE)	*Annual cost to NERL of sickness level **	*Additional annual cost above current NERL cost*	*Total saving over 5 years*
CIPD – all employees	6.8	£12.3m	£5.3m	£27m
CIPD – non-manual, private sector services	5.1	£9.2m	£2.2m	£11m
CBI – all employees	5.3	£9.6m	£2.6m	£13m
CBI – non-manual, private sector	4.2	£7.6m	£0.6m	£3m
NERL (2012/13)	3.86	£7m	-	-

** Based on a sickness cost of £7m for NERL and an average figure of 3.86 days across NERL in 2012/13.*

Employee share costs

6

Employee share costs

Approach

- PwC has reviewed the approach taken by NERL against typical market practice and against the approach taken in International Financial Reporting Standard 2 ("IFRS 2").
- We have sought to challenge the reason for not including the cost of providing employee shares as part of the total remuneration package.

PwC view

- PwC's view is that when making comparisons against the market, total remuneration should include:
    - Base salary
    - Pension
    - Incentive pay, including annual bonus and share plans.
- The share scheme is part of the incentive pay provided by NATS and should not be ignored when considering the total value of the remuneration and in making a comparison with other companies.
- Whilst the mechanism involves the use of shares, the scheme is effectively a way to deliver cash to individuals, in return for an investment made by individuals in NATS.
- This requirement for individuals to invest their own money is a financial commitment with associated risk and ownership of shares improves alignment of individuals with NATS. Through the share scheme, behaviours that add value and increase the value of NATS are generally to be encouraged.
- There is precedent for regulated businesses passing through the cost of SIP plans as an employment cost.
- Our view is that the employee share scheme costs are reasonable and should be treated as an integral part of employment costs, alongside salary and benefits. This is commensurate with the requirements of IFRS2, the international standard that deals with accounting for share-based payments.
- Calculations indicate that the maximum value of the employee share scheme is around 1% of salary per annum for the average employee.
- The structure of the scheme and the level of match provided (1 for 1) are in line with normal market practice.

Conclusion

- We believe that the provision of an employee share scheme is a cost that should be passed through as an expense along with other tangible employee compensation costs.
- NATS is in line with the market, since it has not made free share awards under the SIP since 2009. The current practice of granting partnership shares and matching shares is aligned with the most common combination offered by other companies.
- NATS's practice of making a 1 for 1 match is in line with typical market practice.

Employee share scheme – Operation and IFRS 2

Operation

Our understanding of the operation of the employee share scheme based on information provided by and discussions with NATS, is as follows:

- The scheme was established in 2001 at the point NATS became a Private Public Partnership (PPP). It was agreed that employees should have a 5% stake in NATS.

- The scheme enables all employees to participate and invest in the company.

- It is structured as an HMRC-approved Share Incentive Plan, with the potential to grant the following types of shares:
  - Free shares
  - Partnership shares, bought by individuals
  - Matching shares, issued at a ratio of up to 2:1 for each partnership share purchased by employees (although NATS has chosen a lower ratio of 1:1)
  - Dividend shares.

- A number of awards have been made under the SIP, including five free share awards (between 2001 and 2009), a dividend share award (in 2005), and three partnership and matching awards following year long 'accumulation periods' starting March 2010, September 2011 and April 2013 during which the funds to be invested are deducted from participants). Since 2009, NATS has not issued awards of free shares.

- The price that the shares are traded at is calculated by an independent company and approved by HMRC.

- The terms attached to the various types of shares are as follows:
  - Free shares must be held for five years until they can be sold (unless an individual is a good leaver, for example in cases of death, redundancy, injury or disability, retirement etc)
  - Dividend shares must be held for three years
  - Partnership shares have no holding period, but must be retained for five years to be fully exempt from income tax
  - Matching shares are treated as free shares, except that they are forfeited if the corresponding partnership shares are withdrawn during the first three years.

Treatment as an Employment Cost – IFRS 2

The international standard dealing with the accounting treatment of share-based payments specifically deals with all-employee share plans. In particular, the conclusion reached by the International Accounting Standards Board (IASB) is that broad-based employee share plans should not be exempt from the IFRS (BC 17, IFRS 2).

The objective of IFRS 2 is to reflect in the profit or loss of share-based payment transactions, including expenses associated with transactions in which share awards are granted to employees. The impact on the profit or loss should be based on the measurement of goods or services provided by the employee to the company.

The IASB's rationale for this was as follows (BC 11, IFRS 2):

- The fact that all-employee share plans are available only to employees is in itself sufficient to conclude that the benefits provided represent employee remuneration;
- Moreover, the term 'remuneration' is not limited to remuneration provided as part of an individual employee's contract: it encompasses all benefits provided to employees;
- Similarly, the term services encompasses all benefits provided by the employees in return, including increased productivity, commitment or other enhancements in employee work performance as a result of the incentives provided by the share plan.

Given the international reporting standard requires the company to recognise a cost in respect of the employee share scheme, it logically concludes that it is an integral element of remuneration that represents part of the cost of employing individuals.

Comparison of share scheme with market – structure of plan and quantum

We have sourced market data to test the extent to which the employee share plan aligns with typical practice in this area:

- The table below sets out the usage of different kinds of shares in SIPs offered by companies.
- The most common combination of SIP shares is Partnership and Matching Shares followed by Partnership Shares only.

Type of share combination	*Percentage of companies offering each combination*
Partnership & Matching shares only	41%
Partnership shares only	21%
Partnership, Matching & Free shares	7%
Partnership & Free shares only	6%
Free shares only	4%

Source: ifs ProShare's 2012 SAYE and SIP Survey published in June 2013.

- 50% of companies use Matching Shares as part of their SIP offering. Offering Matching Shares in combination with Partnership shares is the most common combination of shares awarded under a SIP (41% of companies).
- For Matching Shares, the most popular match is 1 for 1 with over a third of SIPs offering this option. The maximum match under the SIP legislation is 2 for 1 with around 16% of SIPs offering this option.
- Typical matching levels are set out in the following table:

Matching level per partnership share	*% of companies offering this matching level on matching shares*
2 for 1	16%
1 for 1	38%
1 for 2	7%
1 for 3	6%
1 for 4	8%
1 for 5	4%
1 for 10	3%
Other	18%

Conclusion

NATS is in line with the market, since it has not made free share awards under the SIP since 2009. The current practice of granting partnership shares and matching shares is aligned with the most common combination offered by other companies.

NATS's practice of making a 1 for 1 match is in line with typical market practice. In our experience, a 12 month accumulation period is also most common.

Appendix F:

Additional evidence from Oxera on the cost of capital

Response to the consultation on the draft UK–Ireland RP2 performance plan: allowed rate of return

Note prepared for NATS En Route plc

4 April 2014

1 Summary

In the draft UK–Ireland RP2 performance plan, the Civil Aviation Authority (CAA) calculates the prices that the UK air navigation service provider, NATS En Route plc (NERL), can charge assuming a real vanilla weighted average cost of capital (WACC) of 4.2%.[1] This is the rate of return that NERL is allowed to earn on its regulated asset base (RAB). The real vanilla WACC allowance in the current price control period (CP3) is 5.5%.[2] In its RP2 business plan, NERL has proposed a real vanilla WACC of 4.9%[3]—considerably lower than the CP3 allowance to account for changes in capital market conditions over the last few years.

In the draft RP2 performance plan, the CAA proposes to reduce the WACC by a further 70 basis points (bp) compared with NERL without new market evidence on equity market returns or the business risk of NERL to justify this further reduction in the cost of capital.

[1] UK Civil Aviation Authority (CAA) and Irish Aviation Authority (IAA) (2014), 'Draft UK-Ireland RP2 performance plan consultation document', February.

[2] This represents the vanilla accounting rate of return (ARR) of 5.5%. This is the rate that is applied to the RAB in CP3 allowing for the reinvestment of cash. The related headline vanilla WACC allowance is 5.7%.

[3] The headline real vanilla WACC underpinning NERL's business plan is 5.1%. This has been converted into an ARR, which is the rate applied to the RAB, to make it directly comparable to the 4.2% proposed by the CAA.

1.1 The CAA's assumption that NERL will be 16% lower-risk in RP2 than in CP3 is not sufficiently well evidenced. A more comprehensive review of the evidence suggests NERL's asset beta, as a minimum, should be similar to Gatwick's. Further, if anything, risk has increased rather than reduced since CP3

A significant proportion of the reduction in the allowed return is due to a lower asset beta assumption—the CAA proposes to reduce the asset beta by **16%** from CP3 (from 0.60 to 0.51). In other words, the CAA assumes that NERL has significantly lower business risk than it has previously judged.

In the absence of market data on betas for air navigation services, material changes in the beta assumption from previous price reviews must be well evidenced, in order to maintain regulatory stability and transparency. The evidence base produced by the CAA's consultants (PwC) to substantiate the change in the beta is not considered to meet this test.[4] First, PwC's analysis makes a number of unsupported assumptions about the link between asset beta and historical volatility of traffic. Second, PwC's analysis only considers the impact of traffic volatility on revenues, rather than profits and cash flows which are of more relevance to investors.

Within PwC's framework of risk assessment, analysis produced in this note shows that NERL is clearly higher-risk than Heathrow and is closer in its risk profile to Gatwick. Based on the CAA's final decision for the airports, this suggests that, as a minimum, NERL's asset beta should be 0.56—the same as Gatwick's.

However, Oxera's previous assessment of the forward-looking exposure to key business risks showed that risk was expected to be at least as high in RP2 as in CP3, implying that an asset beta of 0.60 used in CP3 was still appropriate.[5] The CAA has not presented any new evidence to substantiate why risk is decreasing relative to CP3. If anything, several changes to the regulatory regime introduced by the CAA—such as the change in the pension pass-through—potentially increase risk compared with CP3.

1.2 The CAA's choice of the cost of debt is based on selective market evidence and, as a result, understates the cost of debt for RP2

First, PwC proposes to use NERL's actual credit rating (which includes an uplift to reflect the possibility of government support) as the target credit rating to estimate the cost of new debt. This approach is a departure from the methodology used in previous reviews, and overlooks the fact that part of the uplift in the rating is linked to the government's stake in NERL. PwC does not consider how the possibility of a reduction in the government's stake in NERL could affect the cost of raising new finance during RP2. To ensure that the cost of new debt assumption is robust to a range of scenarios for RP2, the established methodology of using a notional stand-alone credit rating to estimate the cost of new debt is considered more appropriate.

Second, even under PwC's chosen methodology, the cost of new debt is understated due to a selective review of the available evidence.

[4] PricewaterhouseCoopers (2014), 'Estimating the cost of capital for NERL', February.

[5] Oxera (2013), 'What is the cost of capital for NATS (En Route) plc?', 24 July.

- PwC uses information from only one credit rating agency (S&P) in order to arrive at its target credit rating—this leads PwC to adopt a higher target credit rating than would be justified if PwC also used evidence from Moody's.
- PwC places too much weight on the current yield of NERL's bond, which understates the cost of new debt for NERL due to its relatively short duration.

Correcting for these factors would suggest that the cost of new debt should be around 2.3%, rather than 1.75% used by the CAA.

Finally, PwC's allowance for debt fees is understated. It proposes 10bp on the basis that this is the same allowance as for Heathrow for Q6. However, the allowance for Heathrow for Q6 is actually 15bp.

Taking all of these factors together, despite the fact that PwC's assumption for the cost of existing debt for NERL is 10bp higher than Oxera's estimate, the cost of debt range is, on balance, understated. Oxera's original range of 2.5–2.7% is considered to remain appropriate.

1.3 The CAA's estimate of the total equity market return is towards the low end of plausible values. In choosing a relatively low point estimate for the total equity market return the CAA compounds the effect of its proposals on the asset beta and cost of debt, which, overall, leaves NERL with very limited flexibility to respond to cash-flow shocks within the period

The CAA's chosen point estimate of 6.25% is at the bottom of PwC's range of 6.25–6.75%.

Since the publication of Oxera's report (in July 2013), there has been no capital market evidence to suggest a lower estimate of the total equity market return. If anything, interest rates have increased over the period.

With the exception of the Competition Commission's (CC) provisional decision for Northern Ireland Electricity and the CAA's decision for airports, regulators in other sectors have continued to adopt values higher than 6.50%. However, it is recognised that some downward movement in regulatory assumptions has taken place since July 2013.

Therefore, on balance, while the CAA's range for the total equity market return can be reconciled with regulatory precedent, the point estimate chosen by the CAA is towards the low end of plausible values for the total equity market return. Estimates in the upper half of the CAA's range are also justifiable, in our assessment.

This is especially true when the CAA's proposals on the equity market return are considered together with the CAA's proposals on the asset beta and the cost of debt. The combination of the proposed reductions on each parameter leaves NERL with very limited flexibility to respond to cash-flow shocks within the period.

2 CAA proposals

Table 2.1 below summarises the CAA's proposals on the cost of capital relative to NERL's business plan submission and relative to the assumptions used for the current price control (CP3).

Table 2.1 Overview of WACC proposals

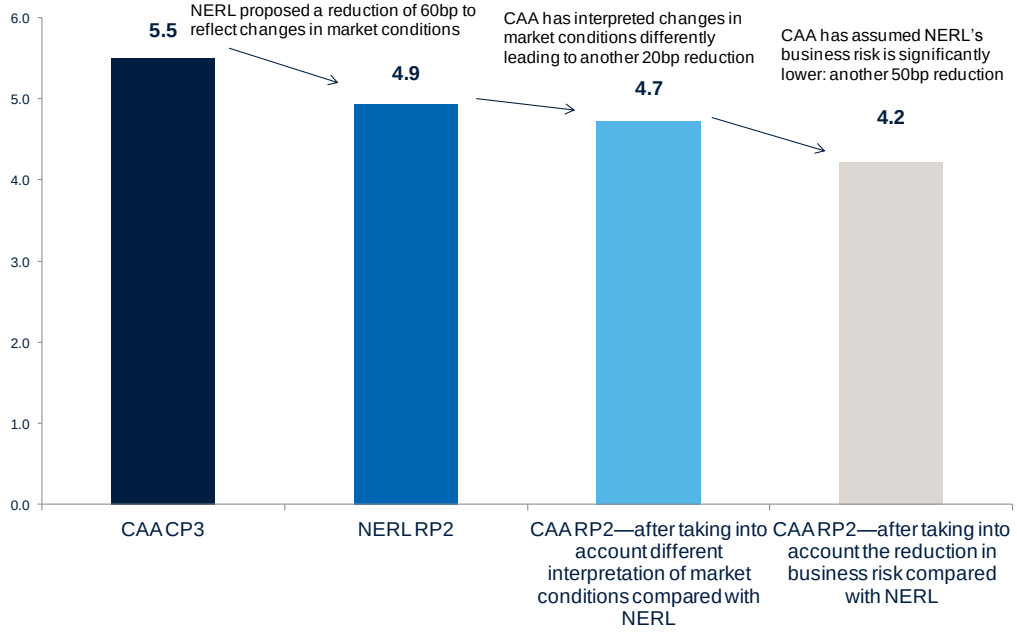
Parameter	CAA's RP2 range—low	CAA's RP2 range—high	CAA's RP2 point estimate	NERL submission for RP2	CP3
Real risk-free rate (%)	0.75	1.25	0.75	1.63	1.75
Equity risk premium (%)	5.50	5.50	5.50	5.25	5.25
Total market return (%)	6.25	6.75	6.25	6.88	7.00
Equity beta	1.15	1.08	1.115	1.35	1.35
Asset beta	0.49	0.52	0.505	0.60	0.60
Real post-tax cost of equity (%)	6.69	7.55	6.87	8.71	8.80
Gearing (%)	60	60	60	60	60
Real pre-tax cost of debt (%)	2.40	2.50	2.45	2.55	3.60
Real vanilla WACC (%)	**4.10**	**4.50**	**4.22**	**5.05**	**5.70**
Rate to be applied to the RAB (%)			**4.22**	**4.93**	**5.52**

Note: The breakdown of NERL's submission is based on the mid-point of the Oxera range.

Source:UK Civil Aviation Authority (CAA) and Irish Aviation Authority (IAA) (2014), 'Draft UK-Ireland RP2 performance plan consultation document', February; and Oxera (2013), 'What is the cost of capital for NATS (En Route) plc?', 24 July.

NERL's business plan already reflected a reduction of 60bp in the WACC to account for known changes in capital market conditions. The CAA proposals further reduce the WACC by 20bp due to a different view of the magnitude of the reduction in the WACC warranted by changes in market conditions (total market return and cost of debt) and then further reduce the WACC by 50bp due an assumption that NERL is lower-risk (Figure 2.1).

Figure 2.1 Proposed changes in the WACC relative to CP3 (%)



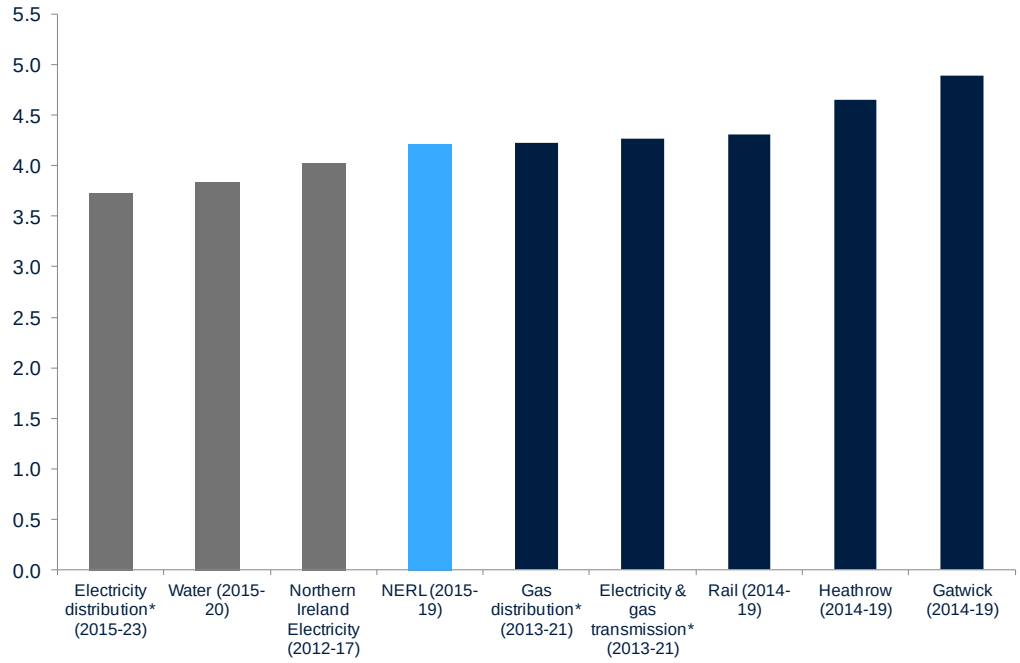
Note: All numbers are stated on an accounting rate of return (ARR) basis.

Source: Oxera analysis.

As shown in the remainder of this note, no new evidence has emerged since NERL's business plan submission to substantiate the additional reductions proposed by the CAA.

It is also worth noting that the CAA RP2 proposals suggest that NERL's investors require a return similar to returns required for investing in regulated energy and water networks. This is in contrast to CP3, where NERL's allowed return was higher than for utilities, consistent with NERL being higher-risk than utilities (see Figure 2.2 and Figure 2.3).

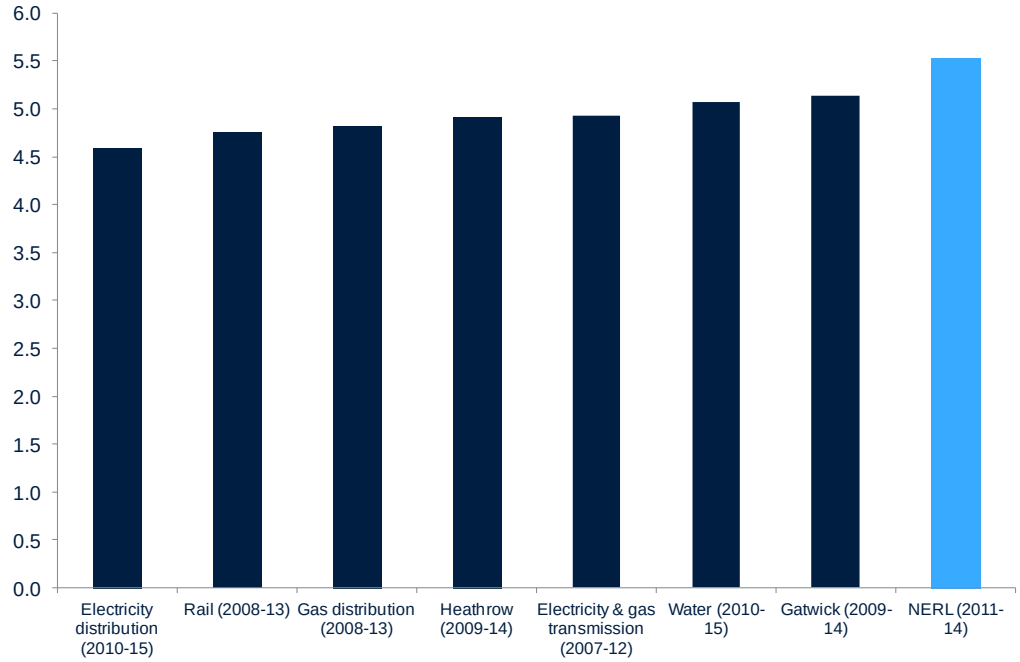
Figure 2.2 Real allowed vanilla rates of return, 2012–23 (%)



Note: For consistency with the CAA proposals, numbers for airports, Northern Ireland Electricity, NERL, and energy networks have been presented on an ARR basis. Decisions in grey indicate provisional decisions. * In energy, the allowed cost of debt is indexed annually. The numbers shown are projected allowances for 2015–16. Gatwick is no longer regulated in the same way as Heathrow, but a regulatory WACC is used to calculate the reference price.

Source: Various regulatory determinations, and Oxera analysis.

Figure 2.3 Real allowed vanilla rates of return, 2007–15 (%)



Note: For consistency with the CAA proposals, numbers for airports, Northern Ireland Electricity, NERL, and energy networks have been presented on an ARR basis.

Source: Various regulatory determinations, and Oxera analysis.

3 Asset beta

The CAA's assumption that NERL will be 16% lower-risk in RP2 than in CP3 is not sufficiently well evidenced. A more comprehensive review of the evidence suggests that NERL's asset beta, as a minimum, should be similar to Gatwick's. Further, if anything, risk has increased rather than reduced since CP3.

The CAA proposals reduce the asset beta for NERL by 16%, from 0.60 to 0.51. In the absence of observable market data on betas for air navigation services, and given the high-level nature of the analysis produced by PwC (as discussed below), the magnitude of the proposed reduction in the asset beta appears unjustifiably large.[6] This is in contrast to the approach taken by the CAA for the London airports, where the CAA was cautious about changing its previous view of the risk of the airports despite a large body of evidence and analysis presented by various parties.

3.1 PwC's approach

PwC draws strong conclusions about the asset beta on the basis of analysis of the impact of historical volume fluctuations on revenues. It notes that on average over the 2006–12 period, NERL was exposed to 70% of volume (traffic) fluctuations. In contrast, airports are exposed to 100% of volume risk, and regulated utilities are assumed to generally be exposed to no volume risk (given that most of them are regulated using revenue caps). PwC then assumes that NERL's beta is 70% between the asset beta of utilities (0.35) and the average asset beta for airports (0.55–0.59). This leads to a range for NERL's beta of

[6] PricewaterhouseCoopers (2014), 'Estimating the cost of capital for NERL', February.

0.49–0.51. Given the lack of market evidence on betas for air navigation services, such a narrow range does not recognise sufficiently the degree of uncertainty around the estimates. There are, however, a number of more important criticisms of the PwC approach.

First, the relationship between the asset beta and the proportion of volume risk that a company is exposed to is unlikely to be as simple as assumed by PwC. The nature of demand risk faced by regulated utilities, NERL and the airports is not identical. It is also unlikely that there is a linear relationship, in the way assumed by PwC, between observed historical volume fluctuations and forward-looking investor expectations of how company returns will correlate with the market.

Second, what matters for investors is volatility in profits and cash flows, not revenues. Even if one were to apply PwC's framework to position NERL's asset beta relative to other sectors, once the impact of volume fluctuations on costs is taken into account, the evidence does not unequivocally suggest that NERL is 30% lower-risk than airports.

3.2 Revised assessment of NERL's relative risk to airports

The analysis produced by PwC can be extended to assess the impact of traffic deviations on profits and returns, rather than revenues. Using data on allowed revenues and costs for NERL, Heathrow (HAL) and Gatwick (GAL) for the 2006–12 period—the same period that is used in the CAA's analysis—and after making assumptions on how costs vary with traffic, deviations in traffic from forecast can be translated into deviations of profit from forecast, and subsequently into deviations of returns on capital from forecast. [7]

For NERL, it is assumed that a 1% change in traffic leads to a 0.3% change in operating expenditure (OPEX).[8] This is based on the information on the relative share of variable to fixed costs provided by NERL, and is an assumption that has previously been used by the CAA.[9] The same assumption is applied to airports' costs, in the absence of other information for the airports.

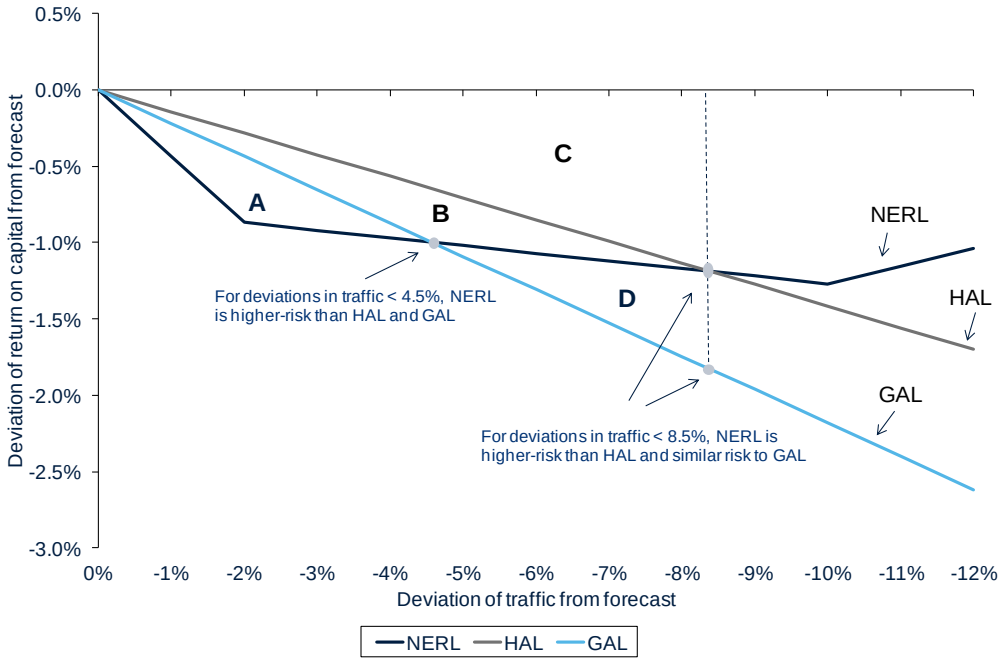
Figure 3.1 below shows that, under these assumptions, for modest deviations of traffic from forecast (up to c. 4.5% in absolute terms), NERL's returns on capital vary more than for both HAL and GAL. For traffic deviations up to c. 8.5%, NERL's returns continue to vary more than for HAL.

[7] More details on the methodology and additional sensitivities are presented in Appendix A1.

[8] OPEX includes pension costs both for NERL and for HAL and GAL.

[9] Civil Aviation Authority (2010), 'NATS (En Route) plc CAA price control proposals (2011-2014)', May, p. 114.

Figure 3.1 Relationship between traffic fluctuations and returns



Note: The horizontal axis shows how actual traffic differs from the forecast used to set the price control. The vertical axis shows what impact the deviation in traffic from forecast has on the return on capital.

Source: Regulatory accounts, and Oxera analysis.

In other words, in a scenario where NERL, HAL and GAL all experience a similar deviation of traffic from forecast, for deviations less than 4.5% NERL's returns deviate more from forecast than for both HAL and GAL, i.e. NERL is clearly riskier than both HAL and GAL.

For traffic deviations between 4.5% and 8.5%, NERL continues to be riskier than HAL. Relative to GAL, NERL's returns suffer more for the first 4.5% of traffic deviations, and less for deviations between 4.5% and 8.5%. The overall shock to NERL's returns can be measured by the size of the area (A + B + C) in Figure 3.1, whereas for GAL it is measured by the area (B + C + D). The size of areas A and B on a net present value basis[10] is broadly similar; therefore, NERL can be considered to have similar exposure to volume risk to GAL for deviations in traffic up to 8.5%.

An important assumption that affects the results of the analysis is the share of variable to fixed costs for airports. To test the sensitivity of the results to this assumption, a scenario where all airports' costs are assumed to be fixed is tested. Under such a scenario, NERL bears more risk than both HAL and GAL for deviations in traffic of up to 3.5%, and bears more risk than HAL and similar risk to GAL for deviations of up to 7%.[11] These 'break-even' points are not materially lower than in Figure 3.1. Given that this scenario is based on a rather extreme assumption that airports are not able to adjust any costs in response to traffic fluctuations, these results show that the conclusions reached on the basis

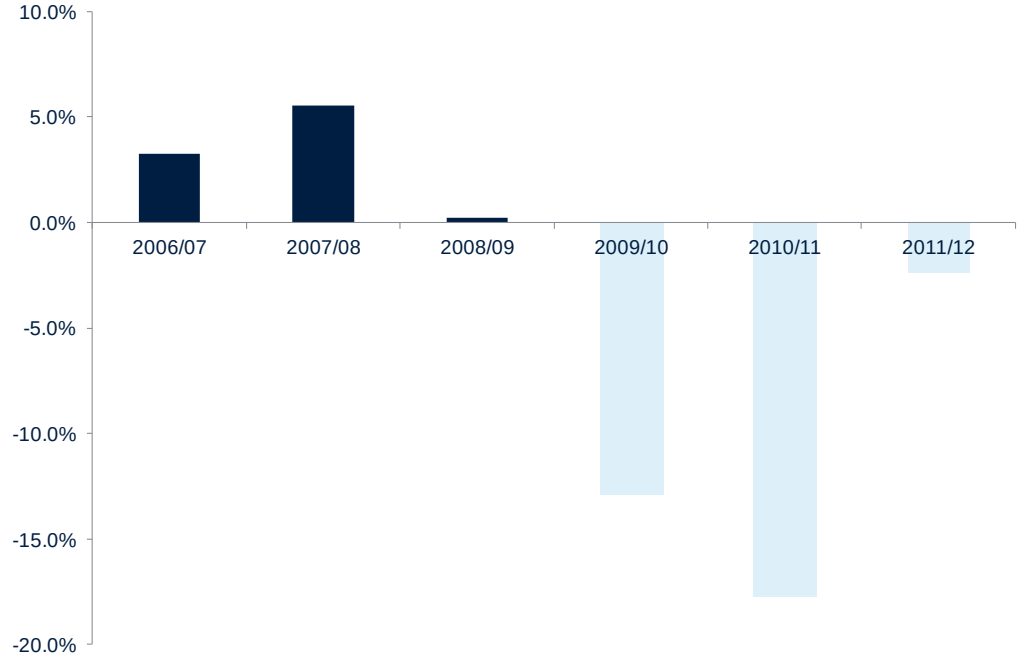
[10] The probability of traffic deviating from forecast by less than 4.5% is greater than the probability of traffic deviating by more than 4.5%.

[11] See Appendix A1.

of Figure 3.1 are not materially affected by the assumption that airports' OPEX costs are 30% variable (same as for NERL).

This analysis suggests that the relative risk of NERL and the airports depends critically on how outturn traffic compares with the forecast used to set the price control. To assess what represents 'normal-course-of-business' deviations, it is worth noting that the average deviation in traffic from forecast (*in absolute terms*) over the 2006–12 period considered in PwC's analysis is 7.0%. However, PwC notes that 2009/10 and 2010/11 were particularly unusual due to the financial crisis and subsequently excludes them from the analysis. Excluding these two years produces an average absolute deviation of 2.8%.

Figure 3.2 Deviation of traffic from forecast (2006–12)



Note: Traffic is measured in Service Units.

Source: NERL's regulatory accounts, and Oxera analysis.

It is also worth noting that in the CAA's downside modelling, the CAA tests two downside traffic scenarios, -5% and -10%, relative to forecast.[12] The STATFOR low and high scenarios for traffic show deviations of +/- c.5% from the base case over the five-year period. In other words, deviations up to 5% over a control period could reasonably be considered as being 'normal-course-of-business'. A scenario with deviations of up to +/-10% is also plausible, especially given recent history, but is likely to be unusual.

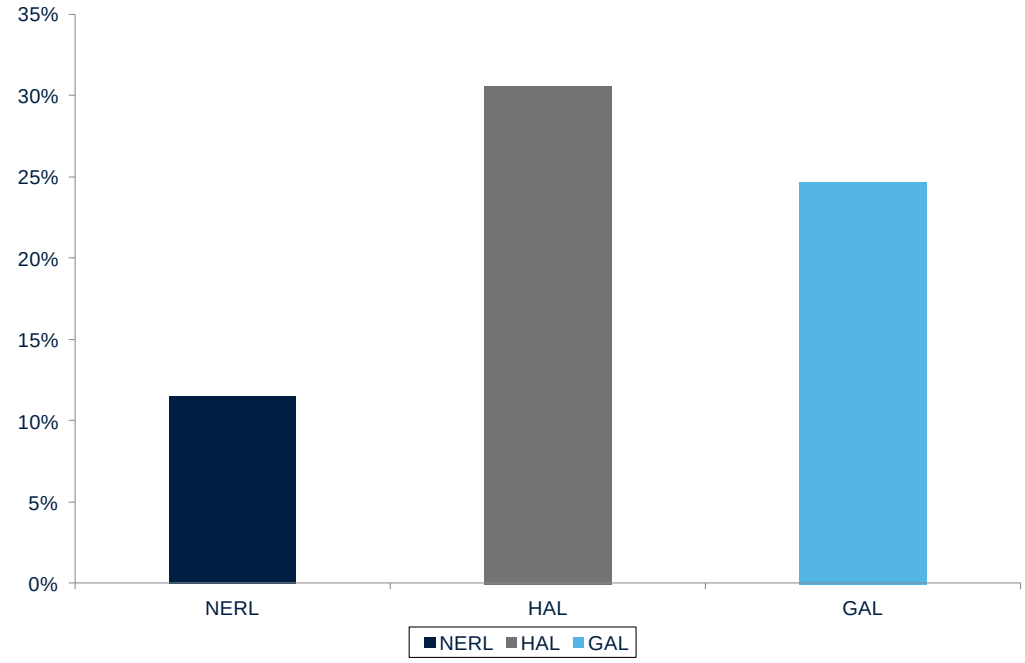
This suggests that, under most reasonable scenarios for traffic, NERL is clearly higher-risk than Heathrow and can be considered to be at least of similar risk to Gatwick. For Q6, the CAA used asset betas of 0.50 and 0.56 for Heathrow and Gatwick. This implies that an asset beta for NERL at least as high as the one allowed for Gatwick is justified.

Differences in cost structure could explain some of the differences in risk between NERL and the airports. For example, as shown in Figure 3.3 below,

[12] Civil Aviation Authority (2014), 'Draft for consultation, FAB Performance Plan, UK-Ireland FAB, Second Reference Period (2015–2019)', March, p. 77.

allowed return is a much smaller proportion of allowed revenue for NERL relative to the airports, which means that the impact of any revenue or cost shock is bigger for NERL. PwC's framework for assessing the operational leverage of NERL is therefore inappropriate, since it considers a number of indicators that are inconclusive in terms of how they may relate to operational leverage of NERL. Instead PwC should have focused on relating the NERL exposure to volume risks to its impact on profits and cash-flow volatility.

Figure 3.3 Allowed return to revenue



Note: Based on forecasts for Q6 and RP2. For RP2, NERL's business plan figures have been used.

Source: CAA, NERL, and Oxera analysis.

3.3 Interaction with other elements of the RP2 proposals

PwC's beta analysis does not consider the interaction with other elements of the CAA proposals and how they affect NERL's risk exposure going forward.

3.3.1 Pensions

PwC's qualitative comparison of relative exposure to pension cost risk is based on the CP3 framework, where NERL is able to pass through 100% of any changes in pension costs to users. However, in the draft RP2 plan, the CAA is reducing the level of protection on the downside to only 80% pass-through. Given the relative scale of pension costs in NERL's cost base, such a change cannot be considered immaterial and represents a non-trivial increase in risk for NERL.

3.3.2 OPEX reductions

The CAA has also proposed significant reductions to the OPEX allowance relative to NERL's business plan, including the removal of the operating cost contingency, disallowance of share plan costs, and reduction in staff and pension costs. NERL's business plan was already based on challenging cost-efficiency targets. When set against significant efficiency improvements

achieved to date and tougher targets set by the CAA, NERL's ability to adjust costs in response to shocks is likely to be more limited than in the past, increasing forward-looking operating leverage. This reduced flexibility to respond to shocks is also noted by Moody's:

> We expect the new regulatory settlement, if confirmed as per draft proposals, to significantly reduce NERL's operating cash flows, putting pressure on its interest coverage, meaning the company would have less headroom to address downside scenarios, such as lower traffic or higher costs. However, the licence requirement will ensure that gearing levels remain modest, somewhat offsetting the lower coverage metrics.[13]

While the existence of an explicit gearing target and cap mitigates some of the impact of this lower flexibility on credit metrics, and hence on risk faced by debt-holders, this means that any increase in risk from the reduced flexibility will be borne by shareholders.

3.3.3 Regulatory risk

In addition, the regulatory environment in RP2 is more uncertain than in CP3, given interaction between the European Commission's Performance Review Body (PRB) and the CAA that was not present at previous reviews. The PRB now has a much greater role in assessing the national performance plans, which, at least initially, could create some instability.

For example, EU-wide efficiency targets have already been subject to unexpected revisions, affecting how the plans of the individual air navigation service providers perform relative to the targets. Other examples of unexpected changes include the change to the timing of the adjustments to revenue for traffic from a one-year lag to a two-year lag.

Against this background of a changing regulatory environment, it is not clear how the CAA can justify such a large reduction in its assessment of relative risk.

3.4 Conclusion

Within PwC's framework of risk assessment, analysis produced in this note shows that NERL is clearly higher-risk than Heathrow and is closer in its risk profile to Gatwick. Based on the CAA's final decision for the airports, this suggests that, as a minimum, NERL's asset beta should be 0.56—the same as Gatwick's.

However, Oxera's previous assessment of the forward-looking exposure to key business risks showed that risk was expected to be at least as high in RP2 as in CP3, implying that an asset beta of 0.60 used in CP3 was still appropriate.[14] The CAA has not presented any new evidence to substantiate why risk is decreasing relative to CP3. If anything, several changes to the regulatory regime introduced by the CAA—such as the change in the pension pass-through—potentially increase risk compared with CP3.

The conclusions on the asset beta take account of the study produced by Steer Davies Gleave (SDG) for the European Commission.[15] While acknowledging that the overall recommendations of the study should improve the methodologies

[13] Moody's (2014), 'Credit opinion: NATS (En Route) plc', 7 March.

[14] Oxera (2013), 'What is the cost of capital for NATS (En Route) plc?', 24 July.

[15] Steer Davies Gleave (2014), 'Study on cost of capital, return on equity and pension costs of air navigation service providers', 28 February.

used to estimate the WACC across different Member States, Oxera disagrees with SDG's conclusion that air navigation service providers' business risk is similar to that of regulated utilities and does not consider that the analysis presented by SDG in any way invalidates the assessment that an asset beta of 0.60 for NERL remains appropriate.

4 Cost of debt

The CAA's choice of the cost of debt is based on selective market evidence and, as a result, understates the cost of debt for RP2.

4.1 Treatment of rating uplift

PwC proposes to use NERL's actual credit rating as the target credit to estimate the cost of debt. NERL's debt receives a two-notch uplift from S&P and a one-notch uplift from Moody's to reflect the possibility of extraordinary government support in case of financial distress.

It is important to stress that the explicit ratings uplift is due to a different methodology used for rating government-related entities, which require an explicit assessment of the likelihood of extraordinary government support.[16] NERL's status as a government-related entity is due to its ownership structure (the government has a 49% stake in the company). Both S&P and Moody's assess the likelihood of extraordinary government support taking into account both the ownership structure and the economic importance of the services provided by NERL.

PwC does not consider how the possibility of a reduction in the government's stake in NERL could affect the rating, and hence the cost of raising new finance during RP2. For example, Moody's notes that:

> the rating could be downgraded by one notch if the UK Government were to sell all or substantially all of its shares in NATS / NERL at any point in the future.[17]

PwC does not consider how a possible reduction in the government's stake in NERL could affect the cost of raising new finance during RP2.[18]

To ensure the cost of new debt is robust to a range of scenarios materialising over RP2, it is considered to be more appropriate to continue with the established methodology of using a notional stand-alone credit rating, which would suggest a higher assumption for the cost of new debt.

4.2 Data used by PwC

There are various factors in PwC's approach that result in a lower cost of new debt assumption than would be justified even using PwC's own methodology.

First, PwC uses information from only one credit rating agency (S&P) in order to arrive at its target credit rating. This leads to a higher target credit rating than is appropriate.

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[16] Standard & Poor's (2013), 'NATS (En Route) plc', 28 June; Moody's (2013), 'Credit opinion: NATS (En Route) plc', 4 December.

[17] Moody's (2013), 'Credit opinion: NATS (En Route) plc', 4 December.

[18] Although there are currently no explicit plans by the government to sell its stake, the possibility of a sale was raised only two years ago (see http://www.ft.com/cms/s/0/b773af9c-727e-11e1-9c23-00144feab49a.html#axzz2wVbIVs00, accessed on 20 March 2014), and it is not inconceivable that such plans could re-emerge over the RP2 period.

- S&P's rating for NERL is 'AA-' which is a two-notch uplift to the stand-alone rating of 'A'.
- Moody's rating for NERL is 'A2 (A)', which is a one-notch uplift to the stand-alone rating of 'A3 (A-)'.

In other words, if equal weighting is given to both agencies, a target credit rating of 'A+' could be justified (which is in between AA- and A). PwC estimates a range for benchmark 'AA-' real cost of debt of 1.8–2.3%, with the lower end of the range consistent with debt costs for an 'AA' rating, and the upper end with an 'A' rating. If more weight is placed on A-rated evidence, estimates towards the upper end of PwC's range should be used.

Second, PwC places too much weight on the current yield of NERL's bond. The real current yield is estimated at 1.4%, and is then used, together with evidence on benchmark indices, to inform the overall range for the cost of new debt of 1.5–2.0%. Although NERL's bond is due to mature in 2023, it is an amortising bond, which means that the effective remaining maturity of the bond is closer to six years than nine years.[19]

Any new bond issued by NERL in RP2 is likely to be of much longer maturity (20–25 years). Therefore, the current traded yield on the existing bond is likely to understate the cost of new debt for NERL, given that investors typically require a term premium for investing in longer-dated bonds.

The benchmark indices used by PwC are based on 10–15-year indices. Arguably, these indices may also understate the cost of longer-term funding: the average maturity and duration of the bonds in these indices are 13 and nine years, respectively.[20] For example, yields on the IBoxx A 10+ years index,[21] which is arguably a more suitable benchmark for any new debt issued by NERL, are about 30bp higher than yields on the IBoxx A 10–15 years index.

4.3 Allowance for fees

PwC proposes 10bp for debt fees on the basis that this is the same allowance as for Heathrow for Q6.[22]

First, the allowance for Heathrow for Q6 is actually 15bp.[23]

Second, PwC chooses Heathrow as a comparator on the basis that the size of the existing NERL bond is close to some of Heathrow's issuances and has a long-dated maturity. However, such a comparison does not take into account the fact that NERL accesses the debt markets on an infrequent basis, implying that debt issue costs will be higher per bond issue than for issuers that frequently access the market. For example, the CAA's allowance for debt fees for Gatwick is 20bp for Q6 on the basis that the fees are spread over a smaller debt base. Given that NERL has only one bond outstanding, such an argument would also apply for NERL. This would suggest that an allowance higher than for Heathrow (e.g. the same as for Gatwick) could also be justified.

[19] An amortising bond principal is repaid over the life of the bond, rather than on the maturity date. The effective maturity of a bond is measured using a concept called 'duration'. The duration on NERL's bond reported by Bloomberg is 5.7 years as of 17 March 2014.

[20] Source: Markit.

[21] This index has an average maturity and duration of 23 years and 13 years, respectively.

[22] PricewaterhouseCoopers (2014), 'Estimating the cost of capital for NERL', February, p. 27.

[23] Civil Aviation Authority (2014), 'Estimating the cost of capital: a technical appendix for the economic regulation of Heathrow and Gatwick from April 2014: Notices of the proposed licences', January.

4.4 Conclusion

Overall, despite the fact that PwC's assumption for the cost of existing debt for NERL is 10bp higher than Oxera's estimate, the cost of debt range is, on balance, understated. Oxera's original range of 2.5–2.7% is considered to remain appropriate.

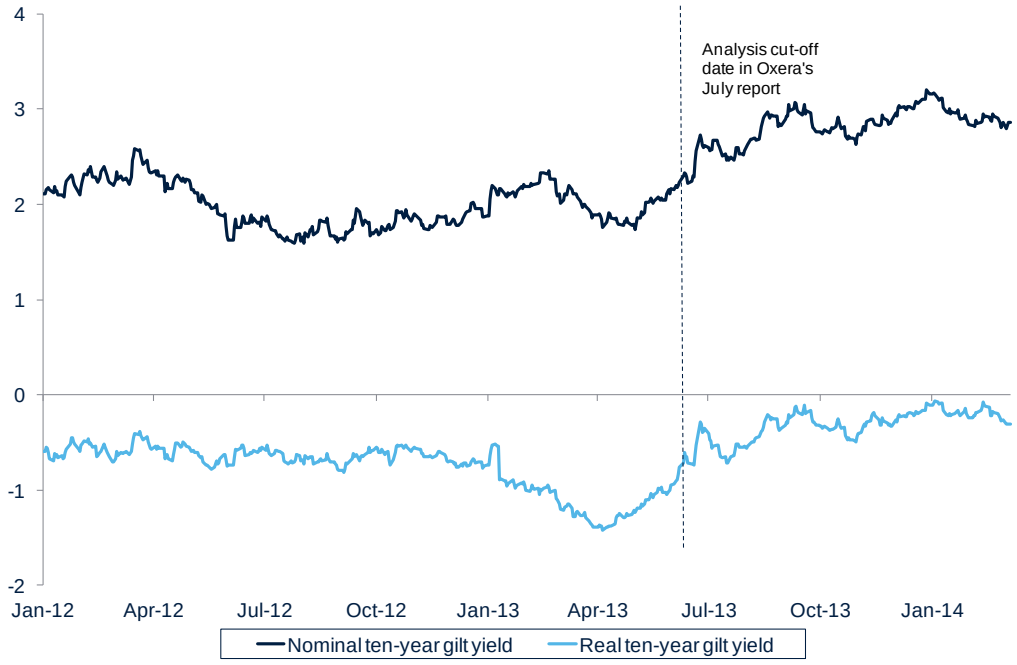
5 Equity market return

The CAA's estimate of the total equity market return is towards the low end of plausible values. In choosing a relatively low point estimate for the total equity market return, the CAA compounds the effect of its proposals on the asset beta and cost of debt, which, overall, leaves NERL with very limited flexibility to respond to cash-flow shocks within the period.

The CAA's chosen point estimate of 6.25% is at the bottom of PwC's range of 6.25–6.75%.

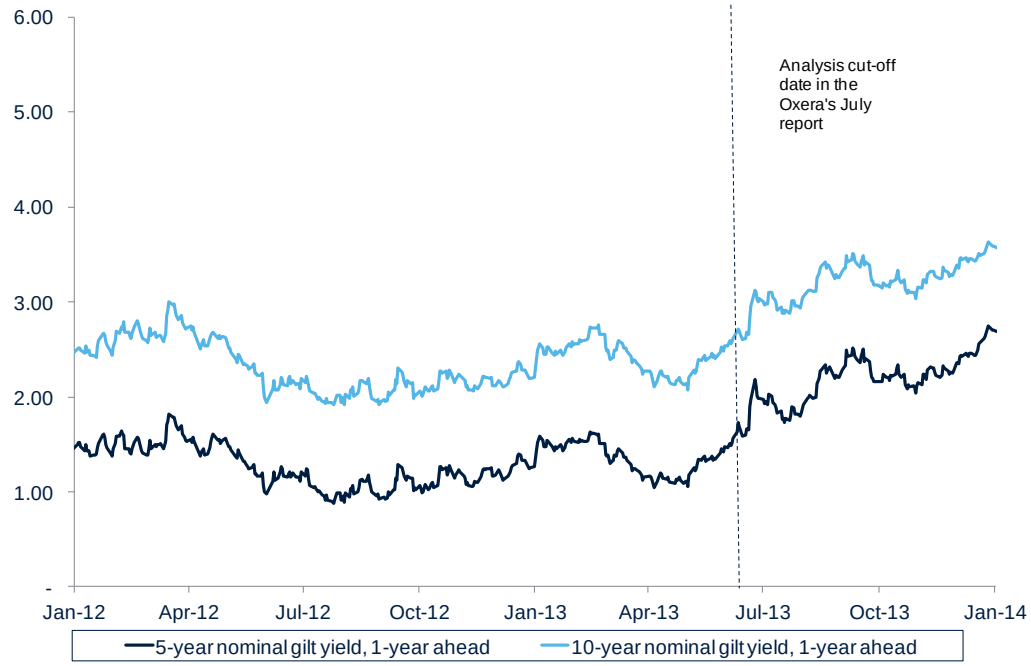
Since the publication of Oxera's report (in July 2013), there has been no capital market evidence to suggest a lower estimate of the total equity market return. If anything, interest rates have increased over the period. This is evidenced in movements in both spot and forward gilt yields (Figure 5.1 and Figure 5.2).

Figure 5.1 Recent movements in spot gilt yields (%)



Source: Bank of England, and Oxera analysis.

Figure 5.2 Recent movements in forward gilt yields (%)



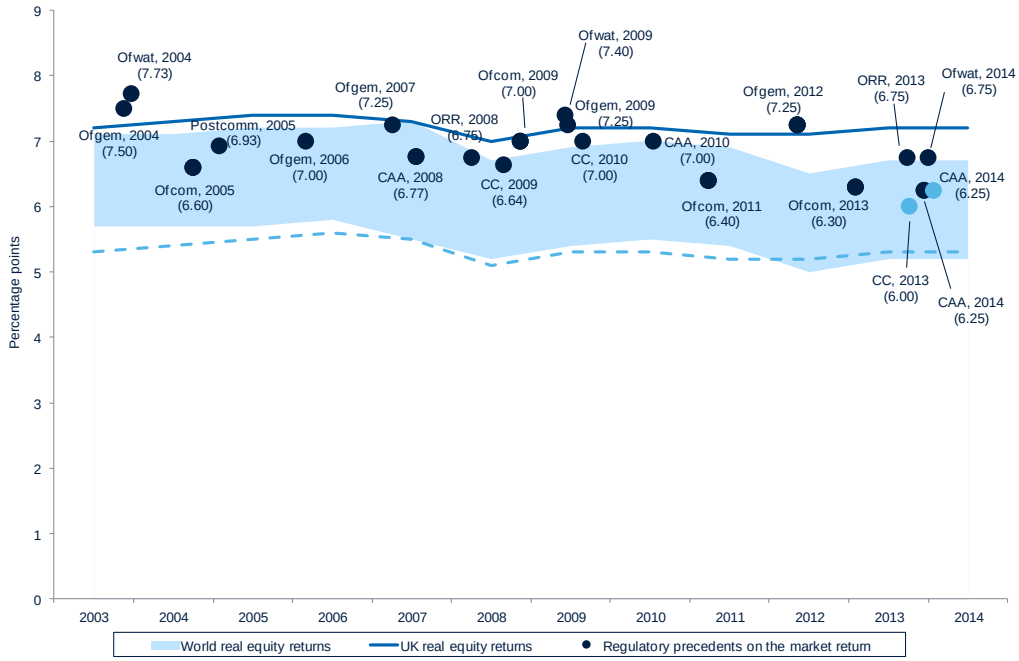
Source: Bank of England, and Oxera analysis.

Since July 2013, apart from the CAA's decision for airports (which were based on a figure of 6.25% in the final decision in January 2014), the following regulators have expressed views on the total equity market return.

- In the provisional findings for Northern Ireland Electricity (where the price control covers 2012–17), the CC concluded on a plausible range for the total equity market return of 5.5–6.5%, with a point estimate of 6.0%.[24]
- Ofwat has recently published guidance on the appropriate WACC for the upcoming price control period (2015–20) in the England and Wales water sector, based on a total equity market range of 6.25–6.75%, with a point estimate of 6.75%.[25]
- Ofgem has recently revised the cost of equity assumption it will use to assess the business plans of electricity distribution companies for the upcoming price control period (2015–23).[26] It is inferred that the revised cost of equity is based on a total equity market return of 6.55%.

[24] Competition Commission (2013), 'A reference under Article 15 of the Electricity (Northern Ireland) Order 1992', 8 November.
[25] Ofwat (2014), 'Setting price controls for 2015–20—risk and reward guidance', 24 January.
[26] Ofgem (2014), 'Decision on our methodology for assessing the equity market return for the purpose of setting RIIO-ED1 price controls', 17 February.

Figure 5.3 Regulatory precedent on the total equity market return



Note: CC, Competition Commission; ORR, Office of Rail Regulation; CAA, Civil Aviation Authority. Light blue dots denote initial proposals, not final decisions. The world and UK real equity market returns represent long-run historical averages based on the Dimson, Marsh and Staunton database. The lower and upper bounds of the world and UK real equity returns represent geometric and arithmetic averages, respectively.

Source: Regulatory determinations, Dimson, Marsh and Staunton, and Oxera analysis.

It is recognised that some downward movement in regulatory assumptions has taken place since July 2013; however, it is also recognised that, with the exception of the CAA's decision for airports, all decisions are provisional at this stage, and are not based on market evidence that was not available to Oxera previously. With the exception of the provisional decision by the CC for NIE and the CAA for airports, regulators in other sectors have continued to adopt values higher than 6.50%.

Therefore, on balance, while the CAA's range for the total equity market return can be reconciled with regulatory precedent, the point estimate chosen by the CAA is towards the low end of plausible values for the total equity market return. Estimates in the upper half of the CAA's range are also justifiable, in our assessment.

This is especially true when the CAA's proposals on the equity market return are considered together with the CAA's proposals on the asset beta and the cost of debt. The combination of the proposed reductions on each parameter leaves NERL with very limited flexibility to respond to cash-flow shocks within the period. This is evidenced by NERL's analysis of the variation in the return on regulatory equity, which clearly shows that NERL's shareholders will be exposed to higher risk, in particular on the downside, in RP2 compared with CP3.[27]

[27] See section 5 of NATS (2014), 'NATS Response to Draft UK-Ireland RP2 Performance Plan', April.

A1 Further supporting evidence

A1.1 Assumptions behind the relative risk analysis

The stylised analysis of the impact of traffic deviations on returns is based on the following assumptions.

- A 1% change in traffic translates into a 1% change in revenue for airports. For NERL, the impact is calculated taking into account the traffic risk-sharing mechanism in place. For NERL, a 1% change in traffic leads to a 1% change in revenue for deviations in traffic within +/-2% of forecast, and a smaller change in revenue for bigger deviations. The maximum revenue exposure of NERL is 4.4% (Table A1.1).

Table A1.1 Changes in revenue

Change in traffic	1%	2%	5%	10%	12%
Change in revenue—NERL	1%	2%	2.9%	4.4%	4.4%
Change in revenue—airports	1%	2%	5%	10%	12%

Note: For traffic deviations within +/-2% of forecast, NERL bears 100% of traffic risk; for deviations between +/-2% and +/-10%, NERL bears 30% of traffic risk; for deviations above +/-10%, NERL bears 0% of traffic risk.

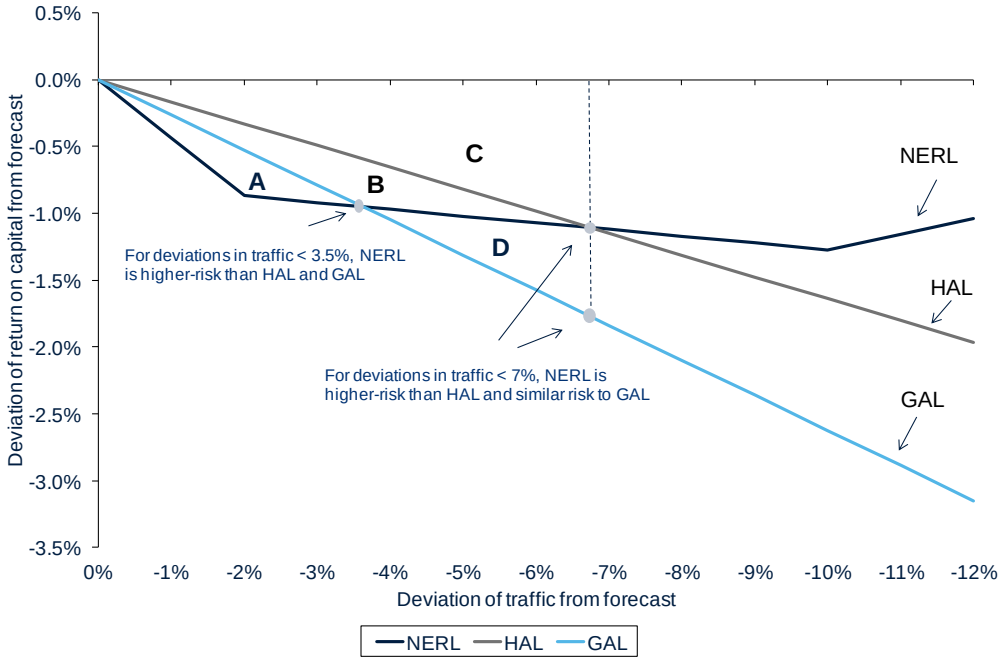
Source: Oxera analysis.

- A 1% change in traffic leads to a 0.3% change in OPEX.[28] This is based on the information on the relative share of variable to fixed costs provided by NERL. The same assumption is applied to airports' costs.
- The proportionate changes to revenues and costs are applied to average allowed revenue and OPEX for NERL, HAL and GAL.[29] This is translated into a change in operating profit (defined as revenue - OPEX - depreciation). The change is then divided by the RAB for the respective company to assess the impact on the return on capital.

[28] OPEX includes pension costs both for NERL and for HAL and GAL.
[29] Average values over the 2006–12 period are used.

A1.2 Relative risk analysis assuming airports' costs are fully fixed

Figure A1.1 Relationship between traffic fluctuations and returns, airports' costs are fully fixed



Note: The horizontal axis shows how actual traffic differs from the forecast used to set the price control. The vertical axis shows what impact the deviation in traffic from forecast has on the return on capital.

Source: Regulatory accounts, and Oxera analysis.