

The CMA has today published its Provisional Findings (PFs) relating to its redetermination of the RP3 price control for NATS En-Route Plc (NERL). Overall, the CMA has awarded NERL allowed revenues that are £63m higher than those set by the CAA, meaning NERL has recovered 30% of the gap in allowed revenues under the CAA's Final Decision. The main drivers of this are the WACC (which the CMA has set 40 basis points higher than the CAA) and an increase in allowed costs relating to generating non-regulatory income. In addition to the material increase in allowed revenues, NERL has benefitted from a reduction in downside risk exposure relating to capex incentives. On allowed opex and operational performance targets, the CMA left the CAA's proposals unchanged. Whilst there will be implications for other regulated industries, this requires a careful and detailed analysis, and we would advise against drawing strong conclusions prior to this occurring. Economic Insight advised NERL on the redetermination.

1. Summary of the decision and financial implications

At the time of the reference to the CMA, the difference in views of allowed revenues required for RP3 between the CAA and NERL was £212m (NERL view of £3,378m; versus CAA view of £3,166m¹) – equivalent to a 7% gap. In its PFs published today, the CMA has set overall allowed revenues of £3,229m over the five-year period. This represents **an increase of £63m** on the CAA's allowed revenues, equivalent to NERL clawing back **30% of the £212m gap on allowed revenues it started from**.

The key highlights are as follows:

- The CMA allowed a materially higher WACC (3.08%, vanilla, RPI) compared to that set by the CAA (2.68%) – an uplift of some 40 basis points. This accounted for £32m of the additional allowed revenues.
- The CAA had made a reduction in NERL's opex of £24m, relating to the cost marginality on non-regulated revenues (i.e. as NERL was projected lower non-reg income, the CAA believed it could lower corresponding costs by £24m). The CMA disagreed, and so reinstated these costs.
- The remaining uplift in allowed revenues was minor, relating to pensions and the Oceanic price control (£7m combined).

¹ Values include allowed revenues for both En-Route and Oceanic. Note, the allowed revenue number from NERL's Business Plan quoted by the CMA in Figure 13-1 of its PFs excludes Oceanic.

- The CMA retained the CAA’s views on both total allowed opex and operational performance targets. Whilst this might be seen negatively, it is important to note that, relative to other regulated industries, NERL was set only a modest opex efficiency challenge in the first place (2%) and the performance targets were less demanding than seen elsewhere. Indeed, one should note that there was some potential for the CMA to set ‘more demanding’ targets (particularly on costs, given the delays to Runway 3) than the CAA, but it chose not to. This goes to a broader point: namely, that there was no single area in which the CMA set allowances *below* those proposed by the CAA.
- In addition to the sizeable increase in allowed revenues, the CMA’s decision removes or modifies three significant capex incentive mechanisms (penalties). These left NERL exposed to a material downside risk, through either revenue or RAB reductions. It is difficult to precisely quantify the benefit of this to NERL. However, and as we subsequently set out, its overall downside financial risk exposure appears to have been reduced relatively materially.

2. Allowed revenues breakdown

The following table provides a breakdown of the key components that make up allowed revenues. Items for which the CMA set a ‘more generous’ allowance than the CAA (i.e. where NERL came out ahead) are highlighted in green. Orange highlighting indicates ‘no change’. As noted above, there were *no areas* in which the CMA was less generous than the CAA. The overall increase in allowed revenues, as we described above, is £63m.

Table 1: Summary of allowed revenues at CMA versus CAA Final Decision (£m)

Item	NERL’s latest position	CAA Final Decision	Delta CAA to NERL	CMA	Delta CMA to CAA
Operating costs (excluding pensions)	£2,156	£2,113*	-£43	£2,113	£0
Pension costs (ongoing and deficit repair combined)	£416	£392	-£24	£395	£3
Regulatory depreciation (including RPI / CPI wedge)	£771	£747	-£24	£747	£0
Regulatory returns (WACC)	£274	£152	-£122	£184	£32
Forgone return on capex cuts	£0.0	-£3	-£3	-£3	£0
Offsetting non-reg income (excluding cost impact)	-£454	-£414	£40	-£414	£0
Cost marginality on non-reg income	-£8	-£32	-£24	-£8	£24
Oceanic	£223	£211	-£12	£215	£4
Total allowed revenues (En-Route & Oceanic)	£3,378	£3,166	-£212.0	£3,229	+ £63

Source: NERL response to CAA Draft Decision and Statement of Case; CAA Final Decision Document; CMA Provisional Findings.

*Post ACOG and OFF adjustments of £2m

In the following sections, starting overleaf, we provide some further details of the CMA’s decision on the key issues.

3. The WACC

In its Final Decision, the CAA set a WACC of 2.68% (vanilla, RPI). This compared to NERL's latest view of 4.21% on the same basis. In its PFs, the CMA has today set the WACC at 3.08%. This represents an increase on the CAA's determined WACC of some 40 basis points.

The key drivers of the CMA's higher WACC are summarised in the following. Note, in practice the CMA published a *range* for each parameter. However, for simplicity, here we base our observations on the 'mid-point', consistent with the overall WACC of 3.08%.

- **The CMA considered NERL should have a significantly higher asset beta than the one proposed by the CAA (0.570 versus 0.460).** The CMA found that the CAA had materially understated the systematic risk faced by NERL, discounting betas derived from utilities entirely from its estimated range, but taking a balanced view of the evidence derived from airports. On method, it is worth noting that the CMA agreed that estimating beta using 'international stock indices' was superior to using 'domestic stock indices'. We note that, all else equal, this approach tends to give somewhat higher beta estimates, which may have wider implications for other regulated industries (and requires more consideration).
- **The CMA set total market returns (TMR) slightly higher (5.5%, RPI) than that assumed by the CAA (5.4%).** As expected, the key issue here was the interpretation of historical realised equity returns, in the absence of a single consistent RPI or CPI inflation timeseries over the long-term. The CMA addressed this by using the consumption expenditure deflator (CED) inflation measure for the period 1900 to 1947/49.² It then combined this with both RPI and CPI for the subsequent period, ultimately therefore deriving two alternative ranges for realised TMR. These were as follows: (i) for CED / CPI, it found the range to be 5.1% to 5.9%; and (ii) for CED / RPI, it found the range to be 5.6% to 6.2% (after making further adjustments for the RPI formulae affect). Overall, the CMA considered the CED / CPI measure to be more reliable and so leant more on this when determining its finalised proposed range of 5.0% to 6.0% (RPI, real). Whilst some reduction in TMR was always likely, we note that the scale of change (implied by the midpoint of 5.5%) relative to prior CMA decisions is nonetheless, notable.³
- **In relation to the real risk free rate, the CMA set this at -2.25%, compared to the CAA's figure of -1.7%.** On method, the CMA relied on the yield on ILGs only. Whilst it considered that these could be subject to distortions, which might mean yields are understated, it nonetheless considered that this was better than the alternatives (either using deflated nominal gilts and adjusting for the inflation risk premium, or using international data, such as US TIPS). Therefore, the reason the CMA's estimate of the real risk free rate was lower than the CAA's was that it used more up to date information (i.e. it is a timing, rather than method, issue).

² The 1947 / 49 distinction reflects the fact that RPI and CPI have differing start dates.

³ The CMA notes that its previous determinations of TMR (which were materially higher, at 6.5%, RPI real) reflected a conscious decision to set the value at the 'upper end' of the estimated range at the time. We note that, for the purpose of its PFs, the CMA has not needed to address this issue specifically in relation to TMR. However, when setting the WACC overall, its position is to take the 'mid-point' of evidence (thus there is perhaps some ambiguity as to what value the CMA would select in the event of it having to set a final point estimate on TMR).

- **On the debt beta, the CMA set a value of 0.05**, relative to the CAA’s proposed figure of 0.10. The reason for this was that the CMA agreed with NERL’s evidence that ‘some weight’ should be placed on direct (econometric) approaches to estimating the debt beta (whereas the CAA relied only on indirect estimates). This methodological driven outcome should carry over to other regulated industries.
- **The CAA materially reduced NERL’s gearing from 60% to 30%**. Here, the CMA’s main considerations appear to have been that: (i) NERL’s actual gearing is much lower than that assumed by the CAA (currently <30%); (ii) the comparators used to estimate NERL’s beta have gearing <60%; and (iii) because all else equal, the CAPM WACC increases with gearing, the CMA was concerned that setting the gearing at 60% would result in customers overpaying, stating: *“it would be illogical and contrary to the interests of NERL’s customers to assume a higher gearing if it were to result in a higher cost of capital.”* Given NERL’s low actual gearing, this element of the decision is perhaps not surprising. However, the appropriateness of it turns on how one interprets the ‘starting point’. That is to say, if the starting point WACC was appropriately calibrated (i.e. the debt beta was commensurate with the gearing) a reduction in gearing that leads to a lower WACC should equally be a cause concern. Objectively, this is a tricky area to unpick.
- **On the cost of debt, the CMA agreed with the CAA, but included higher issuance and liquidity costs**. The CMA largely adopted the CAA’s approach, but used updated data (this drives most of the difference on new debt costs). The higher issuance and liquidity costs allowed by the CMA are largely due to NERL being a ‘small’ business; and so would likely face higher efficient costs.

Bringing the above together, the following table (see overleaf) provides a detailed breakdown of the WACC parameters by item, comparing the CMA’s PFs position with that of the CAA and NERL.

Table 2: Breakdown of WACC parameters

NATS WACC: CMA Provisional Findings Versus CAA and NERL Position				
	CAA		NERL (NATS)	CMA
	Draft proposals	Final Proposals	Response to Draft Proposals	Provisional findings
Inflation (RPI)	3.00%	3.00%	3.00%	3.00%
Real risk-free rate	-1.40%	-1.70%	-1.40%	-2.25%
Nominal risk-free rate	1.6%	1.2%	1.6%	0.7%
TMR	5.40%	5.40%	6.25%	5.50%
Equity Risk Premium	6.80%	7.10%	7.65%	7.75%
Equity Beta	0.9600	1.0000	1.3500	0.7900
Asset beta	0.460	0.460	0.570	0.570
Debt beta	0.130	0.100	0.050	0.050
Cost of equity (real post tax)	5.13%	5.40%	8.93%	3.87%
Cost of embedded debt (real)	2.30%	2.30%	2.13%	2.55%
Proportion of embedded debt	30.00%	30.00%	30.00%	54.00%
Cost of new debt (real)	0.10%	0.10%	0.40%	-0.68%
Proportion of new debt	70.00%	70.00%	70.00%	46.00%
Overall cost of debt (real)	0.76%	0.76%	0.92%	1.06%
Issuance cost allowance	0.10%	0.10%	0.15%	0.15%
Overall cost of debt (real, pre tax)	0.86%	0.86%	1.07%	1.21%
Gearing	60.0%	60.0%	60.0%	30.0%
Equity	40.0%	40.0%	40.0%	70.0%
Calculated outputs				
Vanilla WACC	2.57%	2.68%	4.21%	3.08%
<i>As reported</i>	2.57%	2.68%	4.21%	3.08%

4. Operating costs and pensions

On opex, as highlighted previously, the CMA ultimately agreed with the CAA's total cost allowance (which was based on a 2% efficiency challenge) – meaning overall, opex was a net neutral item for NERL. A key theme of the CMA's PFs was that NERL's efficient opex was subject to considerable uncertainty and, in that context, NERL should have provided more evidence as to how its opex requirements would vary under a range of scenarios. In addition, the quantification of the cost efficiencies implicitly included in NERL's plan turned heavily on the 'base year' against which those were measured. Here the CMA favoured the CAA's proposed base year of 2017, as opposed to NERL's suggestion of 2019 (in which costs were much higher). The CMA also noted the delay of Runway 3 as being an example of how uncertain events might materially impact opex requirements (perhaps implying the CMA felt it was being somewhat generous to retain the CAA's proposals, rather than reduce allowed costs).

On pensions, there were two dimensions: deficit repair and ongoing costs. The CMA agreed with the CAA on the former, but reduced the efficiency challenge on ongoing pension costs in proportion with the CMA's reduction in the efficiency challenge relating to the costs of generating non-regulated income. Hence, NERL benefitted by £3m in this area under the CMA's PFs.

6. Capex governance

At RP3, the CAA was proposing to introduce three new financial incentives around capex governance (in reality these were penalties, as there was no outperformance element to them). These were:

- **An ex-post efficiency incentive.** Under this proposal, the CAA could assess the efficiency of capex already spent by NERL and, if it deemed it to be 'inefficient', make a downwards adjustment to the RAB. The CAA did not set out any 'limit' on the extent of this penalty mechanism.
- **A delivery incentive.** Under this mechanism, the CAA would undertake a 'general assessment' of NERL's capex delivery, informed by the tracking of key investments against delivery milestones. A formal assessment would be made annually and, if the CAA deemed NERL had not sufficiently delivered, a financial penalty could be applied, either by lowering allowed revenues or a reduction in the RAB, capped at £36m.
- **An information incentive.** This incentive mechanism allowed the CAA to remunerate any capex overspend at only the cost of debt, rather than the WACC, should it find there to be "*significant weaknesses in NERL's ongoing provision of information*" relating to capital programmes.

Whilst the CAA's proposed mechanisms did not affect 'allowed revenues', they did have quite material impacts for 'expected returns'. In particular, being both 'penalty only' and 'sizeable', at the very least they created significant downside financial risk exposure for NERL. Specifically:

- Whilst there was no 'upper bound' on the CAA's ex-post efficiency incentive, suppose it deemed 5% of NERL's RP3 investment to be 'inefficient' and made a RAB deduction equivalent to this. That would equate to a penalty of some £38m.⁴
- As above, the penalty exposure on the delivery incentive was up to £36m.
- As regards the information incentive, the 'wedge' between the CAA's proposed WACC and cost of debt was some 1.82% (RPI, real). This implies that, if the mechanism was triggered, NERL might face an additional penalty of up to £3m.⁵

Following from the above, NERL perhaps faced downside penalty exposure of *up to* £77m over RP3 (although the expected value would be lower, and is difficult to determine).

In its PFs, the CMA reached the following views:

- On the ex-post efficiency incentive, the CMA found that the CAA must 'constrain' the circumstances under which any downwards adjustments could be made to the RAB, either through a licence condition, or guidance. It noted that the '*Demonstrably Inefficient or Wasteful*' standard would be appropriate. The CMA has invited views from the parties on this matter. The implication is that there

⁴ Based on CAA's assessment that NERL's capex amount to £763m over RP3.

⁵ Based on CAA's assessment that NERL's capex amount to £763m over RP3. Hence, an assumed upper bound overspend of 20% would be equal to £153m. Applying the 1.82% wedge between the WACC and the cost of debt gives a penalty of £2.8m.

will be some limit on downside risk exposure (versus theoretically unlimited exposure under the CAA's proposals).

- The CMA rejected the CAA's proposed capex delivery incentive, stating that it would: *"result in NERL facing undesirable additional risks associated with uncertainty over the regulatory treatment of capex that may be captured by it. We consider that the CAA provided little clarity over how its proposed capex delivery incentive might be applied, and little guidance that might assist NERL manage the risk that it may become subject to a penalty (which could amount to the total notional equity return allowed for on NERL's planned capital programme)."* The CMA instead proposed an incentive based around the quality of NERL's engagement. Under the CMA's proposals, there would be more clarity around the circumstances whereby penalties would be applied (likely improving the 'expected value' to NERL). However, the CMA found that an overall level of penalty cap of £36m, as per the CAA's mechanism, remained appropriate (meaning the maximum value at risk is unchanged).
- The CMA rejected the capex information incentive proposed by the CAA altogether. Thus, a further downside exposure of C. £3m is removed.

Under the PFs, it is not possible to determine 'by how much' the downside risk exposure has reduced in £s terms with much precision (not least because the CMA's alternative proposals themselves require more development before they can be implemented). However, it seems likely that there will be a reasonably material reduction, relative to the CAA's proposals.

7. Service delivery targets and 3Di

As per the capex governance arrangements, service delivery targets do not impact allowed revenues, but do impact the 'expected return' to NERL. Specifically, NERL is subject to a 3Di incentive, which assesses environmental performance in terms of flight efficiency. For RP3, the CAA had proposed 'softer' targets than at RP2 and had also reduced the financial impact of 3Di (limited to just +0.8% to -1.75% of revenues). NERL had argued that, despite this, it faced an expected penalty position of £5.3m, in part due to having to manage the introduction of technology, and associated costs, to support the Airspace Modernisation Strategy (AMS).

Whilst the CMA acknowledged that AMS would have an impact, it retained the CAA's proposed performance targets. Here, key considerations for the CMA were: (i) that NERL had outperformed its targets at RP2; and (ii) that it was plausible for NERL to meet its targets, notwithstanding AMS.

9. Conclusions and implications

From NERL's perspective, the overall outcome is a good one, with it recovering 30% of the shortfall on allowed revenues, relative to the CAA's Final Decision. The size of the uplift in WACC is also at the higher end of expectations. Beyond the headline numbers, our reflections are as follows:

- The CMA has prioritised (and undertaken more detailed analysis of) areas where the CAA's approach appears to be subject to more material flaws. In other areas, where the CAA's approach is nonetheless questionable, there is a tendency to 'not dig further', and merely adopt the CAA's approach and figures. This might reflect pragmatism (i.e. only so much resource to allocate) and / or a desire to give a sectoral regulator 'the benefit of the doubt'.
- Attempts to 'read across' from the decision to other current or possible redeterminations need to be undertaken with care. On both opex efficiency and operational performance targets, NERL's position is sufficiently different from other industries that it is questionable as to what, if any, inferences can be drawn. On the WACC, at an overall level, clearly the CMA did take the view that the CAA had set this too low (and by a reasonably material degree). However, as per our previous discussion, the individual parameters of the WACC need to be picked apart with care in order to properly understand the implications for other industries.

Economic Insight Limited

125 Old Broad Street
London
EC2N 1AR
0207 100 3746
www.economic-insight.com

Economic Insight Ltd is registered in England No. 7608279.

Whilst every effort has been made to ensure the accuracy of the material and analysis contained in this document, the Company accepts no liability for any action taken on the basis of its contents. Economic Insight is not licensed in the conduct of investment business as defined in the Financial Services and Markets Act 2000.

Any individual or firm considering a specific investment should consult their own broker or other investment adviser. The Company accepts no liability for any specific investment decision, which must be at the investor's own risk.

© Economic Insight, 2020. All rights reserved. Other than the quotation of short passages for the purposes of criticism or review, no part of this document may be used or reproduced without express permission.

