Civil Aviation Authority

NATS Financial Model 2018 – Findings from agreed testing procedures

Report – 13 February 2019

Contents

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Scope of work and limitations

Our work focused on the areas set out in this report. The scope of our work has been limited both in terms of the areas of the business and operations which we have reviewed and the extent to which we have reviewed them. There may be matters, other than those noted in this Report, which might be relevant in the context of the Project and which a wider scope review might uncover.

Taxation

To the extent our scope of work considered corporation tax, our work was based on figures contained in the Financial Model submitted by NERL, therefore we are unable to comment on tax liabilities which may arise as a result of omissions from, or misrepresentations in, the Financial Model.

Forecasts

The responsibility for the forecasts and the assumptions on which they are based is solely that of NERL. It must be emphasized that profit and cash flow forecasts necessarily depend on subjective judgement. They are, to a greater or lesser extent, according to the nature of the businesses and the period covered by the forecasts, subject to inherent uncertainties. In consequence, they are not capable of being audited or substantiated in the same way as financial statements which present the results of completed accounting periods.

Forms of report

For the convenience of the CAA, this Report may have been made available in electronic as well as hard copy format, multiple copies and versions of this Report may therefore exist in different media and in the case of any discrepancy the final issued copy should be regarded as definitive.

General

The Report is issued on the understanding that the management of the CAA have drawn our attention to all matters, financial or otherwise, of which they are aware which may have an impact on our Report up to the date of this Report. Events and circumstances occurring after the date of our Report will, in due course, render our Report out of date and, accordingly, we will not accept a duty of care nor assume any responsibility for decisions and actions which are based upon such an out of date report. Additionally, we have no responsibility to update this Report for events and circumstances occurring after this date.

Notwithstanding the scope of this engagement, responsibility for management decisions will remain solely with the officers and members of the CAA and not Grant Thornton. The officers and members should perform a credible review of the recommendations and options in order to determine which to implement following our advice.

Introduction

Background

NERL – is a subsidiary of NATS, which provides en route air traffic control services to aircraft flying to, from and over the UK and over the eastern North Atlantic, in some of the world's most complex airspace. NERL operates under a Licence issued by the UK Government and subject to economic regulation by the CAA. NERL is subject to economic regulation under the European Union's Single European Sky Performance Scheme for Air Navigation Services and the Transport Act 2000. The CAA's economic regulation takes the form of price controls where the CAA specifies the maximum amounts that NERL can charge its customers for its regulated services.

In January 2018, the CAA published its business plan guidance to NERL for the RP3 period (January 2020 to December 2024) which set out that a key component of the CAA's evaluation of NERL's business plan would include the suitability and integrity of NERL's financial forecasting model – does its financial forecasting model meet best practice standards for a model used for regulatory price control purposes, including appropriate levels of assurance around its logical integrity and usability.

The NATS Financial Model (the Model) in Microsoft Excel is reasonably complicated reflecting its purpose as a model for setting price controls and tracking regulatory performance, as well as business management (including the non-regulated parts of NATS). The model was originally developed by NERL and an external company and has subsequently been extended to reflect changes in the regulatory framework. The RP3 model calculates prices using a general building blocks approach. Prices are then calculated in a bottom up way using these building blocks. There are macros that iterate for looped formulae in the model in order to avoid circularities in calculations, such as the working capital calculations, tax calculations and the Debt Service Reserve Account (DSRA) where solved values link to future periods.

The model contains actuals up to 2017 and forecast data from 2018 to RP3 and beyond. The model does not rely heavily on named ranges, indirect look-up formulae or macros. The RP3 model also has functionality to allow the CAA to examine the impact of modelling a wide range of different scenarios and stress-tests, showing the impact on costs, prices and financial ratios.

Scope

The Model which is the subject of our review was provided to us on 20 December 2018. This was subsequently updated in the version dated 9 January 2019.

Grant Thornton was appointed to undertake agreed testing procedures upon the Model, to inform the CAA's evaluation of the Business Plan submitted by NERL, in order for the CAA to determine appropriate price controls for the RP3 period. This testing work was agreed with the CAA to complement their own analysis and discussions with NERL. Our procedures consisted of:

- For agreed sections of the Model covering indexation, RAB calculations, determined cost calculations, staff costs, regulated and non-regulated income calculations, debt and ratio calculations, and RP3 outputs:
  - Understanding how key Model outputs, such as determined cost and ratios, are linked to, and built from, underlying assumptions. This included the impact on determined cost calculations of areas of new development since the previous price review, such as adjustments for the accounting standard IFRS16 – Lease Accounting.
  - Assessing the consistency of Model calculations with relevant supporting documents from NERL including: RAB rules, model documentation and supporting spreadsheets used to generate inputs to the Model. For a selection of RAB calculations, we undertook parallel calculations to assess this consistency and identify potential discrepancies.
  - Analysing the Model structure using spreadsheet software tools to identify potential anomalies and inconsistencies in its design – for example changes in formula across a row or hardcoded inputs on calculation sheets.
  - Testing the logical accuracy of a selection of formulae.
- Supporting the CAA's evaluation of the Model by analysing how input assumptions and calculations impact on specific model outputs such as indexation, RAB calculations, determined cost calculations, staff costs, regulated and non-regulated income calculations, debt and ratio calculations, and RP3 outputs. This included the following processes:
  - Confirming the opening RP3 balances agree with closing RP2 balances, and where adjustments have been made considered their consistency with the supporting documentation provided.
  - Confirming the consistency between the model and rulebook for approach taken to finance leases.
  - Confirming the macro functionality for regulatory revenue operates in a manner consistent with the explanation provided.
  - Analysing and commenting upon the key drivers for movements in selected ratios such as the Interest Cover Ratio between RP2 and RP3, Funds from Operations (FFO) to net debt, and working capital.
  - Assessing impact of changes to inputs in relation to operating leases to confirm that there are no impacts on Determined Cost and to confirm that they are not double-counted in RAB calculations.
  - Confirming how the Traffic Variances (TVAR) adjustment has been applied in RP3 and understanding the basis of the calculation.
  - Understanding how calendarisation adjustments have been applied on selected calculations.

- Analysing changes in key outputs such as Determined Cost as a result of changes to inputs on a sample basis (scenario analysis) and highlighting where changes in outputs were not in line with expectations. This has included:
  - Analysis and reperformance of changes to the Model as submitted by NERL to reflect the CAA Base Case and the CAA stress test scenarios.
  - Commenting upon inbuilt integrity checks and alerts active within the Model.
- Checking the consistency between agreed sections draft UK Reference Period 3 Performance Plan proposals prepared by the CAA and the Model.
- Commenting at a high-level on the key drivers and assumptions adopted for corporation tax calculations contained with the Model and considering their consistency with current legislation or government announcements. However, where we comment on expected changes to UK tax legislation please note that as the law may not have been enacted this may be subject to change. Furthermore, please note, we have not had sight of any underlying documents, such as tax computations, tax advice papers, financial statements or breakdown of expenses and therefore we have not performed a review of whether figures are consistent with such documents. We have relied wholly on the information included in the Model and prepared our work on the basis they information represented within the aforementioned documents are accurate and a true and fair representation. For the avoidance of doubt this does not comprise a detailed taxation review and we have not undertaken due diligence on the tax position of NERL.

Our work was limited to the procedures set out above. While we have informed the CAA of any potential logical errors in the Model that we find solely in the course of the agreed scope of our work, given the limited nature of the assessment we do not provide the CAA with assurance that the Model is free from error.

We have not independently verified any information or explanations provided to us in the course of our work. Our work did not include any form of review of the commercial merits, technical feasibility or the factual accuracy of the input data. Further, we did not consider the validity of any underlying technical assumptions.

For the avoidance of doubt, we have undertaken a limited scope assessment only and therefore, at the request of the CAA, we have limited the procedures that we have applied. We have not undertaken an audit of the Model (statutory or otherwise) and have not provided an opinion as to the overall reliability or accuracy of the Model.

Conclusion

We have completed our agreed scope of work and reported our findings to the CAA in respect of our testing procedures. Where issues or queries were identified during the course of our procedures these have been resolved, other than where noted below.

1 The additional errors in the CAA base case relate to a balance sheet difference that arises from the change in inflation assumptions. This difference is c£9.90k at the end of RP2 with minor movements during RP3 where it increases by c£0.08k and then stabilises. Given the extent of the calculations affected by the inflation assumption change it is not clear without significant analysis to identify the cause. Given the difference is <£10k on the balance sheet and stable during RP3 and beyond if is recommended that this is picked up NERL when the model is finalised for the agreed assumptions.

2 The Model includes an assumption in respect of the mechanism which will apply for FAS funding, which is an allowance which the CAA required NERL to rebate to customers in RP3 if funds have not been used. NERL expect the mechanism for rebating any excess funds to be reflected in the RP3 licence, they have therefore assumed that the RP3 Regulatory Accounting Guidelines (RAGs) will be updated to reflect this and have included within the RP3 charge control conditions. Similarly, the Model reflects NERL's view on an agreed position in respect of INEA funding which was obtained by NERL for the benefit of customers. The mechanism by which these funds will be passed to customers was discussed and agreed with the CAA by NERL. We provide no further comment or assurance on these calculations and understand that the CAA will confirm the approach adopted is appropriate.

3 The Model assumes an additional tax deduction in respect of the Patent Box. We are unable to comment on the reasonableness of the patent box deduction based on the information included in the model alone. The CAA may wish to request further clarification as to the methodology applied in calculating the tax charge relating to the patent box income.

4 The model assumes that interest deductions will be fully allowable and not subject to Corporate Interest Restrictions (CIR). The CIR rules may restrict a group's amount of interest that is deductible for corporation tax purposes to 30% of taxable EBITDA. The rules include a de-minimis threshold of £2m of interest expense. The approach reflected in the Model does not appear unreasonable, however, the CIR rules are applied on a group wide basis and we do not have enough information to establish the group for CIR purposes. The CAA may wish to request sight of any advice/calculations prepared by or on behalf of NERL to ensure that the CIR rules are correctly applied. There are further anti-avoidance provisions that may apply in relation to debt including anti-hybrid rules and unallowable purpose rules. These have not been considered in the context of our review.

5 In the calculations for the opening RAB there is a discrepancy between the inflation assumptions used in the supporting documentation for the calculation and the Model with a difference of c£319k. We would recommend that this analysis is updated for the final versions of the Model and supporting documentation.

In addition we report the following observations which the CAA may wish to discuss with NERL to consider for future versions of the model.

1 Further clarity could be provided to users of the model by ensuring input time periods are clear as the model includes both financial and calendar years – for example for non-drifted staff pay in the first planning year is uploaded into the model on a January to December basis, however this is not always clearly labelled in section headings.

2 The Model includes calculations which links to other areas of the same worksheet or other worksheets which are not in the same visible area of the spreadsheet as the calculation. As a result in order to identify the key components of a calculation it can be necessary to trace back across several other sheets. An alternative would be to break down these calculations so all the components are visible for the calculation and can be more easily viewed.

3 A small discrepancy occurs in the financial model in relation to Pension Contribution variance calculations which has been treated as an error. This has been acknowledged by NERL but they do not propose to change the model at this stage as the difference relates to a rounding difference of less than £50k over the RP3.

4 We note that not all calculations are detailed in the supporting documentation. As a matter of best practice for future versions NERL and CAA may wish to consider including a comprehensive guide for all model calculations / rule book within the model. As an example from another regulated sector, the model used by Ofwat for their PR19 included a rulebook for model calculations - https://www.ofwat.gov.uk/publication/financial-model-rulebook-updated-june-2018/

5 In order to undertake sensitivity analysis on volume sharing a formula coding change was provided by NERL and which linked to stored base case inputs for RP3. We note that if the base case is updated then these stored values will also have to be updated. We recommend that the coding and/or instructions for running sensitivities is updated to ease future sensitivity analysis.

We note the CAA may wish to consider these observations further as they could impact on RP3 and RP4 calculations.

In undertaking our testing procedures and subject to the observations noted above, we have not identified any issues which suggest the objectives of the testing procedures have not been achieved. We have no further comment on the Model as a result of undertaking the agreed procedures.

The procedures were undertaken on the version of the Model as defined in this Report and cease to be valid if there any subsequent changes to the Model.

For the avoidance of doubt, we have undertaken a limited scope assessment only and therefore, at your request, we have limited the procedures that we have applied. We have not undertaken an audit of the Model (statutory or otherwise) and have not provided an opinion as to the reliability or accuracy of the Model.

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