En-route Charging Zone: United Kingdom
NR 23 (2023-2027)
Year : 2023

ADDITIONAL INFORMATION TO REPORTING TABLES 1 – TOTAL COSTS AND UNIT COSTS

Introduction

The UK follows the determined cost methodology under the Eurocontrol Principles. This requires that determined costs are set out in a performance plan covering a three to five year period and that those costs are specified for each calendar year of that period. While it is preferable that a performance plan is adopted before a reference period starts, the Eurocontrol Principles provide for circumstances where the plan is adopted after the start of the reference period.

Following a reference to the UK Competition and Markets Authority (CMA) of the UK RP3 performance plan decision and subsequent impact of covid-19, the UK RP3 performance plan was adopted covering the period 2020 to 2022. The UK performance plan for the following period, 2023 to 2027, known as NR23, has now been adopted, albeit after the start of the period. We note that relevant stakeholders are now within a six-week period in which they can seek to appeal the NR23 decision to the UK CMA. If any appeals are made and upheld, then the UK performance plan for NR23 may need to be updated accordingly.

The UK performance plan that has been adopted comprises the following documents:

- Economic Regulation of NATS (En Route) plc: Final Decision for the NR23 (2023 to 2027) price control review (CAP2597) October 2023;
- NR23 Review: UK performance plan Decision on DfT, Met Office and CAA en route costs (2023 to 2027) (CAP2553b) July 2023;
- UK CRCO Reporting Tables Nov-23 (CAP2597g); and
- UK CRCO Additional Information Nov-23 (CAP2597h) [This document].

Noting the NR23 performance plan was adopted after the start of the period, a provisional unit rate for 2023 was established to support the 2023 unit rate setting process. In adopting the NR23 performance plan, the 2023 unit rate has been amended, with difference between the provisional rate and adopted rate reflected in charges for the remainder of the period.

The process to develop and adopt the UK performance plan for NR23 and explanation of the regulatory framework is described in chapter 1 of CAP2597.

This final 2024 costs data submission supports the adopted UK performance plan for NR23.

Covid-19 impact on the traffic risk sharing mechanism

In response to the impact of covid-19 on traffic levels and implied effect on the traffic risk sharing (TRS) mechanism, the UK modified its approach to the recovery of TRS revenues from the RP3 period. This revised approach is consistent with the Eurocontrol Principles, and our statutory duties, under the UK Transport Act 2000. The approach adopted by the UK includes:

- Revision to the TRS mechanism such that the 2020-2022 costs are calculated on the basis of actual efficient NERL costs over 2020-22. This is discussed further in chapter 3 of CAP2597.
- A proposed uniform recovery of TRS revenues over NR23 and the following reference period (NR28). This is discussed further in chapter 6 of CAP2597.

En-route Charging Zone: United Kingdom
NR 23 (2023-2027)
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1. Determined costs and unit costs

The approach to the UK determined costs and unit costs for the period 2023-2027 – "NR23" – is set out in CAP2553b in respect of DfT, CAA and Met Office costs, and CAP2597 in respect of NERL costs.

a) Description of the methodology used for allocating costs of facilities or services between different air navigation services, based on the list of facilities and services listed in ICAO Regional Air Navigation Plan, European Region (Doc 7754) as last amended, and a description of the methodology used for allocating those costs between different charging zones;

The UK cost base is prepared under 4 separate organisations:

1. The Department for Transport ("DfT") is the responsible government department. The Department incurs the UK's Eurocontrol Member State costs as well as its own related administrative costs.
2. The Civil Aviation Authority ("CAA", the UK National Supervisory Authority) supervises the economic regulation of NERL, the en route ANSP, and the Meteorological Office's Civil Aviation-related services. Its cost base includes the costs of its airspace strategy, policy and oversight activities and the associated policy, legal and financial support to the route charges system. For NR23, the CAA's determined costs also include its economic regulation of ATS costs. Currently the CRCO tables combine CAA and DfT costs.
3. The Meteorological Office ("MET") allocates a percentage of its core costs to Civil Aviation and is governed by a fixed pricing algorithm which guarantees year on year efficiencies.
4. NATS (En Route) Plc, ("NERL"), is subject to charge controls set by the CAA, following extensive consultation and engagement, and implemented through its licence. NERL's charge controls are developed to be consistent with the determined cost method under the Eurocontrol Principles. The current charge control covered the period from January 2023 to December 2027.

NERL provides two en route services covering the UK FIR and the Shanwick Oceanic area. Costs are allocated to each using an activity management process. This includes separate reporting of the asset bases. In accordance with its licence, NERL produces annual audited regulatory accounts for each charging area, together with a reconciliation of each Regulatory Asset Base (on a calendar year basis for both charging areas). NERL also produces Statutory accounts prepared under IFRS. NERL's Shanwick Oceanic activities are not within scope of the Eurocontrol Principles.

NATS Services Limited ("NSL"), part of the NATS Holdings corporate group, but separate from NERL (the regulated company), provides terminal ATS, engineering and consultancy services. NSL's activities are not subject to economic regulation under the UK Transport Act 2000, nor within scope of the Eurocontrol Principles.

As part of the Licence arrangements, the revenue from other services NERL provides is offset against the en route cost base to reduce the overall charges to en route users. This is applied against staff, other operating and depreciation costs. This does not include NSL's terminal and consultancy activities.

b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Paragraph 36 of the Eurocontrol Principles;

Not applicable

c) Criteria used to allocate costs between terminal and en route services, in accordance with Paragraph 2.5.3 of the Eurocontrol Principles;

In addition to its UK and Oceanic en route services described above, NERL also provides a regulated London Approach service. London Approach's operational characteristics have elements of both terminal and en route functions. To reflect that London Approach has both terminal and en route elements, around a third of the cost of the service is allocated to the London Approach service, with the remainder allocated to NERL's en route charge. For RP3, alongside its business plan, NERL submitted to the CAA evidence on the allocation of approach functions between en route and terminal charges used by other ANSPs in Europe. NERL noted that en route charges do not apply within a 20km boundary from airports. NERL presented analysis that allocated its Radar Manoeuvring Area between en route (>=20km) and terminal (<20km less the area estimated to be handed over to TANS). It found that the resulting allocation was consistent with the cost allocation used in RP2. Following consultation with users, we have retained the current charging arrangements for London Approach for RP3 and NR23 – a separate charge with the current approach to the allocation of costs. More information on our approach to cost allocation in NR23 can be found in chapter 8 of CAP2597a.

d) Breakdown of the meteorological costs between direct costs and the costs of supporting meteorological facilities and services that also serve meteorological requirements in general ('MET core costs'). MET core costs include general analysis and forecasting, surface and upper-air observation networks, meteorological communication systems, data processing centres and supporting core research, training and administration;

The Met Office has been Designated to provide a number of MET forecast and warnings services as part of the UK's obligations under ICAO Annex 3, Meteorological Service for International Air Navigation. The arrangements for MET comprise a number of elements including Core and Direct Services. Direct Services includes a Research and Development programme and support for Volcanic Ash operations.

Core costs are the en route share of the underpinning infrastructure costs of providing a weather forecasting service (e.g. supercomputer, numerical weather prediction model etc.) and calculated in accordance with the guidance contained within ICAO Document 9161, Manual of Air Navigation Service Economics.

Direct costs are the costs associated with providing the specific products and services required as part of the UK's obligations under ICAO Annex 3. This includes human resources (e.g. aeronautical meteorologists, IT specialists etc.), IT systems (e.g. post-processing systems to turn raw numerical weather prediction data into specific aeronautical data) and managerial support.

Chapter 2 of CAP2553b provides an overview of Met Office Determined Costs and planned activities for NR23. These include:

- International Subscriptions – the shared commitments from several countries to support a shared capability. For example, weather satellite programmes operated by the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the UK contribution to the European Centre for Medium Range Weather Forecasting (ECMWF) and the UN body the World Meteorological Organisation (WMO) through which most of the cross-boundary sharing of observation data is determined.

- National Capability – the costs include infrastructure such as the UK radar network, UK weather observations, a UK and global Numerical Weather Prediction (NWP) or weather modelling capability, and core science research and development.
- Service Delivery and Development – the costs associated with the delivery of aviation specific MET services and their ongoing improvement. For example, the World Area Forecast System (WAFS) and the Volcanic Ash Advisory Centre (VAAC and aeronautical meteorologists).

The total MET Office costs for NR23 (2023 – 2027) are set out below and have been derived from figures in chapter 2 of the CAP 2553b NR23 Review: UK performance plan Decision on DfT, Met Office and CAA en route costs (2023 to 2027) .

Met Office NR23 Determined Costs (nominal and in 2020 prices)

£m	2023	2024	2025	2026	2027
National Capability	£19.2	£23.6	£25.8	£25.9	£26.4
MET Service development and delivery	£15.8	£15.6	£13.5	£13.3	£13.4
Total determined costs (nominal)	£35.0	£39.2	£39.3	£39.2	£39.7
Total determined costs (2020 prices)	£29.5	£32.7	£32.8	£32.5	£32.5

Source: Met Office and CAA calculations

e) Description of the methodology used for allocating total meteorological costs and MET core costs referred to in point (d) to civil aviation and between charging zones;

Please see response above to (1d).

f) For each entity, description of the composition of each item of the determined costs by nature and by service (points 1 and 2 of Table 1), including a description of the main factors explaining the planned variations over the reference period;

Determined costs by nature and by service

In the CAP2553b (DfT, CAA and Met Office) and CAP2597 (NERL), we set out the NR23 Determined Costs and any factors that might impact determined cost items over the reference period.

NERL:

In reaching a view on NERL Determined Costs for NR23, the CAA considered a range of evidence and inputs including:

- NERL's NR23 business plan;
- historical analysis/trends (top down analysis);
- independent in-depth consultant studies (bottom up analysis);
- macroeconomic data;
- the results of NERL's customer consultation process, including the Co-Chairs' Report and bilateral meetings with airspace users; and

- evidence provided by NERL, airlines and other stakeholders in response to our consultations on our Initial Proposals (October 2022, CAP2394) and Provisional Decision (July 2023, CAP2553).

Entity: NERL (ANSP)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	This includes pay costs, allowances, Employers national insurance and pension contributions. Chapter 3 of CAP2597, explains the impact of covid-19 pandemic (the lower traffic volumes and NERL's actions to reduce costs) on NERL's actual and forecast staff costs over 2020-22, and compares them with RP3 CMA final determination (FD). In 2020, NERL actual UKATS staff costs (including pension costs) were 12% higher than the RP3 CMA FD in real terms. This was mainly due to the cost of the voluntary redundancy programme. In 2021, costs were 17% lower than the RP3 CMA FD, as a result of NERL actions to reduce staff costs. Chapter 4, sets out our assumptions for efficient costs for NR23, including those relating to staff costs, and highlights differences to NERL's NR23 business plan. It considers the key drivers of staff costs and summarises the evidence that has informed CAA's view of NR23 staff costs. CAP2597 includes an allowance of £1,322 million in 2020 prices (compared to £1,325 million for staff costs in NERL's business plan). **While the CAA necessarily makes assumptions about the level of efficient operating costs in establishing Determined Costs, it is for NERL to manage its business and best determined how to allocate resources including staff numbers and remuneration.**
of which, pension costs	This includes pension contributions for NERL's defined benefit (DB) and defined contribution (DC) schemes. The DB costs include payments to repair the estimated scheme deficit. Pension costs rise slightly in 2020 in real terms vs 2019 (2%), and in 2021 falls in real terms vs 2019 (-3%). CAP2597 includes allowances for pension costs of £447 million in 2020 prices (vs £542 million proposed by NERL in its 2022 business plan). The key drivers of NERL pension costs and CAA's decision for NR23 are set out in chapter 4 of CAP2597.
1.2 Other operating costs	This includes non-staff related costs, including Third Party programme cost (not capitalised), facilities, asset management and engineering support, and tax allowance. NERL took actions to reduce non-staff costs in 2020. As a result, in 2020 UKATS non-staff costs were 34% below the RP3 CMA RP3 FD in real terms, and in 2021 37% below. More information on non-staff costs can be found in chapter 4 of CAP2597. In CAP2597, non-staff cost assumptions increase from 2023 to 2024, then remain flat until 2026 and then fall in 2027. The increases are due to legacy systems not being decommissioned when previously anticipated and cost pressures such as inflation rates and a tight labour market. CAP2597 includes an allowance of £741 million in 2020 prices (compared to the £746 million proposed by NERL) for total non-staff opex. The key drivers of NERL

	non-staff operating costs and CAA's decision for NR23 are set out in chapter 4 of CAP2597.
1.3 Depreciation	This includes depreciation based on the regulatory asset base (RAB) value, with assets depreciated over 15 years on a straight-line basis. The regulatory depreciation allowance relates to capital expenditure in RP3 and previous reference periods. They also include backlog adjustments that true-up for differences in the level of actual capital expenditure and the level assumed in setting previous price controls. The increase in 2020 mainly reflected higher backlog adjustments as NERL accelerated DSESAR. The reduction from 2021 is mainly due to the ending of the depreciation of the opening RAB from when NERL was privatised, which will have been fully depreciated over 20 years. We set an allowance for depreciation over NR23 of £643 million in 2020 prices. Detail on the depreciation over RP3 and NR23 and also on capital expenditure can be found CAP2597, chapter 3 (Reconciliation review) and chapter 5 (Financial framework).
1.4 Cost of capital	The cost of capital is the allowed "vanilla" weighted average cost of capital (3.19% in real terms, deflated by the retail price index (RPI)) on the average regulatory asset base (RAB). The vanilla weighted average cost of capital is the weighted average of the post-tax cost of equity and pre-tax cost of debt. At RP3, we previously estimated the cost of capital on a "pre-tax" basis (by making an upwards adjustment to the vanilla cost of capital to account for NERL's expected tax liabilities. We now provide NERL with a separate allowance for tax (included in 1.2 Other operating costs), and so no longer include an adjustment for tax in the cost of capital. The NR23 vanilla cost of capital is slightly higher than the equivalent RP3 vanilla cost of capital. Although NERL's cost of debt has fallen following its financial restructuring in 2021, its cost of equity is estimated to have increased due to increases in the risk free rate during 2022-23. The cost of capital for NR23 is set out in chapter 5 of CAP2597.
1.5 Exceptional items	This includes the adjustment for military TSUs, restructuring costs and specific programmes' contingency. The cost in NR23 mainly relates to the adjustment for military TSUs.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	This reflects the share of Determined Costs (81.9%) as applied to total Determined Costs during NR23.
2.2 Communication	This reflects the share of Determined Costs (7.6%) as applied to total Determined Costs during NR23.
2.3 Navigation	This reflects the share of Determined Costs (2.8%) as applied to total Determined Costs during NR23.
2.4 Surveillance	This reflects the share of Determined Costs (5.1%) as applied to total Determined Costs during NR23.
2.5 Search and rescue	This is assumed to be zero in NR23

2.6 Aeronautical Information	This reflects the share of Determined Costs (0.6%) as applied to total Determined Costs during NR23.
2.7 Meteorological services	This is assumed to be zero in NR23.
2.8 Supervision costs	This reflects the share of Determined Costs (0.8%) as applied to total Determined Costs during NR23.
2.9 Other State costs	This reflects the share of Determined Costs (1.1%) as applied to total Determined Costs during NR23.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

Details on adjustments beyond the provisions of the International Accounting Standards:

NERL has prepared its annual accounts on the basis of International Accountancy Standards (IAS) since 2005/06. The Determined Costs for NERL have however been prepared on a regulatory building-block basis. The CAA takes an economic approach to its regulation of NERL. While the economic and accounting valuation and treatment of items is often the same or very similar, there are situations in which differences arise because of the different conceptual viewpoints of economics and accountancy.

The consistency of the calculation of determined costs with IAS is considered below. Unless otherwise stated below, the CAA considers that its calculation of Determined Costs is consistent with IAS.

- Revenue discounting: IFRS requires discounting of long-term receivables. These are adjusted in statutory accounts for the impact of recoveries beyond the years to which they relate (e.g. traffic risk sharing, inflation, incentive schemes). The Determined Costs exclude this adjustment.
- Lease reinstatement provisions: until a new lease IAS was introduced in 2019, the rental cost associated with NERL's leases (mainly for property, plant and machinery) was charged as an expense to its profit and loss account on a straight-line basis over the lease term. From 2019, IAS requires leased assets and the commitment to lease rental obligations to be reported on the company's balance sheet and for the profit and loss account to reflect a charge for the depreciation of leased assets and a finance cost relating to lease obligations. The new IAS does not change the company's cash flows. Determined Costs for RP3 excludes the aggregate of the depreciation charge and finance cost reported under IAS and includes the lease rental cost within the allowance for Other Operating Costs. This is consistent with the basis for Determined Costs in previous reference periods and provides better transparency as to the regulatory building blocks. Also, over the lease term the overall cost will be the same.
- Accounting for Leases (IFRS16). Leases previously classified as operating leases and which are now classified as right of use assets under IFRS 16 are treated as operating costs for the purposes of the regulatory settlement and are excluded from the Regulatory asset base.
- Pension costs: The amounts included in Determined Costs in respect of the defined benefit pension scheme are the forecast cash costs as set out in the latest independent actuarial triennial valuation of the defined benefit scheme (as of 31 December 2020). These forecast cash costs are consistent with the schedule of contributions agreed with trustees of the pension scheme in accordance with the governance of the scheme and national law (which includes a margin for prudence). The CAA has included the forecast cash costs in Determined

Costs rather than the forecast accounting charge, calculated under IAS, included in NERL's forecast profit and loss account. In the short to medium term the cash costs may be different to the profit and loss account charge (IAS19), although in the long-run it is expected that they would converge on the same actual cost.

- Regulatory asset base (RAB): The RAB is a measure of the amount invested in NERL that has yet to be returned through revenue allowances, and therefore represents capital employed. The RAB is indexed to inflation (measured using the retail price index, RPI) and is, therefore, presented on a current cost accounting basis. The RAB includes:
  a. Fixed assets. This comprises most of the RAB and IAS allows fixed assets to be valued at current costs.
  b. Working capital (excluding cash balances). The RAB includes small working capital asset necessary for the operation of the business. No cash balances are included. Working capital is stated on a current cost basis. This represents an immaterial departure from strict IAS current cost accounting but is consistent with other regulatory approaches;
  c. The traffic risk sharing revenues from the RP3 period, where traffic levels were much lower due to the impact of the covid-19 pandemic, where these revenues have not yet been recovered through revenues. These revenues are recovered evenly over 10 years of NR23 and NR28. This balance also includes financing costs accrued during the RP3 period.
  d. Pensions pass through asset. The pension pass-through mechanism relates to Determined Costs that can be exempted from the cost sharing mechanism, arising in RP3 and earlier periods. The CAA allows NERL to include in, and depreciate from the RAB, a pensions asset depending whether actual exempt pension costs are higher or lower than allowed costs. The pensions asset is being depreciated over 12 or 15 years depending on when the asset was accrued.
- Capitalised finance costs: These arise for two reasons. First, when the forecast capital expenditure is updated for actual capital expenditure any differences (including timing differences) give rise to additional finance costs (or benefits). This adjustment keeps NERL whole and ensures that NERL does not benefit from delaying capital expenditure. Second and similarly, the pensions pass-through mechanism also gives rise to timing differences and therefore finance costs (or benefits). Capitalised finance costs on the pension pass through makes sure that NERL does not gain or lose due to the timing difference. This concept could be considered consistent with IAS which allow the value of assets and liabilities that crystallise in the future to reflect the time value of money.
- Netting off of non-regulatory revenues against costs: NERL's licence allows it, within specified limits, to provide air navigation services in addition to the en route business. NERL is only able to provide these services because it has the en route business and, therefore, the CAA considers that it is appropriate and in the interest of users that income from these services should be used to reduce Determined Costs and the unit rate. Netting of revenues and costs is not consistent with International Accounting Standards but necessary to reflect this single-till approach. The valuation of these revenues is consistent with IAS.
- Goodwill: IAS requires goodwill to be included in the balance sheet and any impairment to be expensed to the profit and loss account. Determined Costs do not include allowances for the impairment of goodwill. NERL's goodwill arose from privatisation in 2001. To include goodwill impairment charges in Determined Costs would, therefore, be of benefit to shareholders and to the detriment of airline customers. For this reason, the CAA does not allow these charges in setting the unit rate.

- Borrowing costs incurred on borrowings to fund capital expenditure: With the introduction of IAS23: Borrowing Costs, the option to expense borrowing costs which are attributable to the acquisition, construction or production of fixed assets was removed. As a result, under IAS, borrowing costs relating to the development of fixed assets are capitalised as part of the cost of the asset and subsequently depreciated. The CAA does not permit the capitalisation of these borrowing costs as to do so would be to remunerate NERL twice, once through the cost of capital applied to the RAB (to calculate the allowed returns) and again through the inclusion of interest costs on assets in the course of construction in the RAB (which would be recovered through regulatory depreciation). To ensure that this is not remunerated twice, borrowing costs are excluded from fixed assets for regulatory purposes.

Met Office:

The Met Office consulted directly with stakeholders on its NR23 Determined Costs in 2021 and early 2022 using a mixture of written consultation and submissions and a specific NR23 stakeholder event. The feedback received was largely supportive of the Met Office's plans.

Entity: MET	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Staff costs remain broadly level over NR23.
of which, pension costs	Projected as 20.1% of total staff costs
1.2 Other operating costs	Growth of £1.1m in 2023 driven predominantly by increases in international satellite subscriptions.
1.3 Depreciation	Growth over 2023 driven by increases in international satellite subscriptions
1.4 Cost of capital	Fixed over NR23. Calculated as 4.4% of the share of fixed assets employed to deliver aviation services.
1.5 Exceptional items	In light of the impact of covid-19 impact on the industry, approximately £1.2 million to be returned to users in NR23 to reflect delta between actual and determined costs in 2020.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	n/a
2.2 Communication	n/a
2.3 Navigation	n/a
2.4 Surveillance	n/a
2.5 Search and rescue	n/a
2.6 Aeronautical Information	n/a
2.7 Meteorological services	The Determined Costs are fully attributed to meteorological services
2.8 Supervision costs	n/a

2.9 Other State costs	n/a
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

NSA:

Comprise the Department for Transport element of en route costs (representing the UK's share of costs for the running of the Eurocontrol Agency) and the CAA staff, other operating and capital costs associated with our airspace and ATS responsibilities.

Entity: NSA (CAA and DfT)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	This includes staff costs in respect of the CAA's airspace strategy, policy and oversight activities and the associated policy, legal and financial support to the route charges system. For NR23, these costs also staff costs associated with economic regulation of ATS. A significant driver in NR23 are the additional staff costs associated with growth in and complexity of Airspace Change Proposals (ACP) and airspace modernisation and the transfer of economic regulation costs.
of which, pension costs	The costs of meeting CAA pension obligations in respect of staff involved in activities referred to above.
1.2 Other operating costs	This includes non-staff related costs, including Costs of IT systems, consultancy services and travel and related expenses associated with the CAA's airspace activities. In addition to the airspace costs described above, the CAA costs include an AMS Support Fund (ASF) of approximately £10 million over NR23, a continuation of the fund created for RP3.
1.3 Depreciation	Depreciation costs in respect of the building refurbishment at Aviation House for the change in location of Safety Regulation staff brought down prior to the closure of CAA House in December 2019. The costs are depreciated over the life of the assets using the straight-line method applied to historic costs.
1.4 Cost of capital	Cost of capital in connection with the Aviation House building refurbishment project
1.5 Exceptional items	Additional annual cash payments to the CAA's pensions scheme to fund the Pensions Benefit Obligation (PBO) of NATS pensioners and deferred pensioners up to the point of the separation of NATS from the CAA in 2001. The most recent actuarial valuation indicated that annual payments of £6m will be required throughout NR23
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	CAA costs of regulating air traffic management and airspace, including the provision of the AMS support fund.

2.2 Communication	N/A
2.3 Navigation	N/A
2.4 Surveillance	N/A
2.5 Search and rescue	N/A
2.6 Aeronautical Information	N/A
2.7 Meteorological services	N/A
2.8 Supervision costs	These costs represent CAA other costs, that do not fall into ATM/Airspace regulation, policy and oversight – for example the share of corporate overhead costs applied to ATM.
2.9 Other State costs	The DfT incurs costs as a result of being a Eurocontrol Member State. These costs are included as part of the item 'Other State Costs' and are based on costs Eurocontrol forecast for the reference period. Other State Costs contribute to the 'Supervision Costs' which are costs the UK incurs to supervise the provision of air navigation services and also include CAA costs.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

The underlying CAA determined costs included in the November 2022 CRCO submission contained slightly lower than intended NSA determined costs for 2023 (£79.6 million rather than £80.1 million, both in nominal terms), due to a change in inflation indexation and an error. Recognising the provision under paragraph 3.3.4.2 of the Eurocontrol Principles that allows the recovery of changes in costs by competent authorities, no retrospective adjustment has been made to NSA determined costs for 2023 at this stage. However, where CAA actual costs are greater than determined costs for 2023, CAA will seek to make appropriate adjustments in due course.

Pension costs

Entity: NERL (ANSP)
Assumptions underlying the determined pension costs and expected evolution over NR23
CAA's assumptions and allowances relating to NERL pensions costs are set out in chapter 4 of CAP2597. These pension costs include costs from the defined benefit (DB) scheme, defined contribution (DC) scheme and other pension costs where members opt out of the DB scheme.
Entity: MET
Assumptions underlying the determined pension costs and expected evolution over NR23
Met Office staff are covered by the provisions of the Principal Civil Service Pension Scheme (PCSPS). The PCSPS is an unfunded multi-employer defined benefit scheme. However, since the Met Office is unable to identify its share of the underlying assets and liabilities it is accounted for as a defined contribution scheme. Contributions are paid at rates determined from time to time by the scheme's Actuary. Details can be found in the resource

accounts of the Cabinet Office: Civil Superannuation (www.civilservice.gov.uk). Full provision for early retirements is normally made in the year of retirement. Pursuant to the Superannuation Act 1972, employer's contributions were payable to the PCSPS at one of four rates in the range 26.6% to 30.3% of pensionable pay, based on salary bands. The Scheme Actuary reviews employer contributions every four years following a full scheme valuation. The contribution rates are set to meet the cost of the benefits accruing during a period to be paid when the member retires and not the benefits paid during this period to existing pensioners.
Entity: NSA (CAA and DfT)
Assumptions underlying the determined pension costs and expected evolution over NR23
Under exceptional items in the NSA determined costs: Additional annual cash payments to the CAA's pensions scheme to fund the Pensions Benefit Obligation (PBO) of NATS pensioners and deferred pensioners up to the point of the separation of NATS from the CAA in 2001. The most recent actuarial valuation indicated that annual payments of £6 million will be required throughout NR23. In the November 2022/June 2023 CRCO submissions there was an error for 2027 Exceptional items on table T1NSA. It showed the aforementioned £6 million as £6.12 million – this has been corrected in the November 2023 submission.

g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the Paragraph 2.3.3 of the Eurocontrol Principles, and, where current cost accounting is used, provision of comparable historical cost data;

NERL:

NERL's Regulatory asset base (RAB) is a measure of the amount invested in the business that has yet to be returned through revenue allowances, and therefore represents capital employed. The RAB is indexed to UK retail price index (RPI) inflation and is therefore, presented on a current cost accounting basis. The RAB includes a small working capital adjustment also stated on a current cost basis. This approach is consistent with the approach adopted by regulators in other markets. Also included in the RAB are pension pass through adjustments (which can be positive or negative), rolling incentive mechanisms and capitalised finance costs.

Together, IAS and the Eurocontrol Principles provide for fixed assets to be depreciated over their useful economic lives on a straight-line basis from the date they come into operation. Furthermore, assets should be classed according to their nature and useful economic lives. In contrast, the CAA has applied an average economic life to all assets and depreciated from date of acquisition. In addition, the CAA's depreciation charge reflects the current cost adjustment to fixed assets, which contrasts with NERL's statutory reporting basis which reflects historical cost.

The economic and accounting view of depreciation differ. The accounting perspective sees depreciation as a wearing out of assets and a matching of costs with revenues. The economic perspective sees depreciation as a way of passing back to the company its investment in capacity and capability. Because a return is also provided on the RAB (i.e. the amount invested which has not yet been returned to investors) the value of the business (the present value of future cashflows) is independent of the choice of depreciation life.[1]

From an economic viewpoint, depreciation is important as it provides the company with cash flows to fund further capital expenditure and, therefore, from a financing perspective, economic lives should broadly match the useful lives of the assets which are being financed. For these reasons, the CAA provides depreciation from the date of acquisition (in order to facilitate financing) rather than from the date of operation (which is used in accountancy terms to match the costs with the revenues). This also reflects the CAA's statutory duty to secure that NERL will not find it unduly difficult to finance its licensed activities.

The CAA has applied an average useful economic life to all fixed assets that reflects the economic lives of the mix of assets in use. For NR23 capital expenditure (as for RP1 to RP3), the CAA has used a 15-year life which it considers appropriate for regulatory purposes and notes that this is consistent with the mix of assets and their useful economic lives. The CAA therefore concludes that, although the way in which the calculation is performed is not consistent with IAS, the outcome of the calculation is broadly consistent with that which would result from using individual asset lives.

On privatisation in 2001, all the existing assets were to be depreciated over 20 years with additions depreciated over 12 years. As a result of the RP1 review, the CAA extended the useful economic lives of future additions to 15 years. Although this led to a range of lives depending on when the assets were acquired, the CAA considered it would be inappropriate to retrospectively change assets lives because to do so would have created uncertainty with respect to future capital expenditure.

For NR23 we have used the same approach to regulatory depreciation as for RP3 (see chapter 5 of CAP2597 for more details). This includes:

- 20-year straight-line depreciation for the opening RAB at privatisation. These assets will have been fully depreciated by the end of 2022;
- 15-year straight line depreciation for new assets added to the RAB through capital expenditure;
- a true-up for depreciation if there were any differences between the actual and forecast 'RPI-CPI wedge';
- an adjustment for depreciation to remove costs associated with NERL's pension cost pass-through which was recovered through revenue adjustments instead; and
- allowing only efficiently incurred capital expenditure to be recovered through the depreciation allowance.

MET:

Freehold land is not depreciated. Depreciation on buildings is calculated to write-off the cost, or value, by equal instalments over the asset's estimated useful life (not exceeding 50 years). Plant and equipment and information technology assets are depreciated by the straight-line method at a rate calculated to write-off the cost, or value, over the asset's estimated useful life. Current policy is to write-off plant and equipment over three to 30 years and information technology equipment over two to 12 years. Satellite assets are depreciated using the straight-line method over their estimated useful life. This method reflects the principle that the economic benefit of satellite data remains constant

[1] In addition, the accounting charge reflected in NERL's statutory accounts may include the accelerated write down of assets due to impairment and gains or losses on asset sales, neither of which is allowed under economic regulation. It is the proceeds of asset disposals that are deducted from the RAB and are therefore reflected in depreciation.

between individual satellites. Fixtures and fittings include improvements to leasehold buildings and are depreciated over five to 25 years. Assets in the course of construction are not depreciated. Where there is evidence of impairment, fixed assets are written down to recoverable amount.

NSA (CAA and DfT):

Depreciation costs in respect of the building refurbishment at Aviation House for the change in location of Safety Regulation staff brought down prior to the closure of CAA House in December 2019. The costs are depreciated over the life of the assets using the straight-line method applied to historic costs.

h) For each entity, description and underlying assumptions of each item of complementary information (point 3 of Table 1), including a description of the main factors explaining the variations over the reference period;

NERL (ANSP)	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	This is assumed to be equal to the Cost of capital in determined costs (Table 1, line 1.4)
3.12 Cost of leasing	This is the Eurocontrol share of Finance leases and IFRS 16 operating lease costs. These are included within Other operating costs (Table 1, line 1.2).
Eurocontrol costs	
3.13 Eurocontrol costs (Euro)	n/a
3.14 Exchange rate (if applicable)	n/a

MET	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	n/a
3.12 Cost of leasing	n/a
Eurocontrol costs	
3.13 Eurocontrol costs (Euro)	n/a

3.14 Exchange rate (if applicable)	n/a

NSA (CAA and DfT)	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	n/a
3.12 Cost of leasing	n/a
Eurocontrol costs	
3.13 Eurocontrol costs (Euro)	Eurocontrol costs are paid by the DfT to the Agency. These costs are apportioned according to the sharing keys agreed by the Contracting States. These costs cover staff and other operating costs. The UK does not contribute to the Maastricht Upper Area Control Centre (MUAC) aspect of Eurocontrol costs. The determined costs for NR23 are provided in euros by Eurocontrol. A forecast exchange rate is also provided for the figures to be converted into pounds for the tables.
3.14 Exchange rate (if applicable)	For the purposes of setting the UK NR23 performance plan, the last average exchange rate data available before the start of the NR23 period has been used. This is the average September 2022 exchange rate, based on Reuters data, as provided by Eurocontrol to the DfT in October 2022. The average exchange rate used is €1 = £0.874368.

i) For each entity, description of the assumptions used to compute the cost of capital (point 1.4 of Table 1), including the composition of the asset base, the return on equity, the average interest on debts and the shares of financing of the asset base through debt and equity;

NERL	
Cost of capital %	
3.6 Return on equity	The post-tax cost of equity (in real terms, deflated by the retail price index (RPI)) used to calculate the weighted average cost of capital. Further details are provided below the table.
3.7 Average interest on debts	The pre-tax cost of debt (in real terms, deflated by the retail price index (RPI)) used to calculate the weighted average cost of capital. It is the allowed cost of debt we are setting for NERL and is negative in RPI-real terms. It is consistent with the table rows for RP3 and preceding periods. Further details are provided below the table.

3.8 Share of financing through equity	The notional level of the regulatory asset base (RAB) financed by equity, used to calculate the weighted average cost of capital. Further details are provided below the table.

Approach to estimating the cost of capital

The broad approach taken to NERL's cost of capital, including the cost of equity, is consistent with the approach for RP3 and the regulation of utility industries in the UK and widely used elsewhere. This is based on calculating the weighted average cost of capital (WACC), with cost of equity estimated using the capital asset pricing model (CAPM). The cost of capital applied is the vanilla WACC, based on the post-tax cost of equity and pre-tax cost of debt, and set in real terms using the UK retail price index (RPI), consistent with indexation of the regulatory asset base (RAB).[2] The CAA separately estimates an allowance in respect of NERL's reasonable tax expenses in NR23.

In developing our Final Decision, we reviewed a wide range of evidence to estimate an appropriate cost of capital for NR23, including:

- recent market information and trends;
- analysis and views from equity and debt costs from external consultancies and academics; and
- UK regulatory precedent;[3]

We estimated a real (in RPI terms) vanilla WACC for NERL of 3.19%, which is below the 3.54% vanilla WACC proposed by NERL in its RP3 business plan and above the 3.05% vanilla WACC used at RP3.

The increase in the WACC since RP3 is primarily due to an increase in the estimated cost of equity driven by a higher risk free rate. This was partly offset by a reduction in the cost of NERL's debt following the financial restructuring it undertook in April 2021.

The table below shows how the vanilla WACC has been estimated from the components of the cost of debt, cost of equity and gearing. It reflects the WACC in real terms, deflated by the UK retail price index (RPI). We have assumed forecast RPI inflation of 3.20% p.a. during NR23. This WACC is applied to the average RAB to calculate the cost of capital in the Determined Costs. Our approach is to estimate a range (but not a point estimate) for each WACC parameter. We aggregate these parameter ranges to develop a range for the WACC, and then select a point estimate for the WACC from that range.

[2] In the UK financial markets retail prices index (RPI) inflation is the measure of inflation used by investors. In estimating the real cost of capital, the CAA has deducted RPI inflation from the nominal cost of capital. In order that investors are kept whole in respect of inflation, it is appropriate to uplift the asset base by RPI inflation.

[3] This includes including WACC ranges in Ofwat's PR19 draft determinations, Ofcom's business connectivity statement, Ofgem's RIIO-2 methodology decision, and the UKRN cost of equity report

NR23 WACC (RPI-deflated)

	Ref	NR23 Low	NR23 High	RP3
Gearing	A	30.00%	30.00%	30.00%
Risk Free Rate	B	0.32%	0.82%	(2.25%)
TMR	C	5.20%	6.50%	5.50%
Asset Beta	D	0.52	0.70	0.57
Debt Beta	E	0.05	0.05	0.05
Equity beta	F = (D-E*A)/(1-A)	0.76	1.03	0.79
Cost of equity	**G = B + F*(C-B)**	**4.04%**	**6.70%**	**3.87%**
Issuance and liquidity cost	K	0.13%	0.13%	0.15%
Cost of debt	**L = H*J + (1-J)*I + K**	**(1.05%)**	**(1.05%)**	**1.12%**
Vanilla WACC	**M = L*A + G*(1-A)**	**2.31%**	**4.06%**	**3.05%**
Point estimate		**3.19%**		**3.05%**

Source: CAA analysis

j) Description of the determined costs of common projects (point 3.9 of Table 1).

Borealis continues and historically NERL has included the cost of Union Assistance Programmes under Common Projects.

Details of costs included in NERL's NR23 plan (adjusted to the CPI level of the final decision) are provided in the below table.

Any Union assistance funding received will be returned via the Other Revenues line of Table 2 B.

	2023	2024	2025	2026	2027
Borealis Alliance	0.1	0.1	0.1	0.1	0.1
SESAR2020	0.3	0.0	0.0	0.0	0.0
SESAR3	4.8	5.0	5.2	5.3	5.5
Total Common Projects / Union Funding	**5.2**	**5.1**	**5.3**	**5.4**	**5.5**

2. Actual costs and unit costs

2020 to 2022 actuals form part of the costs included in the RP3 reconciliation review, addressed in chapter 3 of CAP2597.

a) For each entity and for each cost item, a description of the reported actual costs and the difference between those costs and the determined costs, for each year of the reference period;

RP3:

- NERL: Operating costs were £132.3m lower than the CAA projected. NERL responded to the impact of covid-19 in reducing its operating costs to protect its liquidity and to support the recovery in 2020. These actions included staff redundancies (restricted to non-operational staff ensuring that essential operational skills were retained to protect the recovery), pay restraint and a recruitment freeze, the release of most external contractors and curtailing non-staff costs. Relative to the price control assumption, the benefits of these actions were sustained in the year. Following the lifting of travel restrictions in March 2022 and the recovery in air traffic volumes, the company has continued to maintain its focus on costs, limiting expenditure to what is essential to support the recovery. The increase in operating costs on the prior year reflects the costs of supporting the traffic recovery, the lifting of the recruitment freeze to support technology transformation, a staff pay award and higher utility costs reflecting energy price increases. Prior year costs were also net of support received from the Coronavirus Job Retention Scheme and credits for releasing previously held provisions following the reassessment of bad debt risk.
- DfT/CAA: 2022 actual costs were approximately £2 million greater than determined costs. This is mostly as a result of higher than forecast Eurocontrol costs.
- Met Office: 2022 actual costs were approximately £1.5 million lower than determined costs.

NR23:

2023 actuals information cannot be updated until 2024

b) Description of the reported actual service units and a description of any differences between those units and the figures provided by the entity that is billing and collecting charges as well as any differences between those units and the forecast set in the performance plan, for each year of the reference period;

Comparing RP3 2022 TSU forecast (13,183,000), with 2022 TSU actuals (10,782,061)* the delta is -2,400,939.

The 10,782,061 reflects flights in the billing period used in CRCO reports.

NR23 traffic forecasts are discussed in chapter 1 of CAP2597.

c) Breakdown of the actual costs of common projects per individual project;

Costs relating to common projects / union assistance programmes in 2022.

The SESAR Deployment Manager amount relates to forex movement on amounts received in prior years so is consistent with the P+L value recognised in our accounts for CY22.

	2022
Borealis Alliance	0.1
SESAR Deployment Manager	-0.2
SESAR2020	4.9
Total Common Projects / Union Funding	4.8

d) Justification of the difference between the determined and the actual costs of new and existing investments of the air navigation service providers, as well as the difference between the planned and the actual date of entry into operation of the fixed assets financed by those investments for each year of the reference period;

Due to the UK's regulatory model, determined costs include a level of annual depreciation that is fixed at the point the plan is set. Investment related costs are therefore in line with the baseline.

NERL provides six monthly updates to airline customers on its service and investment plans.

It is not yet possible to consider differences between planned and actual NR23 capex.

e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the Contracting States.

NERL significantly reduced capex activities over 2020 to 2022 in response to the covid-19 pandemic, reporting over £233 million of savings relative to the CMA RP3 determination. No investment projects were added, cancelled or replaced, however the delivery timelines were extended in many cases and the scope of some projects amended.

Chapter 4 of CAP2597 sets out details of the capex baseline allowance for NR23, which is approximately £540 million over the whole period (2020, CPI prices). The approach to capex regulation does not establish a cap on expenditure. NERL is able to adapt its capex programme, in consultation with stakeholders, and will be remunerated for efficient expenditure.

ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION

See the introductory text. The NR23 performance plan was adopted in October 2023, after the start of the reference period. Therefore, any differences between the unit rate for 2023 based on provisional determined costs and the adopted determined costs will be reflected in adjustments to the unit rates during NR23, including the 2024 unit rate.

a) Description and rationale for establishment of the different charging zones, and potential cross-subsidies between charging zones;

Not applicable

b) Description of the policy on exemptions and description of the financing means to cover the related costs;

In addition to the mandatory exemptions, the UK exempts the following flights from en-route charges in RP3 and NR23:

- Flights by military aircraft;
- Flights made exclusively for the purpose of the instruction or testing of flight crew;
- VFR flights of which the total weight authorised is 5.7 metric tonnes or less;
- Flights terminating at the aerodrome from which the aircraft has taken off ("circular flights");
- Flights made exclusively for the checking or testing of equipment used or intended to be used as aids to air navigation;
- Authorised humanitarian flights.

The UK keeps its compliance with State obligations under review to ensure that the costs of services provided to exempted flights is not passed on to other airspace users through its unit rate.

c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Paragraph 3.3.3.1;

NERL:

In 2020 traffic was 59.5% lower than forecast in the UK RP3 performance plan. In light of the impact of covid-19, consistent with the Eurocontrol Principles, the UK modified its approach to the application of the TRS mechanism, to allow for TRS revenues to be recovered over a longer period of time to smooth the impact on charges. This is discussed in chapter 6 of CAP2597.

Under the typical traffic risk sharing mechanism, approximately £380 million would have been due for recovery from users as part of the NERL component of the 2022 unit rate. However, the mechanism was suspended.

In 2021 traffic was 57.3% lower than forecast. Consistent with the approach taken to 2020, the automatic TRS mechanism for 2021 (as well as 2022) was suspended with the resulting amounts to be reviewed in the context of the NR23 performance plan.

In CAP2597 we confirm our approach, which:

- revises the TRS mechanism so that instead of being based on determined costs, it is calculated on the basis of actual efficient NERL costs over 2020-22. The actual efficient cost baseline set out in chapter 3 of CAP2597 is £707 million, compared with £740 million in NERL's business plan (all in nominal prices). This approach ensures that the NERL only recovers revenue shortfalls (resulting from lower traffic volumes) that relate to its actual efficient costs.

- a uniform recovery of the TRS over NR23 and the following reference period (NR28) – this is discussed in chapter 6 of CAP2597. By adopting an even recovery over ten years (NR23 and NR28), our final decision is to allow a recovery of £354 million during NR23, around 36% (or £201 million) lower than in NERL's business plan (all in nominal prices).

We include adjustments for inflation and cost of capital on the revenue to be recovered. We discuss our reasons for this in chapter 6 of CAP2597.

In CAP2597 we retain the traffic risk share mechanism for the en route services that was applied prior to the impact of covid-19. Where there is unexpected traffic reductions of over 10%, the recovery of revenues is spread over multiple years. The TRS parameters otherwise remain unchanged from RP3.

d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Paragraph 3.3.4 including description of the changes referred to in that Paragraph;

ANSPs (NERL and Met Office):

While the unforeseen costs have not been used in the past by the Met Office, as an ANSP under the Eurocontrol Principles we note that the below provisions are also available to it.

For NR23 (and similar to previous price control periods) we expect costs exempt from the cost risk sharing mechanism to include:

- Net capital expenditure costs associated with new and existing investments. NERL can recover unforeseen changes in capital expenditure, where efficient, through the RAB, which is then recovered from users through cost of capital and depreciation.

- Unforeseen changes in pension costs. The calculation of the RP3 and NR23 Pension Contribution Variance follows the methodology used in RP2 and is based on the European Commission methodology for the treatment of costs exempt from cost sharing. In March 2021, the CAA published a regulatory policy statement on the treatment of pension costs, setting out the principles the UK will follow for the treatment of variances between determined and actual pension costs. Pension cost pass-through and other cost sharing mechanisms are addressed in chapter 7 of CAP2597. Determined pension costs are set out in chapter 4.

- Unforeseen changes in interest rates on loans. While this has not been applied to date, we retain the option to use this provision where appropriate for NR23.

- Unforeseen changes in national taxation law or other new cost items required by law. While this has not been applied to date, we retain the option to use this provision where appropriate in NR23. For example, we would also expect this to apply to any changes in costs due to significant unforeseeable changes in the corporation tax rate during NR23.

These issues are considered in chapter 3 of CAP2597, where we have explained the drivers of the differences between determined and actual costs over 2020-22, and in chapter 7 where we consider cost pass through provisions.

NSA (CAA and DfT):

For NR23, we expect to retain relevant costs exempt from the cost risk sharing provisions consistent with the Eurocontrol Principles:

- Unforeseen changes in Eurocontrol costs, which are outside the control of the State.
- Unforeseen changes in CAA determined costs.

e) Description of adjustments resulting from unforeseen changes in costs in accordance with Paragraph 3.3.4;

NERL:

We have not yet completed our reviews of the changes in pension costs and capital expenditure in RP3. As stated in chapter 3 of CAP2597, we will complete these reviews during the NR23 period and make the necessary adjustments to the cost sharing mechanism during NR23.

f) Description of the other revenues, if any, in accordance with Paragraph 2.2.1 broken down between categories;

NERL:

NERL reports on a single till basis agreed with the CAA. As a consequence, revenue has been offset against costs to reflect the net position. This approach has been discussed with CRCO and is consistent with the Principles. The income that is netted off from other sources includes income from the provision of services to North Sea Helicopters, Ministry of Defence en route air traffic (where NERL provides the infrastructure but not the controllers), services to other group companies, miscellaneous commercial income, London Approach fees and revenue associated with the SESAR Joint Undertaking and other European programmes.

The London Approach charge is reflected as a terminal charge as is not administered through the CRCO system.

In the reporting tables, “Total traffic adjustment” is calculated as the sum of the items “Total traffic adjustment on adjustments from previous reference periods” and “Total traffic adjustments up to 2022”. Instead of adopting this calculation, we have adopted values (known as TVAR) taken from the PCM. This is because the values from 10.1 Union assistance programs and 10.3 Commercial activities should relate to INEA and FAS funding being returned, and from NERL’s licence that these values should form part of the TVAR calculation: (source: https://www.caa.co.uk/media/azlfstks/air-traffic-services-licence-for-nats-en-route-plc-january-2022.pdf page 73).

g) Description of the application of the financial incentive schemes referred to in Paragraph 3.4.1 in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Paragraph 3.4.2 where applicable, and resulting adjustments;

Financial incentive schemes

Financial incentives for RP3 have been suspended given the impact of traffic downturn and volatile recovery.

For NR23, we have reinstating financial incentives. To incentivise the delivery of high levels of service and the delivery of benefits from its capex investment and increasing opex, we have set targets (including environmental and capacity targets) that provide strong incentives on NERL to improve its performance. These financial incentives should drive improved levels of performance over NR23 and protect customers and consumers from lower quality of service.

Service quality targets and incentives are addressed in chapter 2 of CAP2597 and appendix C of CAP2597b.

We have also retained the capex engagement incentive, which addresses the quality of NERL's engagement with its customers on its capital programme through NR23. This is discussed in chapter 7 of CAP2597, with guidance on the application of the incentive in appendix D of CAP2597b.

Modulation of charges

No adjustments are assumed.

h) Description of adjustments relating to the temporary application of a unit rate under Paragraph 3.3.1.4;

Following the CMA RP3 determination of NERL's price control (published in August 2020), for the 2020 to 2022 calendar years, adjustments were required to take into account the difference relating to the 2020 determined costs.

A provisional unit rate for 2023 was implemented, based on NR23 Initial Proposals. With the adoption of the NR23 performance plan, any differences between the provisional unit rate and adopted unit rate for 2023 will be reflected in the unit rates during NR23, including the 2024 unit rate.

i) Description of the cross-financing between en route charging zones;

n/a

j) Information on the application of a lower unit rate under Paragraph 3.3.1.3 than the unit rate calculated in accordance with Paragraph 3.3.1.2 and the means to finance the difference in revenue;

k) Information and breakdown of the adjustments relating to previous reference periods impacting the unit rate calculation;

As part of the RP3 cost reporting tables we have included adjustments from 2018 and 2019 that will be carried over on an n+2 basis and impact on the 2020 and 2021 unit rates (traffic risk sharing, incentives, inflation, cost sharing mechanism and other revenues).

We have taken the same approach for the NR23 cost reporting tables, with adjustments included from 2021 carried over on an n+2 basis and impact on the 2023 unit rates and adjustments from 2022 carried over on an n+2 basis and impact on the 2024 unit rates (traffic risk sharing, inflation, cost sharing mechanism and other revenues).

For Inflation adjustment 2021 for NERL, we have decided to use the results of the PCM in Cell D13 on T3 ANSP (with a value of -£3.970 million) instead of following the formula in the reporting tables, which adopts Cell D19 on T2 ANSP, with a value of -£3.418 million. Similarly, for inflation adjustment 2022, we have decided to use the results of the PCM in Cell G82 on T2 ANSP (with a value of

£43.332 million) instead of following the formula in the reporting tables, which adopts Cell D19 on T2 ANSP (with a value of £44,207 million).

These slight differences are due to the different rounding of inflation figures used by the reporting tables and the PCM: for actual inflation to 2022, inflation % is rounded to 1 decimal places in the reporting tables but is calculated to a greater number of decimal places in the PCM.

ADDITIONAL INFORMATION TO REPORTING TABLE 3 – COMPLEMENTARY INFORMATION ON COMMON PROJECTS AND ON UNION ASSISTANCE PROGRAMME

I) Information on the costs of common projects and other funded projects broken down per individual project, as well as of public funds obtained from public authorities for these projects.

Costs relating to common projects / union assistance programmes in 2022.

The SESAR Deployment Manager amount relates to forex movement on amounts received in prior years so is consistent with the P+L value recognised in our accounts for CY22.

	2022
Borealis Alliance	0.1
SESAR Deployment Manager	-0.2
SESAR2020	4.9
Total Common Projects / Union Funding	4.8