# Performance Plan

# Ireland

## Fourth Reference Period (2025-2029)

Status: Draft performance plan (Art. 12 of IR 2019/317)

Date of issue: 4.56E+04

# Table of Contents

# Signatories

| Performance plan details | |
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| State name | Ireland |
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| Date of adoption of Final Performance Plan | |

We hereby confirm that the present performance plan is consistent with the scope of Implementing Regulation (EU) No 2019/317 pursuant to Article 1 of Regulation (EU) No 2019/317 and Article 7 of Regulation (EC) No 549/2004.

| Name, title and signature of representative | |
|---|---|
| Ethna Brogan<br>DGCA<br>Department of Transport<br>Leeson Lane<br>D02 TR60 |  <br>*(electronically signed)* |

| Additional comments | |
|---|---|

| Document change record | | |
|---|---|---|
| Version | Date | Reason for change |
| 0.1 | 01/10/2014 | Completion of draft Performance Plan |
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| | | |
| | | |

# SECTION 1: INTRODUCTION

**1.1 The situation**

- 1.1.1 - List of ANSPs and geographical coverage of services
- 1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.
- 1.1.3 - Charging zones (see also 1.4-List of Airports)
- 1.1.4 - Other general information relevant to the plan

**1.2 - Traffic Forecasts**

- 1.2.1 - En route
- 1.2.2 - Terminal

**1.3 - Stakeholder consultation**

- 1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan
- 1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan
- 1.3.3 - Consultation of stakeholder groups on the performance plan

**1.4 - List of airports subject to the performance and charging Regulation**

- 1.4.1 - Airports as per Article 1(3) (IFR movements ≥ 80 000)
- 1.4.2 Other airports added on a voluntary basis as per Article 1(4)

**1.5 - Services under market conditions**

**1.6 - Process followed to develop and adopt a FAB Performance Plan**

**1.7 - Establishment and application of a simplified charging scheme**

- 1.7.1 - Scope of the simplified charging scheme
- 1.7.2 - Conditions for the application of the simplified charging scheme

**Annexes of relevance to this section**

- ANNEX C. CONSULTATION
- ANNEX D. LOCAL TRAFFIC FORECASTS
- ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME
- ANNEX Y. RESPONSES TO COMPLETENESS VERIFICATION

# 1 - INTRODUCTION

## 1.1 - The situation

| | |
|---|---|
| NSA(s) responsible for drawing up the Performance Plan | Irish Aviation Authority |

### 1.1.1 - List of ANSPs and geographical coverage and services

| | |
|---|---|
| Number of ANSPs | 2 |

| ANSP name | Services | Type of entity | Geographical scope |
|---|---|---|---|
| AirNav Ireland | ANS Provision | ATSP/CNSP | En Route air navigation services in the Shannon Flight Information Region (FIR) and Shannon Upper Information Region (UIR). Terminal services provided at Dublin, Shannon, and Cork airports. |
| Met Éireann Aviation Services Division (ASD) | Meteorological services for ANS | METSP | Shannon Flight Information Region (FIR) and Shannon Upper Information Region (UIR). Dublin, Shannon and Cork airports. |

**Cross-border arrangements for the provision of ANS services***

** To be reported in the performance plan: any cross-border area or group of adjacent cross-border areas of a size above 500 km $^2$, unless the area or group of areas concerned has fewer than 7,500 controlled flight movements on average per year*

| | |
|---|---|
| Number of cross-border area(s) where the ANSP(s) of the Member State provide(s) services in another State's charging zone(s) | 3 |

| Cross-border service provision in the charging zone(s) of another State | | |
|---|---|---|
| ANSP Name | Name of the cross-border area(s) | Charging zone in which services are provided |
| AirNav Ireland | Isle of Man (IOM) sector and L18 conditional route | London FIR |
| AirNav Ireland | BANBA Box | London FIR |
| AirNav Ireland | TAKAS Box | London FIR |

| | |
|---|---|
| Number of cross-border area(s) where ANSP(s) from another State provide(s) services in the charging zone(s) covered by the performance plan | 1 |

| Cross-border service provision in the charging zone(s) covered by the performance plan | | |
|---|---|---|
| ANSP Name | Name of the cross-border area(s) | Charging zone in which services are provided |
| NATS | Donegal Area | Shannon FIR |

### 1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.

| | |
|---|---|
| Number of other entities | 1 |

| Entity name | Domain of activity | Rationale for inclusion in the Performance Plan |
|---|---|---|
| Department of Transport | Member State | Qualifying entity incurring eligible costs as per Article 15(2) of Regulation (EC) No 550/2004. |

### 1.1.3 - Charging zones (see also 1.4-List of Airports)

| | | |
|---|---|---|
| **En-route** | Number of en-route charging zones | 1 |
| En-route charging zone 1 | Ireland | |
| **Terminal** | Number of terminal charging zones | 1 |
| Terminal charging zone 1 | Ireland - TCZ | |

### 1.1.4 - Other general information relevant to the plan

| Relevant local circumstances with high significance for performance target setting |
|---|
| The key overall picture as regards local circumstances is an identified need for AirNav Ireland to invest significantly in the ATM systems and in operational staffing levels (ATCOs and engineers) over RP4, to ensure that a high quality service can be delivered in a safe manner in RP4 and beyond. |

| Additional information |
|---|

This draft Performance Plan is accompanied by and should be read alongside the NSA's consultation documents published in January and July 2024, our decision document where we address the consultation reponses received from the regulated ANSPs, airspace users, and ANSP staff representatives, and our updated main Performance Plan financial model which shows the derivation of figures, charts, and forecasts. Further, we have also provided the draft and final efficiency assessment and operating cost forecasts in respect of AirNav Ireland carried out by CEPA/THINK, commissioned by the IAA as part of our consideration of the appropriate levels of efficient and eligible Determined Costs to set for RP4. The IAA has previously worked with the same consultants in the context of efficiency assessments of Dublin Airport, in our role in setting the price cap on airport charges at Dublin Airport. The fully unredacted versions of these reports can be provided to the PRB and/or the European Commission, if helpful.

This material is also published on the following page: https://www.iaa.ie/commercial-aviation/economic-regulation/air-navigation-charges/performance-plan-for-rp4.

Other material which is appended to the Performance Plan are the business plan submissions from the regulated entities and the consultation responses recieved in response to our Draft Decision, which are also published on that page.

## 1.2 - Traffic Forecasts

### 1.2.1 - En route

**En route Charging zone 1** **Ireland**

**En route traffic forecast** STATFOR February 2024 (Base)

| STATFOR February 2024 (Base) | 2022A | 2023A | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | CAGR 2024-2029 |
|---|---|---|---|---|---|---|---|---|---|
| IFR movements (thousands) | 582 | 664 | 701 | 723 | 738 | 752 | 769 | 782 | 2.2% |
| IFR movements (yearly variation in %) | | 14.1% | 5.4% | 3.2% | 2.0% | 1.9% | 2.3% | 1.7% | |
| En route service units (thousands) | 4,233 | 4,812 | 5,048 | 5,175 | 5,256 | 5,349 | 5,458 | 5,544 | 1.9% |
| En route service units (yearly variation in %) | | 13.7% | 4.9% | 2.5% | 1.6% | 1.8% | 2.0% | 1.6% | |

### 1.2.2 - Terminal

**Terminal Charging zone 1** **Ireland - TCZ**

**Terminal traffic forecast** STATFOR February 2024 (Base)

| STATFOR February 2024 (Base) | 2022A | 2023A | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | CAGR 2024-2029 |
|---|---|---|---|---|---|---|---|---|---|
| IFR movements (thousands) | 125 | 142 | 151 | 158 | 162 | 165 | 170 | 173 | 2.8% |
| IFR movements (yearly variation in %) | | 13.7% | 6.6% | 4.6% | 2.6% | 2.1% | 2.7% | 1.8% | |
| Terminal service units (thousands) | 170 | 193 | 205 | 215 | 221 | 226 | 233 | 237 | 3.0% |
| Terminal service units (yearly variation in %) | | 13.5% | 6.3% | 4.7% | 2.9% | 2.3% | 2.9% | 2.1% | |

## 1.3 - Stakeholder consultation

### 1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

| Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan |
|---|
| The stakeholders focused primarily on the proposed cost forecasts. Broadly, the ANSPs and the staff representatives stressed the need to take sufficient account of what they asserted would be factors driving cost increases over RP4, so as to ensure the required levels of safety and service quality would be maintained. Airspace users stressed the need for any cost increases to be proportionate, and to reflect an optimal blend between cost efficiency and capacity, while ensuring safety. Airspace users broadly supported the IAA's cost forecasts (which were lower than those of the ANSPs), such as in relation to ATCO and engineer staffing levels, but (in some cases) did not support any resulting increase in the forecast unit rates and/or considered certain aspects of our forecast assumptions were insufficiently challenging. There was general support for the overall approach taken by the IAA to developing the draft Performance Plan, and for the safety targets. As per our usual approach to setting regulatory price controls, the IAA took account of any specifics of these submissions, and where a compelling argument and/or evidence to adjust our proposal was provided, we adjusted our proposal accordingly. Further specific details on each submission made and the response of the IAA to that submission are available, by topic, in the Final Decision document, and in the final CEPA report. |

### 1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

| Topic of consultation | Applicable | Results of consultation |
|---|---|---|
| Establishment of determined costs included in the cost base for charges | Yes | The determined costs have changed in various ways based on the responses received from the ANSPs (AirNav Ireland and MET Eireann), the AirNav Ireland Staff Panel, and airspace users. Overall, operating costs are somewhat higher, and capital costs somewhat lower, in our Final Decision compared to our Draft Decision. Full detail, and the reasons why submissions were accepted or rejected, is set out in the CEPA final report, and the IAA's Final Decision document. Our overall approach remained unchanged, in that we aim to develop a cenreline forecast of efficient costs which is consistent with delivering a high-quality service in a safe manner. |
| New and existing investments, and in particular new major investments, including their expected benefits | Yes | There was general support for the proposed major investments, particularly given that, for RP4, the major investments relate to primarily to the ATM systems. AirNav Ireland stressed the importance of a step increase in engineering headcount to deliver the investment programme it has outlined for RP4, highlighting the primary drivers of this investment programme are resilience, compliance, and improving key metrics in the KPAs of safety, environment, cost and capacity.<br><br>The IAA proposed to reduce AirNav Ireland's proposed general investment programme by 20%, primarily as a result of doubts that the full programme is likely to be delivered within RP4, and also proposed to adjust a number of proposed asset life assumptions. Such a reduction was generally supported by airspace users (but not AirNav Ireland), and has been maintained in the Final Decision. |
| Charging policy | Yes | The charging policy is unchanged from the consultation. Airspace users were supportive of the return of capital costs associated with unspent RP3 capex being spread across the Terminal unit rate evenly throughout RP4 rather than front-loading, to create a smoother Terminal unit rate across the period. On the other hand, we proposed to frontload the return of En Route capital which, in that case, would offset the increase in the unit rate at the start of RP4, making for a smoother unit rate profile. |
| Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity | Yes | Airspace users supported the proposed assymetric approach whereby the maximum disadvantage would be set to 1%, and the maximum advantage would be set to zero. The AirNav Ireland staff representatives were concerned that the proposal could be counterproductive, as reduced revenue could lead to a 'negative feedback loop' whereby there would be less funds available to address the capacity issues that led to the targets not being met in the first place. The IAA decided not to change this proposal, for the reasons set out in section 14 of the Draft Decision and Final Decision documents. |
| Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity | Yes | AirNav Ireland did not support the application of a deadband of zero. The IAA has nonetheless decided to maintain this proposal in the Final Decision, for the reasons set out in section 14 of the Draft Decision and Final Decision documents. |
| Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity | Yes | The proposal to use CRSTMP-modulated pivot values for the Terminal incentive scheme was supported by AirNav Ireland, and not otherwise commented on substantively by other stakeholders. AirNav Ireland also advocated for the same approach for the En Route incentive scheme, however the IAA has decided to adopt Fixed pivot values in that case, for the reasons set out in section 14 of the Draft Decision and Final Decision documents. |
| Establishment or modification of charging zones | No | This was already the subject of consultation in the 'Issues Paper', in January 2024. No party was in favour of any changes. |
| Where applicable, values of the modulated parameters for the traffic risk sharing mechanism | No | AirNav Ireland supported the proposal to apply the default parameters. |
| Where applicable, decision to apply the simplified charging scheme | No | No such proposal was made, and no stakeholders suggested this approach. |
| Where applicable, decision to diverge from the STATFOR base forecast | No | Using the STATFOR base forecast of February 2024 was generally supported, although there was some suggestion that we should take account of the more recent short-term forecast update and/or airline fleet deployment plans. The IAA did not consider that there was sufficient justification to diverge from the STATFOR base forecasts, for the reasons set out in section 3 of the Draft Decision and Final Decision documents. |

### 1.3.3 - Consultation of stakeholder groups on the performance plan

| #1 - ANSPs | |
|---|---|
| Stakeholder group composition | AirNav Ireland, MET Eireann Aviation Services Division, CANSO |
| Dates of main meetings / correspondence | The main consultation meeting was held on 2 August. Responses to the Draft Decision were received from both ANSPs on 23rd August, which have been published alongside the IAA's Final Decision. |
| | All of the elements of the proposed Performance Plan were discussed. The main issues the ANSPs raised during the consultation process related to the |

| | |
|---|---|
| Main issues discussed | All of the elements of the proposed Performance Plan were discussed. The main issues the ANSPs raised during the consultation process related to the operating cost forecasts proposed by the IAA in respect of both ANSPs, which they considered to be insufficient and/or excessively challenging in a number of respects. In the case of AirNav Ireland, it also submitted that our proposed capital cost forecasts were too low, because the proposed WACC and the new capex allowances are too low, and it disputed a number of our proposed asset life assumptions. |
| Actions agreed upon | The IAA agreed to take into account these submissions, and to make changes to the proposed Performance Plan if sufficient evidence that this is warranted is provided in the written submission. |
| Points of disagreement and reasons | The level of the cost forecasts, as well as the proposed incentive schemes, as outlined above. |
| Final outcome of the consultation | The operating cost forecasts have been updated to reflect some of the points raised by the ANSPs, and are now somewhat higher overall, as detailed in sections 4 and 7 of the Final Decision document and the CEPA final report, although remaining below the entities' Business Plan submissions. We do not agree with AirNav Ireland that the proposed capital costs were too low, as set out in sections 5 and 6 of the Final Decision document. |

| Additional comments |
|---|
| |

| **#2 - Airspace Users** | |
|---|---|
| Stakeholder group composition | IATA, Aer Lingus, IAG, Ryanair, Swiss Air |
| Dates of main meetings / correspondence | The main consultation meeting was held on 2 August. Responses to the Draft Decision were received on 23rd August, which have been published alongside the IAA's Final Decision. |
| Main issues discussed | All of the elements of the proposed Performance Plan were discussed. The main topics raised by airspace users were the justifications for the proposed real increase in ANSP operating costs and the need to ensure that any required increases in staffing levels were efficient/proportionate. There was also discussion on the necessity for certain Capex projects and whether the IAA's 20% proposed reduction in the investment programme is sufficient, and on the forecast unit rates and the timing of adjustments. |
| Actions agreed upon | The IAA agreed to take into account these submissions, and to make changes to the proposed Performance Plan if sufficient evidence that this is warranted is provided in the written submissions. |
| Points of disagreement and reasons | The main point of disagreement related to the forecast increase in the En Route unit rate. |
| Final outcome of the consultation | We agree that any cost increases need to be proportionate and reflect efficient service delivery. Some of the operating cost forecast input assumptions have been updated to reflect some of the points raised by the airspace users, although ultimately the final opex forecasts are somewhat higher as a result of the submissions from the ANSPs, as detailed in sections 4 and 7 of the Final Decision document and the CEPA final report, although remaining below the entities' Business Plan submissions. On the other hand, capital costs forecasts are somewhat lower than was proposed in the Draft Decision, as set out in sections 5 and 6 of the Final Decision document. |

| Additional comments |
|---|
| |

| **#3 - Professional staff representative bodies** | |
|---|---|
| Stakeholder group composition | AirNav Ireland Staff Panel, ATCEUC |
| Dates of main meetings / correspondence | The main consultation meeting was held on 2 August. A response to the Draft Decision was received from the staff panel on 23rd August, which has been published alongside the IAA's Final Decision. |
| Main issues discussed | All of the elements of the proposed Performance Plan were discussed. The main issues the staff representatives raised during the consultation process related to the operating cost forecasts proposed by the IAA, which they also considered to be insufficient and/or excessively challenging in a number of respects. They also considered that the capacity targets proposed were too stretching, and that we should instead use the national reference values. |
| Actions agreed upon | The IAA agreed to take into account these submissions, and to make changes to the proposed Performance Plan if sufficient evidence that this is warranted is provided in the written submissions. |
| Points of disagreement and reasons | The operating cost forecasts, and the proposed capacity targets, as outlined above. |
| Final outcome of the consultation | The IAA made a number of adjustments to the operating cost forecast input assumptions, but not to the extent suggested by the staff representatives. The IAA did not change the proposed capacity targets. |

| Additional comments |
|---|
| |

| **#4 - Airport operators** | |
|---|---|
| Stakeholder group composition | None |
| Dates of main meetings / correspondence | |
| Main issues discussed | |
| Actions agreed upon | |
| Points of disagreement and reasons | |
| Final outcome of the consultation | |

| Additional comments |
|---|
| |

| **#5 - Airport coordinator** | |
|---|---|
| Stakeholder group composition | No |
| Dates of main meetings / correspondence | |

| | |
|---|---|
| Main issues discussed | |
| Actions agreed upon | |
| Points of disagreement and reasons | |
| Final outcome of the consultation | |

| Additional comments |
|---|
| |

| **#6 - Other (specify)** | |
|---|---|
| Stakeholder group composition | PRB, EUROCONTROL, Irish Department of Transport |
| Dates of main meetings / correspondence | Attended the meeting of 2 August in an observer capacity. |
| Main issues discussed | n/a |
| Actions agreed upon | n/a |
| Points of disagreement and reasons | n/a |
| Final outcome of the consultation | n/a |

| Additional comments |
|---|
| |

## 1.4 - List of airports subject to the performance and charging Regulation

### 1.4.1 - Airports as per Article 1(3) (IFR movements ≥ 80 000)

| ICAO code | Airport name | Charging Zone | IFR air transport movements | | | |
|---|---|---|---|---|---|---|
| | | | 2021 | 2022 | 2023 | Average |
| EIDW | Dublin | Ireland - TCZ | 91,015 | 211,367 | 240,694 | 181,025 |

### 1.4.2 Other airports added on a voluntary basis as per Article 1(4)

| Number of airports | 2 | | |
|---|---|---|---|
| ICAO code | Airport name | Charging Zone | Additional information |
| EICK | Cork | Ireland - TCZ | |
| EINN | Shannon | Ireland - TCZ | |

| Additional comments |
|---|
| No change from the Revised RP3 Performance Plan with regard to the continued inclusion of Cork and Shannon in a single Terminal Charging Zone alongside Dublin Airport. |

## 1.5 - Services under market conditions

| | |
|---|---|
| Number of services under market conditions | 0 |

## 1.6 - Process followed to develop and adopt a FAB Performance Plan

| Description of the process |
| --- |
| Not applicable |

## 1.7 - Establishment and application of a simplified charging scheme

| | |
|---|---|
| Is the State intending to establish and apply a simplified charging scheme for any charging zone/ANSP? | No |

# SECTION 2: INVESTMENTS

**2.0 - Summary of investments**

**2.1 - Investments - AirNav Ireland**

- 2.1.1 - Summary of investments
- 2.1.2 - Detail of new major investments
- 2.1.3 - Other new and existing investments

**2.2 - Investments - Met Éireann Aviation Services Division (ASD)**

- 2.2.1 - Summary of investments
- 2.2.2 - Detail of new major investments
- 2.2.3 - Other new and existing investments

**Annexes of relevance to this section**

ANNEX E. INVESTMENTS

NOTE: The requirements as per Annex II, 2.2.(c) are addressed in item 4.1.3

## 2.0 - Summary of Investments

**AirNav Ireland**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 |
| New major investments for RP4 (Table A) | 118,100 | 92,191 | Average NBV | 0 | 3,413 | 13,305 | 18,839 | 44,964 |
| | | | Depreciation | 0 | 349 | 2,408 | 3,038 | 5,773 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Other new investments for RP4 (below 5M€) (Table B) | 93,253 | 74,602 | Average NBV | 35,548 | 51,558 | 71,294 | 78,243 | 86,796 |
| | | | Depreciation | 3,397 | 4,947 | 6,008 | 6,601 | 7,510 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Major investments from RP3 (Tables C + D) | 110,781 | 101,047 | Average NBV | 59,278 | 60,811 | 56,211 | 52,576 | 47,743 |
| | | | Depreciation | 4,392 | 4,818 | 5,174 | 5,254 | 4,775 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Existing investments from previous reference periods (Table E) | 7,844 | 6,275 | Average NBV | 41,761 | 40,394 | 44,741 | 48,532 | 26,731 |
| | | | Depreciation | 4,541 | 3,974 | 3,041 | 2,459 | 1,560 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Total for the ANSP in RP4 | **329,978** | **274,115** | Average NBV | **136,587** | **156,176** | **185,550** | **198,190** | **206,233** |
| | | | Depreciation | **12,329** | **14,087** | **16,630** | **17,352** | **19,618** |
| | | | Cost of leasing | **0** | **0** | **0** | **0** | **0** |

**Met Éireann Aviation Services Division (ASD)**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 |
| New major investments for RP4 (Table A) | 0 | 0 | Average NBV | 0 | 0 | 0 | 0 | 0 |
| | | | Depreciation | 0 | 0 | 0 | 0 | 0 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Other new investments for RP4 (below 5M€) (Table B) | 34,722 | 6,910 | Average NBV | 264 | 270 | 398 | 368 | 513 |
| | | | Depreciation | 142 | 204 | 521 | 548 | 877 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Major investments from RP3 (Tables C + D) | 0 | 0 | Average NBV | 0 | 0 | 0 | 0 | 0 |
| | | | Depreciation | 0 | 0 | 0 | 0 | 0 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Existing investments from previous reference periods (Table E) | 13,642 | 2,374 | Average NBV | 354 | 233 | 0 | 0 | 0 |
| | | | Depreciation | 475 | 475 | 233 | 0 | 0 |
| | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 |
| Total for the ANSP in RP4 | **48,364** | **9,284** | Average NBV | **618** | **503** | **398** | **368** | **513** |
| | | | Depreciation | **616** | **679** | **754** | **548** | **877** |
| | | | Cost of leasing | **0** | **0** | **0** | **0** | **0** |

## 2.1 - Investments - AirNav Ireland

*Complementary information may be provided in* ***ANNEX E***

### 2.1.1 - Investments from RP4 (000's)

| **Table A - Number of new major investments (i.e. above 5 M€) for RP4** | 6 |
|---|---|

| Ref. # | Name of new major investments (i.e. above 5 M€) for RP4 | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| A1 | COOPANS TopSky ATC One | 54,900 | 41,631 | Average NBV | 0 | 2,532 | 9,590 | 8,728 | 30,353 | 12 years | 2029 | 75% | 25% |
| | | | | Depreciation | 0 | 0 | 862 | 862 | 2,817 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| A2 | Radar Upgrade Phase 2 | 22,000 | 17,600 | Average NBV | 0 | 416 | 1,962 | 2,676 | 2,873 | 12 years | 2026 | 75% | 25% |
| | | | | Depreciation | 0 | 181 | 874 | 1,265 | 1,467 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| A3 | Ballycasey Building Extension | 12,200 | 9,760 | Average NBV | 0 | 0 | 0 | 0 | 2,416 | 25 years | 2029 | 100% | 0% |
| | | | | Depreciation | 0 | 0 | 0 | 0 | 98 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| A4 | ASMGCS | 12,000 | 9,600 | Average NBV | 0 | 0 | 0 | 0 | 2,295 | 10 years | 2029 | 0% | 100% |
| | | | | Depreciation | 0 | 0 | 0 | 0 | 480 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| A5 | CASDS | 9,500 | 7,600 | Average NBV | 0 | 465 | 1,753 | 1,585 | 1,417 | 8 years for simulators, 12 years for | 2026 | 75% | 25% |
| | | | | Depreciation | 0 | 168 | 671 | 671 | 671 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| A6 | Dublin ATC Building Extension | 7,500 | 6,000 | Average NBV | 0 | 0 | 0 | 5,850 | 5,610 | 25 years | 2028 | 75% | 25% |
| | | | | Depreciation | 0 | 0 | 0 | 240 | 240 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| **Subtotal of new major investments from RP4** | | **118,100** | **92,191** | **Average NBV** | **0** | **3,413** | **13,305** | **18,839** | **44,964** | | | | |
| | | | | **Depreciation** | **0** | **349** | **2,408** | **3,038** | **5,773** | | | | |
| | | | | **Cost of leasing** | **0** | **0** | **0** | **0** | **0** | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

**Table B - Other new investments (below 5M€) from RP4**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| **Subtotal of other new investments from RP4** | 93,253 | 74,602 | **Average NBV** | **35,548** | **51,558** | **71,294** | **78,243** | **86,796** | | | 70% | 30% |
| | | | **Depreciation** | **3,397** | **4,947** | **6,008** | **6,601** | **7,510** | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RP4 | | | Cost of leasing | | | | | | | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

## 2.1.2 - Investments from RP3 (000's)

| Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan | 10 |
|---|---|

| Ref. # | Name of major investments (i.e. above 5 M€) stemming from RP3 performance plan | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| C1 | COOPANS Builds 3.6 to 3.8 budget | 8,000 | 6,400 | Average NBV | 4,751 | 3,863 | 2,976 | 2,088 | 1,200 | 8 years | 2021-2023 | 75% | 25% |
| | | | | Depreciation | 888 | 888 | 888 | 888 | 888 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C2 | New Dublin Radar 2 Replacement | 5,000 | 4,000 | Average NBV | 2,357 | 2,191 | 2,026 | 1,860 | 1,695 | 15 years | 2022 | 75% | 25% |
| | | | | Depreciation | 165 | 165 | 165 | 165 | 165 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C3 | NAVAIDS replacement program | 9,000 | 7,200 | Average NBV | 4,210 | 6,458 | 5,952 | 5,365 | 4,778 | 12 years | 2021-2024 | 0% | 100% |
| | | | | Depreciation | 263 | 425 | 587 | 587 | 587 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C4 | Dublin Tower - Building | 36,391 | 36,391 | Average NBV | 33,100 | 32,189 | 31,278 | 30,367 | 29,456 | 40 years | 2021 | 0% | 100% |
| | | | | Depreciation | 911 | 911 | 911 | 911 | 911 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C5 | Dublin Tower - Equipment | 13,466 | 13,466 | Average NBV | 6,939 | 6,006 | 4,706 | 3,406 | 2,164 | 12 years | 2021 | 0% | 100% |
| | | | | Depreciation | 1,267 | 1,300 | 1,300 | 1,300 | 1,184 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C6 | COOPANS 2019 Roadmap Builds | 8,000 | 6,400 | Average NBV | 2,360 | 4,754 | 4,136 | 4,564 | 3,737 | 8 years | 2023-2024 | 75% | 25% |
| | | | | Depreciation | 290 | 521 | 715 | 828 | 828 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C7 | New En Route Contingency Centre at Ballygireen | 12,255 | 12,255 | Average NBV | 4,274 | 4,153 | 4,033 | 3,912 | 3,791 | Building 40 years & ATM systems 12 | 2020 | 100% | 0% |
| | | | | Depreciation | 516 | 516 | 516 | 483 | 121 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C8 | Plant upgrade works | 7,169 | 5,735 | Average NBV | 851 | 792 | 733 | 675 | 616 | 8 years | 2023 | 71% | 29% |
| | | | | Depreciation | 59 | 59 | 59 | 59 | 59 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C9 | Emergency Air Situation Display System (EASDS) Replacement | 6,500 | 5,200 | Average NBV | | | | | | 20 years | 2021-2024 | 75% | 25% |
| | | | | Depreciation | 0 | 0 | 0 | 0 | 0 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| C10 | Climate Action Plan (Sustainability Management Plan) | 5,000 | 4,000 | Average NBV | 436 | 404 | 371 | 339 | 306 | 15 years | 2021-2024 | 75% | 25% |
| | | | | Depreciation | 33 | 33 | 33 | 33 | 33 | | | | |
| | | | | Cost of leasing | | | | | | | | | |
| **Subtotal of major investments from RP3 performance plan** | | **110,781** | **101,047** | **Average NBV** | **59,278** | **60,811** | **56,211** | **52,576** | **47,743** | | | | |
| | | | | **Depreciation** | **4,392** | **4,818** | **5,174** | **5,254** | **4,775** | | | | |
| | | | | **Cost of leasing** | **0** | **0** | **0** | **0** | **0** | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

| Table D - Number of major investments (i.e. above 5 M€) added during RP3 | 0 |
|---|---|

## 2.1.3 - Existing investments from previous reference periods (000's)

**Table E - Existing investments from previous RPs**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| **Subtotal of existing investments from previous RPs** | 7,844 | 6,275 | **Average NBV** | 41,761 | 40,394 | 44,741 | 48,532 | 26,731 | | | 73% | 27% |
| | | | **Depreciation** | 4,541 | 3,974 | 3,041 | 2,459 | 1,560 | | | | |
| | | | **Cost of leasing** | | | | | | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

## 2.1.4 - Detail of new major investments for RP4 from table A (000's)

*NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives on new major investments.*

| **Name of new major investment 1** | ***COOPANS TopSky ATC One*** | | Reference # | ***A1*** | Total value of the asset | | | ***54,900*** |
|---|---|---|---|---|---|---|---|---|
| Main category of the investment | New ATM system | Overhaul of existing ATM system | Other ATM | CNS | Infrastructure | Ancilliary | Other | |
| | | *X* | | | | | | |
| Description of the asset | The COOPANS TopSky ATC One platform will replace the existing COOPANS ATM platform and associated software and hardware. This major system upgrade is required due to obsolescence, and to ensure COOPANS members transition towards the Digital European Sky. | | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference | Yes | Yes, this investment is partially required for CP1 compliance and in particular in relation to AF5 and AF6. | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | The modernization effort is intended to bring AirNav Ireland, working with its COOPANS partners, in line with the European ATM Master Plan and the DES initiative. These initiatives aim to harmonize and enhance air traffic management across Europe, leveraging digital technologies to improve efficiency, safety, and sustainability in aviation operations. | | | | | | | |
| Level of impact of the investment | Network level | Yes | | | | | | |
| | Local level | Yes | | | | | | |
| Quantitative impact per KPA | Safety | Environment | Capacity | Cost Efficiency | | | | |
| | Significant | Significant | Major | Major | | | | |
| Benefits for airspace users and results of the consultation of airspace users' representatives | Stakeholders supported this proposal during the RP4 Consultation Meeting. It ensures full compliance with CP1 AF5 and AF6, and introduces automation and other efficiencies. For full detail of the intended deliverables under the heading of each KPA, please refer to the appendix to the IAA's Draft Decision document, as well as AirNav Ireland's Business Plan submission. | | | | | | | |
| Joint investment / partnership | Yes | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | This is a joint COOPANS Alliance project. | | | | | |

| **Name of new major investment 2** | ***Radar Upgrade Phase 2*** | | | Reference # | ***A2*** | Total value of the asset | | | ***22,000*** |
|---|---|---|---|---|---|---|---|---|---|
| Main category of the investment | New ATM system | Overhaul of existing ATM system | Other ATM | CNS | Infrastructure | Ancilliary | Other | | |
| | | | | X | *X* | | | | |
| Description of the asset | The upgrade of the remaining four radar sites (Shannon, Cork, Dublin Radar 3, Mount Gabriel 2) to RSM 970 NG models, including the three combined airport radars. The radar subsystems, such as radar antennas, radomes and ancillaries at all 8 radar sites will be addressed. | | | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference | No | | | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | | | | | | | | | |
| Level of impact of the investment | Network level | Yes | | | | | | | |
| | Local level | Yes | | | | | | | |
| Quantitative impact per KPA | Safety | Environment | Capacity | Cost Efficiency | | | | | |
| | Major | Significant | Significant | Significant | | | | | |
| Results of the consultation of airspace users' representatives | This project was outlined in the consultation material. It was not the subject of any substantive submissions from airspace users' representatives. | | | | | | | | |
| Joint investment / partnership | No | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | | | | | | | |

| **Name of new major investment 3** | ***Ballycasey Building Extension*** | | | Reference # | ***A3*** | Total value of the asset | | | ***12,200*** |
|---|---|---|---|---|---|---|---|---|---|
| Main category of the investment | New ATM system | Overhaul of existing ATM system | Other ATM | CNS | Infrastructure | Ancilliary | Other | | |
| | | | | | *X* | | | | |
| Description of the asset | Expansion of the Ballycasey Area Control Centre building, which opened in 2004, due to current space limitations. The project is intended to address space requirements for increased staffing numbers (the requirement for which has been outlined elsewhere) and new operational equipment installations. The new space will aim to utilise existing infrastructure by expansion of equipment cabinets into adjacent rooms which necessitates providing new space for support services and staff. | | | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference | No | | | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | | | | | | | | | |
| Level of impact of the investment | Network level | Yes | | | | | | | |
| | Local level | Yes | | | | | | | |
| Quantitative impact per KPA | Safety | Environment | Capacity | Cost Efficiency | | | | | |
| | Negligeable | Negligeable | Significant | Significant | | | | | |
| Results of the consultation of airspace users' representatives | This project was outlined in the consultation material. It was not the subject of any substantive submissions from airspace users' representatives. | | | | | | | | |

| | | | |
|---|---|---|---|
| Joint investment / partnership | No | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Name of new major investment 4** | ***ASMGCS*** | | Reference # | ***A4*** | Total value of the asset | | | ***12,000*** |
| Main category of the investment | | New ATM system | Overhaul of existing ATM system | Other ATM | CNS | Infrastructure | Ancilliary | Other |
| | | *X* | | | | *X* | | |
| Description of the asset | | Advanced Surface Movements and Guidance Control System (ASMGCS) is a system used at airports to provide routing, guidance and surveillance for the control of aircraft and vehicles. This project is to deliver the infrastructure and technology to provide A-SMGCS at Cork and Shannon Airports (it is already in place at Dublin Airport). | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference | No | This investment is recommended as best practice by EUROCONTROL/EASA. | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | | This project aligns with one of the Strategic Objectives in the updated Master Plan SDO#1: Alert for reduction of collision risks on taxiways and runways. | | | | | | |
| Level of impact of the investment | Network level | No | | | | | | |
| | Local level | Yes | | | | | | |
| Quantitative impact per KPA | | Safety | Environment | Capacity | Cost Efficiency | | | |
| | | Major | Negligeable | Significant | Negligeable | | | |
| Results of the consultation of airspace users' representatives | | It is recognised that this investment is recommended as best practice by EUROCONTROL / EASA. It is also pertinent in light of the critical incident at Haneda Airport in January 2024. | | | | | | |
| Joint investment / partnership | Yes | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | | This will be a joint initiative with the aerodrome operators, who will need to invest separately in the airfield infrastruture and to ensure compatible vehicles. | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Name of new major investment 5** | ***CASDS*** | | Reference # | ***A5*** | Total value of the asset | | | ***9,500*** |
| Main category of the investment | | New ATM system | Overhaul of existing ATM system | Other ATM | CNS | Infrastructure | Ancilliary | Other |
| | | *X* | *X* | | | | | |
| Description of the asset | | This project provides for the replacement of the current Emergency Air Situation Display System (EASDS), which was introduced into operational service in 2008. It is used as a contingency Air Traffic Control (ATC) system in the event of a major failure of the COOPANS system. | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference | No | | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | | | | | | | | |
| Level of impact of the investment | Network level | | | | | | | |
| | Local level | | | | | | | |
| Quantitative impact per KPA | | Safety | Environment | Capacity | Cost Efficiency | | | |
| | | Major | Major | Major | Major | | | |

| | | | |
|---|---|---|---|
| Results of the consultation of airspace users' representatives | | This project was outlined in the consultation material, but was not the subject of any substantive submissions from airspace users' representatives. AirNav Ireland referred to the several hour long ATM system outage experienced by NATS in 2023, and that IATA had estimated the cost to the industry in the region of €100m. AirNav Ireland said that this investment will go a long way to avoid such events, and therefore represents 'considerable value for money'. | |
| Joint investment / partnership | No | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Name of new major investment 6** | ***Dublin ATC Building Extension*** | | Reference # | ***A6*** | Total value of the asset | | | ***7,500*** |
| Main category of the investment | New ATM system | Overhaul of existing ATM system | | Other ATM | CNS | Infrastructure | Ancilliary | Other |
| | | | | | | *X* | | |
| Description of the asset | This project provides for the construction of an extension to the existing ACC building, or a separate block (final solution remains to be determined) due to current space limitations, again in the context of the intended increase in operational staffing levels outlined elsewhere in the performance plan documentation. The new space is to consist of strategic parts stores, relocation of TCD from existing equipment room, office accommodation and training rooms for new incoming engineering staff, canteen facilities for increased site numbers. | | | | | | | |
| Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?<br>If yes please provide description/reference | No | | | | | | | |
| For investments in new ATM systems and major overhauls of ATM systems, information on the consistency of the investment with the European ATM Master Plan | | | | | | | | |
| Level of impact of the investment | Network level | No | | | | | | |
| | Local level | Yes | | | | | | |
| Quantitative impact per KPA | Safety | Environment | | Capacity | Cost Efficiency | | | |
| | Negligeable | N/A | | Significant | Negligeable | | | |
| Results of the consultation of airspace users' representatives | This project was outlined in the consultation material. It was not the subject of any substantive submissions from airspace users' representatives. | | | | | | | |
| Joint investment / partnership | No | If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives | | | | | | |

## 2.1.5 - Details on other new investments for RP4 from table B

| Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period |
|---|
| Detail of other new investments (as well as further detail on the major investments outlined above) is outlined in sections 6 and appendix 1 of the IAA's Draft Decision and Final Decision documents, the appendices to AirNav Ireland's Business Plan submission, as well the 'AirNav Capex (IAA)' tab of the Performance Plan financial model. |

| Ref. | Name of other new | Master Plan | Total value of the asset (capex or | Value of the assets allocated to ANS in the scope of the | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | |
|---|---|---|---|---|---|---|

| # | investments for RP4 | reference (if any) | contractual leasing value) (in **national currency**) | performance plan (in **national currency**) | | 2025 | 2026 | 2027 | 2028 | 2029 | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B1 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B2 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B3 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B4 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B5 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B6 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B7 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B8 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B9 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |
| B10 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |

## 2.2 - Investments - Met Éireann Aviation Services Division (ASD)

*Complementary information may be provided in* ***ANNEX E***

### 2.2.1 - Investments from RP4 (000's)

| **Table A - Number of new major investments (i.e. above 5 M€) for RP4** | 0 |
|---|---|

**Table B - Other new investments (below 5M€) from RP4**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| **Subtotal of other new investments from RP4** | 34,722 | 6,910 | **Average NBV** | 264 | 270 | 398 | 368 | 513 | | | 80% | 20% |
| | | | **Depreciation** | 142 | 204 | 521 | 548 | 877 | | | | |
| | | | **Cost of leasing** | 0 | 0 | 0 | 0 | 0 | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

### 2.2.2 - Investments from RP3

| **Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan** | 0 |
|---|---|

| **Table D - Number of major investments (i.e. above 5 M€) added during RP3** | 0 |
|---|---|

### 2.2.3 - Existing investments from previous reference periods (000's)

**Table E - Existing investments from previous RPs**

| | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Lifecycle (Amortisation period in years) | Planned date of entry into operation | Allocation (%)* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2025 | 2026 | 2027 | 2028 | 2029 | | | En route* | Terminal* |
| **Subtotal of existing investments from previous RPs** | 13,642 | 2,374 | **Average NBV** | 354 | 233 | 0 | 0 | 0 | | | 80% | 20% |
| | | | **Depreciation** | 475 | 475 | 233 | 0 | 0 | | | | |
| | | | **Cost of leasing** | 0 | 0 | 0 | 0 | 0 | | | | |

** En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.*

### 2.2.4 - Detail of new major investments for RP4 from table A

*Not applicable*

## 2.2.5 - Details on other new investments for RP4 from table B (000's)

| Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period |
|---|
| A number of capital investment projects are planned for the coming years in the context of the SES and ICAO regulatory frameworks and with the intention of improving quality of service. While some of the capital projects are focused specifically on supporting aeronautical meteorological functions, others are cross cutting with planned investments intended to also support Met Éireann activities along with the aviation functions. |

| Ref. # | Name of other new investments for RP4 | Master Plan reference (if any) | Total value of the asset (capex or contractual leasing value) (in **national currency**) | Value of the assets allocated to ANS in the scope of the performance plan (in **national currency**) | Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in **national currency**) | | | | | | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 2025 | 2026 | 2027 | 2028 | 2029 | |
| B1 | Met Self Briefing Upgrade | | 150 | 150 | Average NBV | 120 | 90 | 60 | 30 | | This project, originally part of the METCOM project, will allow aviation users of Met Éireann's meteorological services to more readily access bespoke regulated data in a user-friendly configurable environment. |
| | | | | | Depreciation | 30 | 30 | 30 | 30 | 30 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B2 | RADAR Upgrades | | 19,230 | 2,633 | Average NBV | 312 | 299 | 1,207 | 1,803 | 2,372 | The Met Éireann RADAR network will be upgraded from its current 2 sites to 6 sites which will significantly increase the domain covered within the Shannon FIR and provide ATS with the capability, through implementation of aviation specific software modules, to overlay RADAR data onto ATM workstations hence improving both situational awareness and decision making by ATCOs. |
| | | | | | Depreciation | 13 | 13 | 51 | 78 | 105 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B3 | METCOM | | 1,860 | 458 | Average NBV | 413 | 367 | 321 | 275 | 229 | The METCOM project will upgrade aviation messaging systems to ensure regulatory compliance and enable compliance with CP1. |
| | | | | | Depreciation | 46 | 46 | 46 | 46 | 46 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B4 | AUTO OBS | | 500 | 500 | Average NBV | 0 | 438 | 375 | 313 | 250 | Investment in additional visibility observing sites in the vicinity of the major airports will provide the aviation observers and forecast teams of early warning of degenerating visibility and cloud ceiling conditions through the deployment of visual aid sensors. |
| | | | | | Depreciation | 0 | 63 | 63 | 63 | 63 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| | | | | | Average NBV | 242 | 0 | 0 | 0 | 0 | This is a carryover project from RP3. In order to strengthen Business Continuity in Met Éireann, there was a |
| | | | | | Depreciation | 242 | 242 | 0 | 0 | 0 | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| B5 | IMaMS | | 6,960 | 1,210 | Cost of leasing | 0 | 0 | 0 | 0 | 0 | requirement for ICT Geo-resilience in conjunction with a Business Continuity Management (BCM) operational office. This required an ICT solution to enable diversification and replication across two ICT sites in order to facilitate DR and meet Recovery Time Objectives and Recovery Point Objectives for products and services. |
| B6 | IMaMS 2 | | 8,000 | 1,392 | Average NBV | 0 | 0 | 1,114 | 835 | 557 | This is a continuation of the IMaMs project and provides consisten Business Continuity for Met ASD. This phase will take over from IMaMS and ensure no gap in cover. |
| | | | | | Depreciation | 0 | 0 | 278 | 278 | 278 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B7 | HPC 1 | | 6,690 | 1,163 | Average NBV | 466 | 233 | 0 | 0 | 0 | This is a carryover project from RP3. The implementation of HPC by Met Éireann is required in order to develop capacity to enable developments in forecast services such as nowcasting and the use of high resolution ensemble forecasts for the TMA. The improved forecasting capability will also support improvements to forecast services relating to high impact and extreme weather and support safety and efficiency in airport management and ATM. |
| | | | | | Depreciation | 233 | 233 | 233 | 0 | 0 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B8 | HPC 2 | | 8,690 | 1,512 | Average NBV | 0 | 0 | 0 | 0 | 1,210 | This is a new project for RP4 and consists of a continuation of the HPC1. HPC capacity is being developed in collaboration with other modern European Meteorological Services to ensure value for money and to optimise the investment potential. |
| | | | | | Depreciation | 0 | 0 | 0 | 0 | 302 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B9 | MET Data Visualisation Project | | 800 | 264 | Average NBV | 211 | 158 | 106 | 53 | 0 | The purpose of this project is to procure and enter into a new contract for a Meteorological Data Visualisation and Production System. Such a system is a core requirement of the Forecasting Division, and it would not be possible to produce quality forecasts, including aviation forecasts, without such a system. |
| | | | | | Depreciation | 53 | 53 | 53 | 53 | 53 | |
| | | | | | Cost of leasing | 0 | 0 | 0 | 0 | 0 | |
| B10 | | | | | Average NBV | | | | | | |
| | | | | | Depreciation | | | | | | |
| | | | | | Cost of leasing | | | | | | |

# SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

**3.1 - Safety targets**

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

**3.2 - Environment targets**

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

**3.3 - Capacity targets**

3.3.1 - Capacity KPI #1: En route ATFM delay per flight
3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight
3.3.3 - ATCO Planning

**3.4 - Cost-efficiency targets**

3.4.1 - Cost-efficiency KPI #1: Determined unit cost (DUC) for en route ANS
En Route Charging Zone #x
3.4.2 - Cost-efficiency KPI #2: Determined unit cost (DUC) for terminal ANS
Terminal Charging Zone #x
3.4.3 - Cost allocation ATSP/CNSP
ATSP/CNSP #x
3.4.4 - Cost allocation METSP
METSP #x
3.4.5 - Cost allocation NSA
3.4.6 - Determined costs assumptions
ANSP #x
3.4.7 - Pension assumptions
3.4.8 - Interest rate assumptions for loans financing the provision of air navigation services
3.4.9 -Additional determined costs related to measures necessary to achieve the en route capacity targets
3.4.10 - Restructuring costs

**3.5 - Additional KPIs / Targets**

**3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs**

3.6.1 - Interdependencies and trade-offs between safety and other KPAs
3.6.2 - Interdependencies and trade-offs between capacity and environment
3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity
3.6.4 - Other interdependencies and trade-offs

**Annexes of relevance to this section**

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
ANNEX F. BASELINE VALUES (COST-EFFICIENCY)
ANNEX H. RESTRUCTURING MEASURES AND COSTS
ANNEX M. COST ALLOCATION
ANNEX J. OPTIONAL KPIs AND TARGETS
ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS
ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS
ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

# SECTION 3.1: SAFETY KPA

**3.1 - Safety targets**

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

a) Safety national performance targets

b) Justifications for the local safety performance targets

c) Main measures put in place to achieve the safety performance targets

**Annexes of relevance to this section**

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

# 3 - PERFORMANCE TARGETS AT LOCAL LEVEL

## 3.1 - Safety targets

### 3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

**a) Safety performance targets**

| | | |
|---|---|---|
| | Number of Air Traffic Service Providers | 1 |

| | | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| | | Target | Target | Target | Target | Target |
| **AirNav Ireland** | Safety policy and objectives | C | C | C | C | C |
| | Safety risk management | D | D | D | D | D |
| | Safety assurance | C | C | C | C | C |
| | Safety promotion | C | C | C | C | C |
| | Safety culture | C | C | C | C | C |
| | Additional comments | | | | | |

**b) Justifications for the local safety performance targets**

The RP4 Union-wide targets for the five EoSM components are unchanged from RP3. However, the methodology underlying the measurement of the KPI has been updated by EASA. The conditions to be met by ANSPs for reaching a certain target level have become more stringent in comparison to RP3. As a result, the safety performance target standards for RP4 are not directly comparable with those of RP3, and equate to an improvement in safety management.

In 2022, AirNav Ireland met the EoSM target of 'Managed' (level C) in Safety Policy and Objectives, Safety Assurance, Safety Promotion and Safety Culture. However, performance was downgraded in relation to the EoSM target for Safety Risk Management from 'Assured' (level D) to 'Managed' (level C). This target was again missed in 2023.

The IAA has set targets for AirNav Ireland which are consistent with the Union-wide targets during RP4, by ensuring EoSM that is at least 'Level D' in the objective of safety risk management and at least 'Level C' in the other safety objectives of culture, policy and objectives, promotion and assurance. These targets are set for each year of RP4, meaning that the standards are to be achieved by 2025 rather than by 2029. For further details, please refer to section 9 of the IAA's Draft Decision and Final Decision documents.

** Refer to Annex O, if necessary.*

**c) Main measures put in place to achieve the local safety performance targets**

To assess the compliance of AirNav Ireland with the required level of safety performance, the IAA will oversee AirNav Ireland to provide assurance of the effectiveness of the level of safety management. This oversight, based on risked based principles, will include, inter alia, audits, inspections, reviews of safety performance data and reviews of changes to the functional system.

The IAA will continue to conduct an annual review of the EoSM questionnaire, based on actual outcomes each year, and impose remedial measures in any areas of under-performance.

In its RP4 Business Plan submission, AirNav Ireland has set out a detailed description of its safety management processes, safety culture, and the measures it plans to undertake in RP4 in order to ensure compliance with the required level of safety performance, including in relation to its Human Factors (Fatigue, Stress and Roster management) policy, Safety Culture, and Just Culture policy.

** Refer to Annex O, if necessary.*

# SECTION 3.2: ENVIRONMENT KPA

**3.2 - Environment targets**

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

a) Environment national performance targets

b) Justifications for the local environment performance targets

c) Main measures put in place to achieve the environment performance targets

**Annexes of relevance to this section**

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

## 3.2 - Environment targets

### 3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

**a) National environment performance targets**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| National reference values | 1.42% | 1.40% | 1.38% | 1.36% | 1.34% |

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| | Target | Target | Target | Target | Target |
| **National targets** | 1.42% | 1.40% | 1.38% | 1.36% | 1.34% |

**b) Justifications for the local environment performance targets**

In considering the appropriate local environment performance targets for RP4, we assessed the past performance of AirNav Ireland and the drivers of this performance. While AirNav Ireland remains one of Europe's best performers in terms of the KEA, the target was missed in 2023. We found that this was largely due to factors outside of the control of AirNav Ireland and/or as a result of measures which were network-optimal but locally sub-optimal. In that context, we carried out a further review over 2022, 2023, and 2024 to date.

In this review, we noted that prior to the UK LD1/West airspace change, which relates to the introduction of FRA in UK airspace, the KEA in 2023 was at its lowest level in the year at approximately 1.2% and broadly consistent with 2022. A sharp increase was observed from 23rd March 2023, the same day as the UK airspace change was operationalised. KEA inefficiency peaked in April at 1.6% and remained elevated for the remainder of the year, although started to trend downwards in later months. We noted that KEA performance has normalised somewhat in the opening months of 2024, although remain above 2022 levels. We assessed that this suggested the introduction of FRA in Western UK airspace continues to impose challenges in meeting KEA targets and was indeed likely a key factor behind performance exceeding target levels in 2023.

On this basis, we decided the RP4 reference values for Ireland, which are less challenging than RP3 but remain significantly below the Union-wide targets, were appropriate. Sustainably reducing the environmental impact of aviation is a key goal for Ireland, as it is across the EU. Challenging targets will drive a focus for both AirNav Ireland and the IAA to continuously assess and monitor performance. From that perspective, it is preferable to have a target which, while challenging, seeks to drive performance improvements. In that regard, the reference values appear to provide an appropriate balance between achievability/realism, and ambition, in the context of the changed operational situation related to the UK airspace change. For further details, please refer to section 10 of the IAA's Draft Decision and Final Decision documents.

** Refer to Annex P, if necessary.*

**c) Main measures put in place to achieve the local environment performance targets**

In respect of the challenges posed by the introduction of FRA in UK airspace, AirNav Ireland has undertaken to continue to work with NATS to identify any potential improvements which may mitigate this impact. The IAA will continue to hold regular review meetings with AirNav Ireland to discuss performance trends and any potential optimisation measures.

In addition, Common Project 1 (CP1) related projects continue to support AirNav Ireland to meet environmental targets. Of the total CO2 emissions from CP1, 80% of the total savings originate from AF3 functionalities (flexible airspace management and FRA). Alongside this, savings/reductions in taxi-out time will support reductions in CO2 output, contributing to network wide targets across RP4.

** Refer to Annex P, if necessary.*

# SECTION 3.3: CAPACITY KPA

**3.3 - Capacity targets**

3.3.1 - Capacity KPI #1: En route ATFM delay per flight
- a) National capacity performance targets
- b) Justifications for the local en route capacity performance targets
- c) Main measures put in place to achieve the local en route capacity performance targets

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight
- a) National capacity performance targets
- b) Justifications for the local terminal capacity performance targets, including contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the local terminal capacity performance targets

3.3.3 - ATCO planning
- a) ATCOs in the scope of the performance plan
- b) ATCO planning at ACC level
- c) ATCO training

**Annexes of relevance to this section**

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

## 3.3 - Capacity targets

### 3.3.1 - Capacity KPI #1: En route ATFM delay per flight

**a) National capacity performance targets**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| National reference values | 0.08 | 0.06 | 0.05 | 0.03 | 0.03 |

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| | Target | Target | Target | Target | Target |
| **National targets** | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |

**b) Justifications for the local en route capacity performance targets**

In assessing the appropriate level for En Route capacity targets for RP4, we first conducted an assessment of AirNav Ireland's performance over RP3. AirNav Ireland met all En Route service demand between 2020 and 2022 despite ATCO headcount running below the IAA's RP3 forecast for 2022. However, while still meeting the ATFM delay target, performance deteriorated markedly in 2023, with En Route ATFM delay reaching 0.02 min/flight. Furthermore, almost all of this delay was ANSP attributable.

The IAA noted that the suggested national reference values would allow for a continued and significant deterioration in performance relative to the current target, in circumstances where AirNav Ireland has still met the current target. In that context, we did not consider it appropriate to set a target for RP4 which is below the current 2024 target. We also decided to build further ambition into the target from 2027 onwards. This is linked to the year where we assess that AirNav Ireland should be capable of addressing the current under-resourcing in ATCO staffing levels, with additional resilience added to the rosters to reduce utilisation to sustainable levels. In that context, we consider it appropriate to set targets which are significantly more ambitious than the national reference values. We have set targets which are consistent with very low levels of ATFM delay, although not zero delay, the targeting of which would likely be inefficient/disproproportionate as regards the trade-off between capacity and cost. For further details, please see section 11 of the IAA's Draft Decision and Final Decision documents.

** Refer to Annex Q, if necessary.*

**c) Main measures put in place to achieve the local en route capacity performance targets**

The key measures which are to be put in place to achieve the local en route capacity targets relate to investment in the ATM systems, and in additional operational resourcing (ATCOs and engineers).

As assessed by CEPA/THINK, AirNav Ireland has already put in place a range of measures designed to enable it to provide capacity in a cost efficient manner, including multi-ratings of ATCOs, flexible airspace sectorisation in response to traffic loading rather than a fixed sector plan, and 'crew-to-workload' staffing. In addition, the ANSP has a number of other capacity related capital projects forecast for RP4, such as major investment in the ATM systems, building extensions to allow for increased test and proving facilities needed to implement new systems, and to allow classroom capacity to deliver the future ATC service, along with additional projects related to obsolescence which will ensure current levels of capacity are maintained. The NSA will monitor the implementation of these initiatives and will work to ensure sufficient measures are taken to comply with the performance targets.

In the cost allowances for RP4, the NSA has accordingly accounted for the requirement for additional ATCOs and engineers, as well as an increase in the forecast level of capital expenditure, aimed to facilitate the ANSP in achieving the targets as traffic grows. This is discussed further elsewhere in the Performance Plan documentation. The NSA has also put in place an incentive scheme designed to create an appropriately sharp and weighty incentive on the ANSP to achieve this target, as set out in the relevant tab and the consultation and decision documents.

** Refer to Annex Q, if necessary.*

### 3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

**a) National capacity performance targets**

| | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| | Target | Target | Target | Target | Target |
| **National targets** | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Additional comments | The National targets remain unchanged from RP3. However, the parameters for the Terminal capacity incentive scheme are adjusted to make it more effectively targeted towards CRSTMP delay, while modulating downwards the pivot values. This is discussed in the relevant section. | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Airport level** | ***EIDW-Dublin*** | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| | Airport contribution to national targets | | | | | |
| | ***EICK-Cork*** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Airport contribution to national targets | | | | | |
| | ***EINN-Shannon*** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Airport contribution to national targets | | | | | |

**b) Justifications for the local terminal capacity performance targets, including contribution to the improvement of the European ATM network performance**

In assessing the appropriate level for Terminal capacity targets for RP4, we assessed AirNav Ireland's performance over RP3, and also carried out a benchmarking analysis of performance relative to all other european airports with more than 80k annual movements. AirNav Ireland did not meet the target in 2023, although much of the arrival ATFM delay was weather related. Our benchmarking analysis showed that AirNav performs well against the comparator sample.

We concluded that there is little scope to further lower the targets from RP3. Equally, notwithstanding that AirNav Ireland did not meet the target in 2023, this alone does not provide a justification for less stringent targets, particularly given that the cost forecasts are based on an assumption of AirNav Ireland addressing the current under-resourcing in ATCO staffing levels, with additional resilience added to the rosters to reduce utilisation to sustainable levels. We have thus set targets which are consistent with those of RP3, consistent with very low levels of ATFM delay, although not zero delay, the targeting of which would likely be inefficient/disproproportionate as regards the trade-off between capacity and cost. For further details, please see section 11 of the IAA's Draft Decision and Final Decision documents.

** Refer to Annex Q, if necessary.*

**c) Main measures put in place to achieve the local terminal capacity performance targets**

The key measures which are to be put in place to achieve the local terminal capacity targets relate to investment in the ATM systems, and in additional operational resourcing (ATCOs and engineers). Unlike En Route, it is notable that a significant degree of arrival ATFM delay is typically outside the control of AirNav Ireland, and so, to a certain extent, whether the target is achieved is less within the control of AirNav Ireland.

AirNav Ireland has already put in place a range of measures designed to enable it to provide capacity in a cost efficient manner, including multi-ratings of ATCOs, flexible airspace sectorisation in response to traffic loading rather than a fixed sector plan, and 'crew-to-workload' staffing. In addition, the ANSP has a number of capacity related capital projects forecast for RP4, such as major investment in the ATM systems building extensions to allow for increased test and proving facilities needed to implement new systems, and to allow classroom capacity to deliver the future ATC service, along with additional projects related to obsolescence which will ensure current levels of capacity are maintained. The NSA will monitor the implementation of these initiatives and will work to ensure sufficient measures are taken to comply with the performance targets.

In the cost allowances for RP4, the NSA has accordingly accounted for the requirement for additional ATCOs and engineers, as well as an increase in the forecast level of capital expenditure, aimed to facilitate the ANSP in achieving the targets as traffic grows. This is discussed further elsewhere in the Performance Plan documentation. The NSA has also put in place an incentive scheme designed to create an incentive on the ANSP to achieve this target, as set out in the relevant tab and the consultation and decision documents.

** Refer to Annex Q, if necessary.*

## 3.3.3 - ATCO planning and training

**AirNav Ireland**

### a) ATCOs in the scope of the performance plan

| ATCOs in the scope of the performance plan | | Actual | Forecast | Planned | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Number of ATCO in OPS (year-end FTEs) employed by the ANSP (for services within the scope of the performance plan) | ACC | N/A, ATCOs are forecast by charging zone rather than by position. See cost allocation section. | | | | | | |
| | APP | | | | | | | |
| | TWR | | | | | | | |
| Number of ATCOs in OPS (year-end FTEs) allocated to the en route cost base(s) | | 248 | 250 | 255 | 270 | 274 | 286 | 288 |
| Number of ATCO on other duties (year-end FTEs) employed by the ANSP | | 9 | 9 | 15 | 15 | 15 | 15 | 15 |

### b) ATCO planning at ACC level

| | Actual | Forecast | Planned | | | | |
|---|---|---|---|---|---|---|---|
| **Dublin (EIDW ACC)** | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs) | 0 | 4 | 5 | 6 | 3 | 5 | 3 |
| Number of ATCOs in OPS planned to stop working in the OPS room (FTEs) | 0 | 4 | 4 | 3 | 2 | 3 | 2 |
| Number of ATCOs in OPS planned to be operational at year-end (FTEs) | 54 | 54 | 55 | 58 | 59 | 61 | 62 |

| | Actual | Forecast | Planned | | | | |
|---|---|---|---|---|---|---|---|
| **Shannon (EISN ACC)** | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs) | 0 | 16 | 17 | 20 | 12 | 18 | 10 |
| Number of ATCOs in OPS planned to stop working in the OPS room (FTEs) | 0 | 14 | 13 | 9 | 8 | 9 | 8 |
| Number of ATCOs in OPS planned to be operational at year-end (FTEs) | 194 | 195 | 200 | 211 | 214 | 223 | 225 |

| Additional comments |
|---|
| *Note that the NSA's En- Route ATCO staffing forecasts are not specifically allocated to either EIDW ACC or EISN ACC locations. The actual staffing decisions remain at the operational discretion of AirNav Ireland.* |

### c) ATCO Training

| ATCO trainees of the ANSP | | Actual | Forecast | Planned | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| Number of trainees planned to enter the training program(s) during the year. | | 29 | 29 | 34 | 21 | 33 | 19 | 16 |
| Number of trainees expected to complete the training program(s) during the year based on statistical estimates. | | N/A | 20 | 20 | 24 | 15 | 23 | 13 |
| Number ATCO trainees at year end. | | 29 | 29 | 34 | 21 | 33 | 19 | 16 |

| Description of the training process, including details on the average failure rate and the process used to allocate newly qualified ATCOs between ACC, APP and TWR positions. |
|---|
| The calculations are based on a 70% pass rate. As the course length is between 1 and 2 years, we have assumed that all first year trainees are the 'number of trainees planned to enter the training programs during the year' and the 'number of ATCO trainees at year end' are the number of ATCO trainees in the first year of training. Operational decisions as regards the allocation of ATCOs to the various control centres is a matter for AirNav Ireland, based on need. ATCOs are typically multi-rated and assigned to locations, rather than being limited to being assigned to ACC, APP, or TWR positions. In some cases, for example, ATCOs at the Dublin control centre are licensed for all three of ACC, APP, and TWR positions, which is intended to allow for the provision of flexible, scalable, and cost effective capacity. |

# SECTION 3.4: COST-EFFICIENCY KPA

**3.4 - Cost-efficiency targets**

3.4.1 - Cost-efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

a) RP4 cost-efficiency performance targets
b) Information on the baseline values for the determined costs and the determined unit costs
c) Detailed justifications for the adjustments to the baseline values
d) Justification of the consistency of the local cost-efficiency performance targets with the Union-wide targets
e) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate
f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS
g) Verification by the NSA

3.4.2 - Cost-efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

a) RP4 cost-efficiency performance targets
b) Information on the baseline values for the determined costs and the determined unit costs
c) Detailed justifications for the adjustments to the baseline values
d) Justifications for the local terminal cost-efficiency performance targets, including contribution to the improvement of the
e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS
f) Verification by the NSA

3.4.3 - Cost Allocation ATSP/CNSP

ATSP/CNSP #x

a) Summary of services provided
b) Allocation of costs by segment
c) Allocation of costs related to the provision of approach services
d) Description of other services and activities outside the scope of the performance plan and their financing
e) Changes in cost allocation
methodology
f) Verification by the NSA

3.4.4 - Cost Allocation METSP

METSP #x

a) Summary of services provided
b) Allocation of costs by segment
c) Breakdown of determined meteorological costs between direct and core costs and allocation between en route and terminal services
d) Meteorological direct costs and allocation across charging zone(s)
e) Meteorological core costs and allocation across charging zone(s)
f) Changes in cost allocation methodology
g) Verification by the NSA

3.4.5 - Cost allocation NSA

a) Supervision costs
b) Search and rescue costs (if reported as part of the NSA costs)
c) Changes in cost allocation methodology
d) Verification by the NSA

3.4.6 - Determined costs assumptions

ANSP #x

3.4.6.1 - Operating costs
3.4.6.2 - Capital costs
3.4.6.3 - Costs for VFR exempted flights
3.4.6.4 - NSA verification

3.4.7 - Pension assumptions

3.4.7.1 Total pension costs
3.4.7.2 Assumptions for the "State" pension scheme
3.4.7.3 Assumptions for the occupational "Defined contributions" pension scheme
3.4.7.4 Assumptions for the occupational "Defined benefits" pension scheme

3.4.8 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.9 - Additional determined costs related to measures necessary to achieve the en route capacity targets

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP4, which induce additional costs

b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4 by nature by ANSP

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

3.4.10 - Restructuring costs

3.4.10.1 Restructuring costs from previous reference periods to be recovered in RP4

3.4.10.2 Restructuring costs planned for RP4

**Annexes of relevance to this section**

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

## 3.4 - Cost-efficiency targets

### 3.4.1 - Cost-efficiency KPI #1: Determined unit cost (DUC) for en route ANS

**En Route Charging Zone #1 - Ireland**

**a) RP4 cost-efficiency performance targets**

| En route charging zone<br>Name of the CZ | Baseline 2019<br>2019 B | Baseline 2024<br>2024 B | RP4 cost-efficiency targets (determined 2025-2029)<br>2025 D | <br>2026 D | <br>2027 D | <br>2028 D | <br>2029 D | 2029D vs. 2019B<br>(CAGR) | 2029D vs. 2024B<br>(CAGR) |
|---|---|---|---|---|---|---|---|---|---|
| Total en route costs in nominal terms (in national currency) | 117,176,241 | 146,355,992 | 158,869,491 | 170,005,248 | 175,495,276 | 182,461,194 | 190,003,843 | 5.5% | 5.4% |
| **Total en route costs in real terms (in national currency at 2022 prices)** | **127,076,393** | **137,749,330** | **147,240,080** | **155,211,357** | **158,057,082** | **161,805,100** | **166,048,081** | 3.0% | 3.8% |
| Total en route costs in real terms (in EUR2022) [1] | 127,076,393 | 137,749,330 | 147,240,080 | 155,211,357 | 158,057,082 | 161,805,100 | 166,048,081 | 3.0% | 3.8% |
| YoY variation | | | | 5.4% | 1.8% | 2.4% | 2.6% | | |
| Total en route Service Units (TSU) | 4,606,517 | 5,091,391 | 5,175,000 | 5,256,000 | 5,349,000 | 5,458,000 | 5,544,000 | 2.1% | 1.7% |
| YoY variation | | | | 1.6% | 1.8% | 2.0% | 1.6% | | |
| **Real en route unit costs (in national currency at 2022 prices)** | **27.59** | **27.06** | **28.45** | **29.53** | **29.55** | **29.65** | **29.95** | 0.9% | 2.1% |
| Real en route unit costs (in EUR2022) [1] | **27.59** | **27.06** | **28.45** | **29.53** | **29.55** | **29.65** | **29.95** | 0.9% | 2.1% |
| YoY variation | | | | 3.8% | 0.1% | 0.3% | 1.0% | | |

| | |
|---|---|
| National currency | **EUR** |
| [1] Average exchange rate 2022 (1 EUR=) | **1.00** |
| Forecast inflation index 2024 - Base 100 in 2022 | **107.70** |

**b) Information on the baseline values for the determined costs and the determined unit costs**

| En route charging zone<br>Name of the CZ | Baseline 2019<br>2019 B | Baseline 2024<br>2024 B | Actuals 2019<br>2019 A | Forecast 2024<br>2024 F | 2019 Baseline<br>adjustments | 2024 Baseline<br>adjustments |
|---|---|---|---|---|---|---|
| Total en route costs in nominal terms (in national currency) | 117,176,241 | 146,355,992 | 114,371,000 | 145,860,934 | 2,805,241 | 495,058 |
| **Total en route costs in real terms (in national currency at 2022 prices)** | **127,076,393** | **137,749,330** | **123,971,149** | 137,289,682 | 3,105,244 | 459,648 |
| Total en route costs in real terms (in EUR2022) [1] | 127,076,393 | 137,749,330 | 123,971,149 | 137,289,682 | 3,105,244 | 459,648 |
| Total en route Service Units (TSU) | 4,606,517 | 5,091,391 | 4,640,860 | 5,091,391 | -34,342 | 0 |

**c) Detailed justifications for the adjustments to the baseline values**

**c.1) Adjustments to the 2019 baseline value for the determined costs**

| Number of adjustments | 3 |
|---|---|

| Adjustment #1 | Entity name | Entity type | Nature | Costs nominal NC | Costs real NC | Costs EUR2022 |
|---|---|---|---|---|---|---|
| Actual cost correction | Met Éireann ASD | MET | Staff | 232,000 | 256,811 | 256,811 |
| Description and justification of the adjustment | | | | | | |
| MET costs previously reported as 2019 actuals were costs charged (i.e. the determined cost), not costs incurred by MET ASD in 2019. This was an error, and the 2019 actual MET cost build up has now been validated by the NSA. This adjustment was already applied for assessing the RP3 trends relative to the target trend. | | | | | | |

| Adjustment #2 | Entity name | Entity type | Nature | Costs nominal NC | Costs real NC | Costs EUR2022 |
|---|---|---|---|---|---|---|
| Actual cost correction | Met Éireann ASD | MET | Other Operating | 2,158,000 | 2,388,785 | 2,388,785 |
| Description and justification of the adjustment | | | | | | |

| |
|---|
| MET costs previously reported as 2019 actuals were costs charged (i.e. the determined cost), not costs incurred by MET ASD in 2019. This was an error, and the 2019 actual MET cost build up has now been validated by the NSA. This adjustment was already applied for assessing the RP3 trends relative to the target trend. |

| Adjustment #3 | Entity name | Entity type | Nature | Costs nominal NC | Costs real NC | Costs EUR2022 |
|---|---|---|---|---|---|---|
| FMP/AMC positions returning from NATS | AirNav Ireland | ANSP | Staff | 415,241 | 459,648 | 459,648 |
| Description and justification of the adjustment | | | | | | |
| This adjustment corrects for a change in the scope of functions in RP4 and associated cost allocation for RP4, relative to previous periods. The Flow Management Position and Airspace Management Cell functions currently being provided by UK NATS to Ireland must now be taken back from NATS. These functions have previously been carried out by NATS (noting that Ireland-UK Performance Plans were developed at FAB level) and no costs were allocated into AirNav Ireland's cost base in 2019 or 2024, however, linked to the exit of the UK from the EU, it is now neccessary for AirNav to provide this service itself. We have estimated that 10 additional staff will be required, planned to be delivered in 2025 and 2026. This adjustment is a conservative estimate based on the En Route apportionment of the associated staff costs only. | | | | | | |

| **Total adjustments to the 2019 baseline value for the determined costs** | **Costs nominal NC** | **Costs real NC** | **Costs EUR2022** |
|---|---|---|---|
| | **2,805,240** | **3,105,244** | **3,105,244** |

**c.2) Adjustments to the 2019 service units**

| Impact of transition to actual route flown | Actual service units (M2) | Coefficient M2/M3 | Source | Actual service units (M3) | Service units adjustment |
|---|---|---|---|---|---|
| | 4,640,860 | -0.74% | CRCO correction factor May 2019 (on 12 months) | 4,606,517 | -34,342 |

| Other adjustment to the 2019 service units | No |
|---|---|

| **Total adjustments to the 2019 service units** | -34,342 |
|---|---|

**c.3) Adjustments to the 2024 baseline value for the determined costs**

| Number of adjustments | 1 |
|---|---|

| Adjustment #1 | Entity name | Entity type | Nature | Costs nominal NC | Costs real NC | Costs EUR2022 |
|---|---|---|---|---|---|---|
| FMP/AMC positions returning from NATS | AirNav Ireland | ANSP | Staff | 495,058 | 459,648 | 459,648 |
| Description and justification of the adjustment | | | | | | |
| This adjustment corrects for a change in the scope of functions in RP4 and associated cost allocation for RP4, relative to previous periods. The Flow Management Position and Airspace Management Cell functions currently being provided by UK NATS to Ireland must now be taken back from NATS. These functions have previously been carried out by NATS (noting that Ireland-UK Performance Plans were developed at FAB level) and no costs were allocated into AirNav Ireland's cost base in 2019 or 2024, however, linked to the exit of the UK from the EU, it is now neccessary for AirNav to provide this service itself. We have estimated that 10 additional staff will be required, planned to be delivered in 2025 and 2026. This adjustment is a conservative estimate based on the En Route apportionment of the associated staff costs only. | | | | | | |

| **Total adjustments to the 2024 baseline value for the determined costs** | **Costs nominal NC** | **Costs real NC** | **Costs EUR2022** |
|---|---|---|---|
| | **495,058** | **459,648** | **459,648** |

**c.4) Adjustments to the 2024 service units**

| Other adjustment to the 2024 service units | No |
|---|---|

**d) Justification of the consistency of the local en route cost-efficiency performance targets with the Union-wide targets**

| |
|---|
| A deviation from the short-term and long-term target trends is observed. The NSA has reviewed the drivers of this trend, and assesses it to be necessary and proportionate in reflecting the costs of measures necessary to achieve the capacity targets for RP4. It is driven by increased ATCO recruitment, and major investment in the ATM systems, and associated measures. Based on the Business Plan submissions of |

necessary to achieve the capacity targets for RP4. It is driven by increased ATCO recruitment, and major investment in the ATM systems, and associated measures. Based on the Business Plan submissions of AirNav Ireland and MET ASD, the short term trend would have been +4.2%, and the long term trend would have been +1.7%, which, by contrast, in our view, would not have been proportionate with reference to achieving those targets.

** Refer to Annex R, if necessary.*

**e) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate under:**

| | | |
|---|---|---|
| Additional costs of measures necessary to achieve the capacity targets for RP4 | Yes | Detailed in part 3.4.9 of the performance plan |
| Restructuring costs planned for RP4 | No | |

**f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS**

The IAA will monitor and validate actual cost efficiency performance, through the provision of regulated entity accounts and other reporting arrangements.

The NSA has set cost efficiency targets which are intended to be challenging but achievable for the regulated entities, while delivering the required level of service. Most of the cost risk, particularly for operating costs, is assigned to AirNav Ireland within the regulatory period. This is the primary incentive-based regulatory mechanism which creates an incentive to incur efficient expenditure only, in order to increase profit. This is the main incentive measure in place to achieve or outperform the DUC for En Route ANS.

** Refer to Annex R, if necessary.*

**g) Verification by the NSA**

| | |
|---|---|
| Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/317 | Yes |

## 3.4.2 - Cost-efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

**Terminal Charging Zone #1 - Ireland - TCZ**

**a) RP4 cost-efficiency performance targets**

| Terminal charging zone<br>Name of the CZ | Baseline 2024<br>2024 B | RP4 cost-efficiency targets (determined 2025-2029)<br>2025 D | <br>2026 D | <br>2027 D | <br>2028 D | <br>2029 D | 2029D vs. 2024B<br>(CAGR) |
|---|---|---|---|---|---|---|---|
| Total terminal costs in nominal terms (in national currency) | **32,305,197** | **35,959,328** | 38,285,602 | 39,928,400 | 41,386,068 | 43,560,165 | 6.2% |
| **Total terminal costs in real terms (in national currency at 2022 prices)** | **30,663,112** | **33,732,546** | **35,454,268** | **36,612,270** | **37,478,551** | **39,027,098** | 4.9% |
| Total terminal costs in real terms (in EUR2022) [1] | **30,663,112** | **33,732,546** | **35,454,268** | **36,612,270** | **37,478,551** | **39,027,098** | 4.9% |
| YoY variation | | | 5.1% | 3.3% | 2.4% | 4.1% | |
| Total terminal Service Units (TNSU) | 205,000 | 215,000 | 221,000 | 226,000 | 233,000 | 237,000 | 2.9% |
| YoY variation | | | 2.8% | 2.3% | 3.1% | 1.7% | |
| **Real terminal unit costs (in national currency at 2022 prices)** | **149.58** | **156.90** | **160.43** | **162.00** | **160.85** | **164.67** | 1.9% |
| Real terminal unit costs (in EUR2022) [1] | **149.58** | **156.90** | **160.43** | **162.00** | **160.85** | **164.67** | 1.9% |
| YoY variation | | | 2.3% | 1.0% | -0.7% | 2.4% | |

| | |
|---|---|
| National currency | **EUR** |
| 1 Average exchange rate 2022 (1 EUR=) | **1.00** |
| Forecast inflation index 2024 - Base 100 in 2022 | **107.70** |

**b) Information on the baseline values for the determined costs and the determined unit costs**

| Terminal charging zone<br>Name of the CZ | Baseline 2024<br>2024 B | Forecast 2024<br>2024 F | 2024 Baseline<br>adjustments |
|---|---|---|---|
| Total terminal costs in nominal terms (in national currency) | 32,305,197 | 32,148,863 | 156,334 |
| **Total terminal costs in real terms (in national currency at 2022 prices)** | **30,663,112** | 30,517,960 | 145,152 |
| Total terminal costs in real terms (in EUR2022) [1] | 30,663,112 | 30,517,960 | 145,152 |
| Total terminal Service Units (TNSU) | 205,000 | 205,000 | 0 |

**c) Detailed justifications for the adjustments to the baseline values**

**c.1) Adjustments to the 2024 baseline value for the determined costs**

| Number of adjustments | 1 |
|---|---|

| Adjustment #1 | Entity name | Entity type | Nature | Costs nominal NC | Costs real NC | Costs EUR2022 |
|---|---|---|---|---|---|---|
| FMP/AMC positions returning from NATS | AirNav Ireland | ANSP | Staff | 156,334 | 145,152 | 145,152 |
| Description and justification of the adjustment | | | | | | |
| This adjustment corrects for a change in the scope of functions in RP4 and associated cost allocation for RP4, relative to previous periods. The Flow Management Position and Airspace Management Cell functions currently being provided by UK NATS to Ireland must now be taken back from NATS. These functions have previously been carried out by NATS (noting that Ireland-UK Performance Plans were developed at FAB level) and no costs were allocated into AirNav Ireland's cost base in 2019 or 2024, however, linked to the exit of the UK from the EU, it is now neccessary for AirNav to provide this service itself. We have estimated that 10 additional staff will be required, planned to be delivered in 2025 and 2026. This adjustment is a conservative estimate based on the Terminal apportionment of the associated staff costs only. | | | | | | |

| **Total adjustments to the 2024 baseline value for the determined costs** | **Costs nominal NC** | **Costs real NC** | **Costs EUR2022** |
|---|---|---|---|
| | **156,334** | **145,152** | **145,152** |

**c.2) Adjustments to the 2024 service units**

| Adjustment to the 2024 service units | No |
|---|---|

**d) Justifications for the local terminal cost-efficiency performance targets, including contribution to the improvement of the European ATM network performance**

Similar to the approach to En Route, the NSA has sought to develop Terminal cost forecasts on the basis of efficiently delivering the required level of capacity and safety performance. This maximises the value that the provision of terminal services by AirNav Ireland will add to the European ATM network in RP4. Full details are set out in the cost sections of the IAA's Draft Decision and Final Decision, and in the CEPA draft and final reports.

The IAA notes that, notwithstanding that we have estimated lower Determined Cost requirements relative to those proposed by the regulated entities, the short term trend from 2024 to 2029 is increasing in real terms to a similar extent as the En Route charging zone (in this case +2%). Based on the Business Plan submissions from the regulated entities, before the IAA carried out its own verification and forecasting analysis with CEPA/THINK, the IAA has estimated that the short term trend would have been +4.6%.

The drivers of this +2.0% trend are very similar to the drivers of the En Route trend, being related to investment in the ATM systems, and in additional operational resourcing, in particular the recruitment of ATCOs and engineers (but only to the extent that the IAA/CEPA/THINK have assessed to be neccessary and proportionate). In the absence of such investment, we assess that a negative real unit cost trend could be achieved, however this would have negative implications for the ability to achieve the capacity targets for RP4 and beyond, as well as, for example, negative implications in respect of CP1 given that this investment is required in order to deliver CP1 functionalities.

** Refer to Annex R, if necessary.*

**e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS**

The IAA will monitor and validate actual cost efficiency performance, through the provision of regulated entity accounts and other reporting arrangements.

The NSA has set cost efficiency targets which are intended to be challenging but achievable for the regulated entities, while delivering the required level of service. Most of the cost risk, particularly for operating costs,

| |
|---|
| is assigned to AirNav Ireland within the regulatory period. This is the primary incentive-based regulatory mechanism which creates an incentive to incur efficient expenditure only, in order to increase profit. This is the main incentive measure in place to achieve or outperform the DUC for Terminal ANS. |

** Refer to Annex R, if necessary.*

**f) Verification by the NSA**

| | |
|---|---|
| Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/3172 | Yes |

## 3.4.3 - Cost allocation ATSP/CNSP - AirNav Ireland

*Complementary information may be provided in ANNEX M*

**a) Summary of services provided**

| Air navigation services provided | | Description of the services provided by the concerned entity |
|---|---|---|
| ATS/ATM | Yes | AirNav Ireland provides air traffic management and related services within the 451,000km2 of airspace. |
| Communication | Yes | AirNav Ireland uses Air/Ground and Ground/Ground based communications systems to ensure the safety and regularity of air traffic. |
| Navigation | Yes | Integrated operational requirements are planned and developed for the provision of Air Navigation Services. |
| Surveillance | Yes | AirNav Ireland uses 8 Mode-S Radars and 3 Solid State Primary Radars at nine radar sites across Ireland to deliver full coverage of the airspace, and the ARTAS system merges this data and distributes the appropriate air situation picture to ATCO's. ASMGCS (Advanced Surface Movement Guidance and Control System) incorporates Surface Movement Radar, Multilateration and ADS-B to facilitates safe movement of aircraft and vehicles at Dublin Airport. |
| Search and rescue | No | |
| Aeronautical Information | No | |
| Meteorological services | No | |
| Services to OAT | No | |
| Cross-border ATS | No | Other than in respect of the delegated blocks of airspace already identified. |

| 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. |
|---|
| First, costs which are properly to be allocated outside of either the Terminal or En Route charging zones are excluded entirely. This applies, in particular, to costs which are allocated to the North Atlantic Communications (NAC) charging zone. AirNav Ireland does not provide services at any airport outside the scope of the performance plan. The cost forecasts are then split between the single Terminal and single En Route charging zones, as addressed further below.<br><br>Then, forecast costs by eligible service (i.e. those listed in the above table) has been based on the outturn cost split by service from RP3 to date, with the large majority allocated to 'ATM/ANS'. |

**b) Allocation of costs by segment**

| **ANSP costs by segments (in nominal terms in '000 national currency)** | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Determined costs for en route charging zone(s) in the scope of the performance plan | 132,803 | 143,282 | 148,434 | 155,270 | 162,474 |
| Determined costs for terminal charging zone(s) in the scope of the performance plan | 32,167 | 34,376 | 35,939 | 37,367 | 39,471 |
| Forecasted costs for terminal services at airports outside the scope of the performance plan | N/A | N/A | N/A | N/A | N/A |

| Description of the criteria used to allocate costs between terminal and en route services in accordance with Article 22(5), including at airports outside the scope of the performance plan |
|---|
| **Staff Costs:** For operational ATCOs, the required efficient staffing level has been modelled by CEPA/THINK (on behalf of the NSA) separately for each location, such as Dublin control centre, Shannon ACC, etc. AirNav Ireland's allocation keys, which we and CEPA/THINK have validated, have then been used to split our forecast into the En Route and Terminal charging zones. For non-operational ATCOs, the 2024 budget cost-allocation is used. Other staff costs have been allocated based on a mixture of AirNav Ireland's allocation keys and 2023 outturn cost allocation. These allocations between Terminal and En Route are broadly assessed to remain constant throughout RP4. However, in cases where step-changes are expected, as is the case for data assistants, year-on-year adjustments are applied in our forecast, based on location.<br><br>**Other Operating Costs:** The approach to the allocation of other operating costs, as forecast by the NSA, can be summarised as follows.<br>- For operational non-staff costs, the costs are initially allocated to an 'Activity' and to a 'Location'. Then AirNav Ireland uses a standardised allocation key to split these costs into En Route and Terminal charging zones, depending on the Activity and Location.<br>-For more general support costs, these are split into specific subcategories, each of which has a defined allocation key.<br>As most Other Operating costs comprise multiple activities and locations, the overall allocation for each non-staff cost category is a weighted average depending on the structure of spend.<br><br>**Capital Costs and Investments:** Costs are first allocated to geographical cost centres, such Shannon ACC (Ballycasey), Dublin contol centre, Cork Airport, Shannon Airport, North Atlantic Communications (Ballygireen), and Headquarters (D'Olier Street). Where a project is solely associated with the provision of En Route services, such as at Ballycasey, it is allocated 100% to the En Route cost base. If solely associated with the provision of Terminal services, it is allocated 100% to the Terminal cost base. If the project is to be used for the provision of both En Route and Terminal services at a given location, it is jointly allocated. The apportionment of jointly allocated projects depends on the location. At Dublin and Shannon ACC, costs are allocated 75:25 to En Route, while at Cork the apportionment is 50:50. The assets for the headquarters are assigned 73% to En Route, 15% to Terminal, and 12% to NAC. These allocation keys reflect the extent to which each location provides services to Terminal/En Route traffic, having regard to the 20km charging zone boundary, and the mix of ACC, Approach, and Tower services provided by each ATC unit. |

**c) Allocation of costs related to the provision of approach services**

| **Allocation of costs related to approach services (in nominal terms in '000 national currency)** | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Total determined costs for approach services | N/A- see below | | | |
| Determined costs for approach services allocated to the en route charging zone(s) | N/A- see below | | | |
| Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan | N/A- see below | | | |

| Description of the methodology used for establishing approach costs and allocating them between en route and terminal services, including the distance from the relevant airport(s) used for allocating approach costs and description of the operational requirements on the basis of which that distance has been defined |
|---|
| See Annex M, together with CEPA/THINK draft report and final report. |

**d) Description of other services and activities outside the scope of the performance plan and their financing**

| Based on the description of the services provided under item a) above, describe the nature of the activities outside the scope of the performance plan, the related costs and the arrangements in place to finance them as well as the methodology used by the NSA to ensure that these amounts are excluded from the cost bases charged to airspace user |
|---|

| | |
|---|---|
| Terminal ANS at airports (outside the scope of the performance plan) | No |

| | |
|---|---|
| Services to OAT | No |

| | |
|---|---|
| Other ANS | Yes |
| If yes, description of the nature of the services provided and the geographical scope | |
| North Atlantic Communications (NAC) services within Shanwick oceanic airspace. | |
| If yes, description of the arrangements for the financing of the services provided | |
| Users of the oceanic airspace pay a separate unit rate. All direct costs associated with the provision of this service, and the corresponding proportion of central costs (such as corporate services), are excluded from this draft Performance Plan and allocated to the NAC charging zone. | |

| | |
|---|---|
| Non ANS | No |

**e) Changes in cost allocation methodology**

| | |
|---|---|
| Are there changes in the cost allocation criteria with respect to the previous reference period?<br>If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline. | No |
| | |

**f) Verification by the NSA**

| | |
|---|---|
| Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/317 | Yes |

## 3.4.4 - Cost allocation METSP - Met Éireann Aviation Services Division (ASD)

*Complementary information may be provided in ANNEX M*

**a) Summary of services provided**

| Description of the services provided by the meteorological service provider, the geographical scope and the different users for which the services are provided |
|---|
| MET ASD is a business unit of Met Éireann, Ireland's National Meteorological Service, which is maintained by the State under the UN Convention of the World Meteorological Organisation (WMO). The ASD is designated as Ireland's Meteorological Authority under the ICAO Chicago Convention on International Civil Aviation and since 2006 has been designated as a meteorological Air Navigation Services Provider (MET ANSP) under the EU Single European Sky Service Provision Regulation (CIR EU 550/2004 ) and therefore has responsibility for the provision of regulated meteorological services to aviation. Regulatory compliance and oversight of the ASD is conducted by the IAA.<br><br>The aeronautical meteorological services provided by ASD include the maintenance of the Meteorological Watch Office for the Shannon FIR, the provision of aeronautical forecast and warning services, and maintenance of five aeronautical meteorological stations. |

**b) Allocation of costs by segment**

| **Meteorological ANS costs (direct + core) by segments (in nominal terms in '000 national currency)** | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Determined costs for en route charging zone(s) in the scope of the performance plan | 8,959 | 9,262 | 9,448 | 9,417 | 9,539 |
| Determined costs for terminal charging zone(s) in the scope of the performance plan | 2,240 | 2,316 | 2,362 | 2,354 | 2,385 |
| Forecasted costs for terminal services at airports outside the scope of the performance plan | 390 | 403 | 416 | 427 | 439 |

**c) Breakdown of determined meteorological costs between direct and core costs and allocation between en route and terminal services**

| Description of the meteorological costs and of the methodology for allocating these costs between direct costs and the costs of supporting meteorological facilities and services that also serve meteorological requirements in general ('MET core costs') |
|---|
| MET ASD cost allowances included in the draft performance Plan are based on the determined operational and capital costs forecast over the RP4 period which have been set by the IAA following our analysis of eligibility and efficiency. For further details, see Section 7 of our Draft Decision and Final Decision. The costs can be subdivided between:<br><br>-Direct costs, which are related to aviation specific activities and services.<br>-Core costs, which are associated with the basic meteorological infrastructure and/or central service provision, upon which services to aviation (as well as other services) depend.<br><br>Both categories of costs are outlined below in the relevant tables. The costs are established through the application of a cost allocation methodology. Met Éireann uses its Internal Accounts System (IAS) to enable the aviation costs to be determined and reported. There are four primary categories of activity: Core, Civil Aviation, Public Weather Services and Commercial. These are further sub-divided, to give a total of 32 sub-categories. There are also 5 sub-categories for "support" costs such as administration, accommodation and training and these are apportioned to the primary sub-categories. The notional cost of services provided free to the State by Met Éireann is also accounted for in the cost allocation system. |

**d) Meteorological direct costs and allocation across charging zone(s)**

| **Total determined direct meteorological costs allocated to the charging zones within the scope of the performance plan (in nominal terms in '000 national currency)** | | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| En route charging zone 1 | Ireland | 5,548 | 5,732 | 5,869 | 5,962 | 5,753 |
| Terminal charging zone 1 | Ireland - TCZ | 1,387 | 1,433 | 1,467 | 1,491 | 1,438 |
| **Total forecasted costs for the concerned entity** | | **6,935** | **7,165** | **7,337** | **7,453** | **7,191** |

| Description of the items included in the meteorological direct costs and methodology used to allocate these costs in the scope of the performance plan, as well as across charging zone(s). |
|---|
| The meteorological direct costs relate to staff, production, operating, depreciation, and support costs which are solely driven by the following aviation specific services: |

METAR Reports: METAR reports (excluding TREND) as specified in ICAO Annex 3
Reports for ATS: Instrument display systems for ATS; also plain-language reports for ATS (excluding TREND)
Automated Flight Briefing Material: Online Met Self Briefing System
Verbal Briefing: Briefing and consultation (excluding General Aviation and Military)
TAFs (FT and FC): Terminal Area Forecasts (excluding General Aviation and Military)
SIGMET: SIGMET as specified under ICAO Annex 3
Aerodrome Warning: Aerodrome warnings; wind-shear warnings as specified in ICAO Annex 3
Airport/ATC enquiries: Enquiries from airport agencies (airport authorities, IAA, etc.) and local ATC
Graphical Charts: Low level significant weather charts; upper level tabular wind charts as specified in ICAO Annex 3
Additional forecast data: 5-day tabular forecast
Consultation with adjacent MWO: Regarding SIGMET issuance and network weather in line with ICAO Annex 3 recommendations.
Cross Border Convective Forecast Service: Collaborative cross border forecast service aggregated across the EUROCONTROL network domain.

These costs are fully allocated to aviation. However, costs which are allocable to aviation activities but outside the scope of the charging zones (in particular, those relating to Casement aerodrome and Knock airport) have not been included in this draft Performance Plan.

As to the split between the Terminal and En Route charging zones, following a previous assessment by the IAA (then CAR), charges to civil aviation have been split 80:20 between the En Route and Terminal charging zones respectively. As set out in Section 7 of our Draft Decision and Final Decision, the IAA has carried out a high level reassessment of those allocation keys, including with reference to the PRB's Review of the Reporting of Meteorological Costs for Air Navigation Services, and concluded that there was no basis to amend these keys for RP4.

**e) Meteorological core costs and allocation across charging zone(s)**

| **Total determined core meteorological costs allocated to the charging zones within the scope of the performance plan (in nominal terms in '000 national currency)** | | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| En route charging zone 1 | Ireland | 3,411 | 3,530 | 3,579 | 3,455 | 3,786 |
| Terminal charging zone 1 | Ireland - TCZ | 853 | 882 | 895 | 864 | 947 |
| **Total forecasted costs for the concerned entity** | | **4,264** | **4,412** | **4,473** | **4,318** | **4,733** |

| Description of the items included in the meteorological core costs and methodology used to allocate these costs to civil aviation, including the proportion of meteorological core costs included in the scope of the plan as compared to total meteorological costs incurred by the entity, as well as across charging zones. |
|---|
| In respect of core costs, there are 9 identified categories of Core Costs associated with Met Éireann activities used to support, amongst other functions, the aviation services. These are surface synoptic observations; upper air observations, RADAR data, Satellite data, NWP, Climatological data, ICT, Internal Forecasting Guidance and Library/Laboratory and Environment activities. All of the foregoing make a contribution to aviation services. However, the contribution of some Core activities is very small and has been discounted while others are complex to apportion fairly – and so these are also not included. Therefore, aviation is not allocated any portion of costs associated with Internal Forecasting Guidance, Library/Laboratory and Environment activities.<br><br>The allocation key otherwise used to assign Core Costs (operating and capital) to aviation has been updated for RP4. The adjustment is primarily the result of the growing remit of Met Éireann in its service areas due to the implementation of both the Flood Forecasting Centre (FFC) (which will become operational during 2024) and the establishment of a Climate Services Division. Because these new service activity areas also have a demand on the Core infrastructure, this dilutes the coefficients to be applied to apportion Core costs to other services, including aviation. The impact in respect of RP4 is a reduction to 17.4% in the Core costs allocation key to aviation services.<br><br>The same 80:20 split between the Terminal and En Route charging zones is also applied in the case of Core costs. |

**f) Changes in cost allocation methodology**

| Are there changes in the cost allocation criteria with respect to the previous reference period?<br>If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline. | No |
|---|---|
| The cost allocation criteria have not changed, however the allocation key used to allocate costs to aviation has reduced somewhat, due to a broader scope of functions diluting it, as explained above. | |

**g) Verification by the NSA**

| Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/317 | Yes |
|---|---|

## 3.4.5 - Cost allocation - NSA

*Complementary information may be provided in ANNEX M*

**a) Supervision costs**

| Description of the supervision activities performed by the NSA(s), the underlying assumptions used to estimate the related determined costs and the main factors explaining the variations of these costs over the reference period |
|---|
| The NSA function is assigned to the IAA, Ireland's single civil aviation authority. The IAA is responsible for economic and performance regulation and cost efficiency under the SES performance and charging regulations. The Safety Regulation Division of the IAA has the NSA responsibilities of safety oversight and licensing. The IAA's Air Navigation Services Division (ANSD), Airspace Division, and Search and Rescue (SAR) oversight Divisions are the sections within the IAA which are directly allocated to the NSA, in full. One third of the IAA's economic regulation team has been directly allocated to the NSA, given that ANS economic and performance regulation is one of three main functions performed by that team.<br><br>A proportion of the IAA's core costs are also included in the NSA costs. This proportion is based on the total direct NSA costs, divided by the total direct costs of all other functions, which amounts to approximately 19% for RP4. The IAA's Determined Costs for RP4 have been based on the IAA's budget for 2024, extrapolated forward to 2029, such that they stay broadly flat in real terms. The only significant variation comes from the capitalisation of building upgrade works which occurs in 2026. For further details, please see section 8 of the IAA's Draft Decision and Final Decision documents.<br><br>Total supervision costs also include Eurocontrol costs, State policy costs associated with ANS, and State subscriptions to ICAO and ECAC. |

| Description of the methodology used to allocate NSAs supervision costs between en route and terminal as well as across different charging zones |
|---|
| NSA costs are allocated 73% En Route, 15% Terminal, and 12% to North Atlantic Communications (NAC), which is allocated outside of the scope of the performance plan. 100% of Eurocontrol costs are allocated to the En Route charging zone, while costs of the Department of Transport follow the allocations of the NSA (73% En Route, 15% Terminal, 12% NAC). The NSA cost allocation methodology is unchanged from RP3, based on the proportion of revenues generated by each of the three charging zones. |

**b) Search and rescue costs (if reported as part of the NSA costs)**

| Description and underlying assumptions for search and rescue costs and main factors explaining the variations over the reference period |
|---|
| Search and Rescue (SAR) direct costs are fully allocated to the NSA. A proportion of the IAA's core costs are also allocated to the Search and Rescue division. SAR costs remain flat in real terms across the reference period with little variation year on year. These relate only to the cost of oversight of the SAR service by the IAA- the cost of SAR service provision itself has not been included within the draft Performance Plan, on this occasion. |

| **Total search and rescue costs for the entity providing search and rescue services (in nominal terms in '000 national currency)** | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|
| Determined costs for en route charging zone(s) in the scope of the performance plan | 1,129 | 1,163 | 1,192 | 1,223 | 1,256 |
| Determined costs for terminal charging zone(s) in the scope of the performance plan | 226 | 233 | 238 | 245 | 251 |
| Forecasted search and rescue costs outside the scope of the performance plan | 191 | 197 | 202 | 207 | 212 |

| Description of the methodology used to allocate search and rescue costs to civil aviation and in the scope of the performance plan, including the proportion of search and rescue costs included in the scope of the plan as compared to total search and rescue costs incurred by the entity |
|---|
| The NSA is responsible for oversight of SAR services. The SAR proportion of the NSA costs included in the performance plan is limited to the costs associated with maintaining the oversight programme. |

| Description of the methodology used to allocate search and rescue costs to civil aviation between en route and terminal as well as across different charging zones |
|---|
| It follows the general methodology to allocate IAA costs, as outlined above. |

**c) Changes in cost allocation methodology**

| Are there changes in the cost allocation criteria with respect to the previous reference period?<br>If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline. | Yes |
|---|---|
| Since 2021, the regulatory reform process in Ireland has been completed, and the new IAA has been established as the single civil aviation regulator which now encompasses both the economic regulation and safety oversight functions. The ANSP function has been transferred to a new company, AirNav Ireland.<br><br>The new regulator has therefore developed a cost allocation and charging system in respect of its direct costs, and core costs (following public consultation). Regulatory divisions within the IAA which are directly allocated to the NSA are allocated a proportion of total IAA corporate services costs (eg. HR, Finance, Facilities). The proportion of core costs allocated corresponds to the share of each division's direct costs in the full IAA cost base in that year. The total NSA costs is equal to the sum of each directly allocated regulatory division's direct and core costs. Further detail on the NSA cost allocation criteria is contained in Section 8 of our Draft Decision and Final Decision documents. In the case of NSA costs, the new methodology has not led to a very different outcome relative to the 2021 methodology, when there was two separate NSAs. | |

**d) Verification by the NSA**

| Confirmation by the NSA that the data and information included in this section comply with the requirements of Article 15(2) Regulation (EC) No 550/2004 and with IR 2019/317. | Yes |
|---|---|

## 3.4.6 - Determined costs assumptions - AirNav Ireland

### 3.4.6.1 - Operating costs

**a) Staff costs**

| Number of entries | 10 |
|---|---|

| # | Staff costs building blocks (in nominal terms in '000 national currency) | Description of the composition of each item | Charging zones | Actual | Forecast | Determined | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1 | Operational ATCOs | Operational ATCOs | En-route charging zones | | 39,141 | 40,572 | 42,293 | 43,603 | 45,785 | 46,952 |
| | | | Terminal charging zones | | 6,410 | 6,782 | 6,933 | 7,107 | 7,359 | 7,523 |
| 2 | Station Managers | Station Managers | En-route charging zones | | 3,892 | 4,499 | 4,715 | 4,878 | 5,052 | 5,226 |
| | | | Terminal charging zones | | 637 | 752 | 773 | 795 | 812 | 837 |
| 3 | ATM Specialists | ATM Specialists | En-route charging zones | | 1,318 | 2,460 | 2,555 | 2,641 | 2,731 | 2,824 |
| | | | Terminal charging zones | | 168 | 314 | 326 | 337 | 349 | 361 |
| 4 | Corporate Services | Includes IT,Finance, HR, Property and Facilities, and Sustainability | En-route charging zones | 4,643 | 5,636 | 6,123 | 6,460 | 6,694 | 6,938 | 7,188 |
| | | | Terminal charging zones | 901 | 1,081 | 1,174 | 1,239 | 1,284 | 1,331 | 1,378 |
| 5 | Data Assistant | Data Assistants | En-route charging zones | 2,480 | 2,969 | 3,066 | 3,206 | 3,315 | 3,427 | 3,545 |
| | | | Terminal charging zones | 291 | 342 | 353 | 369 | 382 | 395 | 408 |
| 6 | FMP/AMC | Roles related to the return of FMP/AMC functions | En-route charging zones | 0 | 0 | 270 | 564 | 583 | 603 | 624 |
| | | | Terminal charging zones | 0 | 0 | 85 | 178 | 184 | 190 | 197 |
| 7 | Engineer | Engineers | En-route charging zones | 8,529 | 12,739 | 13,491 | 13,958 | 14,545 | 15,187 | 15,818 |
| | | | Terminal charging zones | 1,500 | 2,248 | 2,381 | 2,463 | 2,567 | 2,680 | 2,791 |
| 8 | Operations Management Support | Operations Management Support | En-route charging zones | 5,984 | 7,677 | 9,296 | 9,980 | 10,714 | 11,219 | 11,610 |
| | | | Terminal charging zones | 961 | 1,250 | 1,513 | 1,625 | 1,744 | 1,826 | 1,890 |
| 9 | Pension Payout Cost | Fixed pension contributions | En-route charging zones | 14,617 | 4,204 | 4,197 | 4,196 | 4,182 | 4,170 | 4,154 |
| | | | Terminal charging zones | 2,447 | 695 | 702 | 697 | 692 | 685 | 681 |
| 10 | ATCOs | Operational ATCOs, Station Managers, ATM Specialists (for 2023) | En-route charging zones | 38,549 | | | | | | |
| | | | Terminal charging zones | 6,678 | | | | | | |
| **Total staff costs** | | | **En-route charging zones** | **74,802** | **77,577** | **83,974** | **87,928** | **91,155** | **95,111** | **97,939** |
| | | | **Terminal charging zones** | **12,778** | **12,832** | **14,057** | **14,604** | **15,093** | **15,627** | **16,067** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | The IAA does not consider that | En-route charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Accounting provisions included in total staff costs | including any accounting provisions is the correct approach to a system of incentive based economic regulation. This 'banks' downside scenarios and double counts ordinary business risk, which is already remunerated through the cost of equity. | Terminal charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7) | Detail on the assumptions underlining the determined pension costs and expected evolution are provided in Tab 3.4.7. | En-route charging zones | 14,611 | 12,187 | 12,852 | 13,344 | 13,612 | 13,930 | 14,144 |
| | | Terminal charging zones | 2,446 | 2,006 | 2,121 | 2,209 | 2,254 | 2,306 | 2,342 |

| Description of the main factors explaining the planned variations of staff costs over the reference period |
|---|
| Headcount is the primary factor explaining the variation of staff costs over the reference period. The efficient level of headcount is forecast to increase from 636 in 2025, to 690 in 2029, which is driving the consistent increase throughout the period. Discussion on the increase in headcount can be found in the CEPA 'AirNav Ireland Operating Expenditure: Bottom-up Efficiency Assessment' reports which are provided as part of the draft Performance Plan documentation, as well as in section 4 of the IAA's Draft Decision and Final Decision documents. |

**b) Other operating costs**

| Number of entries | 7 |
|---|---|

| # | Other operating costs building blocks (in nominal terms in '000 national currency) | Description of the composition of each item | Charging zones | Actual | Forecast | Determined | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1 | Travel | Cost lines relating to travel expenses | En-route charging zones | 916 | 1,270 | 1,295 | 1,320 | 1,346 | 1,373 | 1,400 |
| | | | Terminal charging zones | 147 | 239 | 244 | 249 | 253 | 259 | 264 |
| 2 | Training | Costs lines relating to training | En-route charging zones | 5,894 | 7,548 | 8,346 | 11,045 | 8,431 | 10,195 | 11,857 |
| | | | Terminal charging zones | 1,401 | 1,761 | 1,947 | 2,577 | 1,967 | 2,378 | 2,766 |
| 3 | Utilities | Cost lines relating to utility costs | En-route charging zones | 541 | 2,156 | 2,199 | 2,242 | 2,286 | 2,331 | 2,378 |
| | | | Terminal charging zones | 120 | 609 | 622 | 634 | 646 | 659 | 672 |
| 4 | Telecommunications | Cost lines relating to telecoms | En-route charging zones | 2,235 | 2,408 | 2,578 | 2,647 | 2,716 | 2,791 | 2,863 |
| | | | Terminal charging zones | 359 | 376 | 402 | 413 | 424 | 435 | 447 |
| 5 | Operational | Cost lines relating to other operational spending | En-route charging zones | 6,563 | 6,927 | 7,776 | 8,747 | 9,617 | 9,029 | 9,336 |
| | | | Terminal charging zones | 1,766 | 1,779 | 1,987 | 2,229 | 2,443 | 2,306 | 2,387 |
| 6 | Subscriptions | Cost lines relating to subscriptions | En-route charging zones | 364 | 465 | 556 | 556 | 557 | 556 | 556 |
| | | | Terminal charging zones | 78 | 99 | 118 | 118 | 118 | 118 | 118 |
| 7 | Administration | Cost lines relating to administration | En-route charging zones | 12,828 | 13,473 | 14,548 | 15,011 | 15,471 | 15,952 | 16,452 |
| | | | Terminal charging zones | 3,291 | 3,071 | 3,325 | 3,426 | 3,525 | 3,628 | 3,736 |
| **Total other operating costs** | | | **En-route charging zones** | **29,341** | **34,247** | **37,298** | **41,567** | **40,423** | **42,227** | **44,842** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Total other operating costs** | | **Terminal charging zones** | **7,163** | **7,935** | **8,644** | **9,645** | **9,375** | **9,783** | **10,389** |
| Accounting provisions included in total other operating costs | | En-route charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Terminal charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Costs for ground-ground communication services | | En-route charging zones | 769 | 803 | 859 | 882 | 905 | 930 | 954 |
| | | Terminal charging zones | 120 | 125 | 134 | 138 | 141 | 145 | 149 |
| Costs for air-ground communication services via terrestrial link | | En-route charging zones | 769 | 803 | 859 | 882 | 905 | 930 | 954 |
| | | Terminal charging zones | 120 | 125 | 134 | 138 | 141 | 145 | 149 |
| Costs for air-ground communications services via satellite link | | En-route charging zones | 769 | 803 | 859 | 882 | 905 | 930 | 954 |
| | | Terminal charging zones | 120 | 125 | 134 | 138 | 141 | 145 | 149 |

| Description of the main factors explaining the planned variations of other operating costs over the reference period |
|---|
| AirNav Ireland is forecasting significant step-increases in spending on other operating costs compared with current and historic levels. In assessing the efficiency of these proposed increases, CEPA/THINK disaggregated other operating costs into 24 separate categories, with each assessed individually. More detail on the forecast increased spending across RP4 by cost line can be found in the CEPA/THINK draft and final reports. Some of the main increases relate to increased training costs (itself related to ATCO recruitment), as well as maintenance/spares relating to the new ATM system. |

**c) Exceptional items**

| | | |
|---|---|---|
| Number of entries | | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Accounting provisions included in total exceptional items | | En-route charging zones | | | | | | | |
| | | Terminal charging zones | | | | | | | |

| Description of the main factors explaining the planned variations of other exceptional items over the reference period |
|---|
| N/A |

**d) Accounting provisions**

| | | |
|---|---|---|
| Number of entries | | 0 |

**3.4.6.2 - Investment costs**

**a) Depreciation costs**

| | |
|---|---|
| Method adopted for the calculation of the depreciation cost (point 1.3 of Table 1): | Historical |
| If current cost accounting is applied, equivalent historical cost accounting figures have to be provided in Annex E in order to allow for comparison | |

**b) Cost of capital**

| 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 |
|---|
| The cost of capital is the estimate of the return which investors (equity shareholders and holders of debt) in AirNav Ireland would require. It should balance rewarding exisiting investors appropriately, enabling the delivery of required infrastructure, and protecting the interests of airspace users from excessive charges. For RP4, the IAA has set the real cost of capital for AirNav Ireland at 4.26%. In its Business Plan submission, AirNav Ireland proposed a |

real cost of capital of 4.91%.

The cost of capital assumptions are summarised below. More detail on our assessment of all of the components of the cost of capital for AirNav Ireland can be found in Section 5 of the Draft Decision and Final Decision document.

| Cost of capital assumptions | Description of each item |
|---|---|
| NBV fixed assets | Cost of capital is calculated by reference to<br>(i) NBV of the regulated asset base, calculated at each month end,<br>(ii) Cost of capital incurred before commissioning an asset capitalised and depreciated over the useful life of that asset.<br><br>Assets are depreciated on a straighline basis. The largest project to be added to the average asset base during RP4 is TopSky ATC One. More information on AirNav Ireland's major projects and the depreciation of these projects can be found in the Performance Plan financial model.<br><br>Details on AirNav Ireland's smaller investments can be found in Tab 2.1 of the Performance Plan template, and in Appendix 1 of the IAA's Draft Decision and Final Decision Documents. |
| Adjustments total assets | None |
| Net current assets | None - Net current assets are not included in the cost of capital calculation. |
| Cost of capital % | The IAA has calculated that the determined costs should provide for a real pre-tax rate of **4.26%** (the nominal WACC therefore ranges from 6.30% to 6.35% across RP4), based on the following assumptions, for AirNav Ireland. All real and nominal components of the WACC can be observed in Tab 'AirNav WACC (IAA)' of the Performance Plan financial model. |
| Return on equity | The pre-tax return on equity is **7.3%** in real terms (therefore 9.5% in nominal terms), across RP4. The cost of equity is estimated using the Capital Asset Pricing Model (CAPM). The CAPM describes the expected return for assets and equities, and in cases where equities are traded in markets, some of the parameters are observable based on market data. |
| Average interest on debts | The average interest on debts is **1.17%** in real terms (therefore ranging from 3.1% to 3.2% in nominal terms), across RP4. AirNav Ireland does not hold any embedded debt. We have therefore calculated the cost of new debt using the various fees and rates in AirNav Ireland's undrawn Revolving Credit Facility (RCF) arrangements. Nominal debt costs have been converted to real debt costs using the Fisher equation and an inflation rate of 1.98%, which is the RP4 average rate based on the April 2024 IMF forecast for 2025 to 2029. This leads to a real cost of debt of 1.17%. |

| | |
|---|---|
| Share of financing through equity | We have set AirNav Ireland's notional share of financing through equity across RP4 at **50%**. While the ANSP currently has no debt, and its current actual gearing is therefore zero, it has put in place borrowing facilities. However, uncertainty on the timing and extent to which these facilities may be used means AirNav Ireland's level of gearing throughout RP4 is uncertain.<br><br>There is no universally accepted precise level of gearing that is considered to be efficient or optimal; however, regulatory decisions within the Irish and European aviation sector in recent years, including our own, have used values between 50% and 60% (based on ranges around these values).<br><br>We consider a notional gearing point estimate of 50% appropriate. |

**3.4.6.3 - Costs for VFR exempted flights**

| 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 Article 31(3), 31(4) and 31(5) |
|---|
| The cost of VFR flights is captured in an annual amount of €127k, consistent with previous years. |

**3.4.6.4 - NSA verification**

| Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the determined costs of the ANSP with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification |
|---|
| The IAA has ensured that only eligible and efficient costs, based on prudent estimates and input assumptions, are included in the determined costs for AirNav Ireland. This has resulted in a range of adjustments and alternative assumptions being adopted, as is apparent from the descriptions elsewhere in this template and the supporting documentation. |

## 3.4.6 - Determined costs assumptions - Met Éireann Aviation Services Division (ASD)

### 3.4.6.1 - Operating costs

**a) Staff costs**

| Number of entries | 1 |
|---|---|

| # | Staff costs building blocks (in nominal terms in '000 national currency) | Description of the composition of each item | Charging zones | Actual | Forecast | Determined | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1 | Staff costs | Staff costs are determined based on a bottom-up assessment of MET ASD's forecast staffing profile over RP4. | En-route charging zones | 3,635 | 4,241 | 4,609 | 4,746 | 4,839 | 4,935 | 4,740 |
| | | | Terminal charging zones | 908 | 1,060 | 1,152 | 1,187 | 1,210 | 1,234 | 1,185 |
| **Total staff costs** | | | **En-route charging zones** | **3,635** | **4,241** | **4,609** | **4,746** | **4,839** | **4,935** | **4,740** |
| | | | **Terminal charging zones** | **908** | **1,060** | **1,152** | **1,187** | **1,210** | **1,234** | **1,185** |

| Accounting provisions included in total staff costs | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | En-route charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Terminal charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7) | Pension costs for MET ASD are based on the Government of Ireland Public Service Pensions scheme. We note that the previously reported pension cost for 2023 appears to have been understated, which explains the change from 2023 to 2024. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | En-route charging zones | 327 | 635 | 705 | 726 | 740 | 755 | 724 |
| | | Terminal charging zones | 82 | 159 | 176 | 181 | 185 | 189 | 181 |

| Description of the main factors explaining the planned variations of staff costs over the reference period |
|---|
| Headcount is the primary factor explaining the variation of staff costs over the reference period. MET ASD is forecasting a relatively minor step-change in headcount between the end of RP3 and the start of RP4, which the IAA has assessed in terms of eligibility, need, additionality, and efficiency, and has accepted in part only. This increase is described in detail in Section 7 of the IAA's Decision Document, with the IAA's assessment of the substantiation also provided. |

**b) Other operating costs**

| Number of entries | 1 |
|---|---|

| # | Other operating costs building blocks (in nominal terms in '000 national currency) | Description of the composition of each item | Charging zones | Actual | Forecast | Determined | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1 | Other operating costs | Other Operating Costs consist of both Core and Direct Other Operating Costs. | En-route charging zones | 2,610 | 2,922 | 2,742 | 2,776 | 2,857 | 2,893 | 2,918 |
| | | | Terminal charging zones | 653 | 730 | 685 | 694 | 714 | 723 | 729 |
| **Total other operating costs** | | | **En-route charging zones** | **2,610** | **2,922** | **2,742** | **2,776** | **2,857** | **2,893** | **2,918** |
| | | | **Terminal charging zones** | **653** | **730** | **685** | **694** | **714** | **723** | **729** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Accounting provisions included in total other operating costs | | En-route charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Terminal charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Costs for ground-ground communication services | N/A | En-route charging zones | | | | | | | |
| | | Terminal charging zones | | | | | | | |
| Costs for air-ground communication services via terrestrial link | N/A | En-route charging zones | | | | | | | |
| | | Terminal charging zones | | | | | | | |
| Costs for air-ground communications services via satellite link | N/A | En-route charging zones | | | | | | | |
| | | Terminal charging zones | | | | | | | |

| Description of the main factors explaining the planned variations of other operating costs over the reference period |
|---|
| Other Operating Costs are forecast to stay largely flat (in real terms) throughout RP4. Additional costs due to increased technical support related to observation systems are offset by a downward shift in the core costs allocation key as Met Éireann's remit has grown since the beginning of RP3. More detail on Other Operating costs can be found in Section 7 of the IAA's Draft Decision and Final Decision documents. |

**c) Exceptional items**

| Number of entries | 1 |
|---|---|

| # | Exceptional items building blocks (in nominal terms in '000 national currency) | Description of the composition of each item | Charging zones | Actual | Forecast | Determined | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| 1 | EUMETSAT | | En-route charging zones | 823 | 982 | 1,115 | 1,197 | 1,149 | 1,151 | 1,179 |
| | | | Terminal charging zones | 206 | 246 | 279 | 299 | 287 | 288 | 295 |
| **Total exceptional items** | | | **En-route charging zones** | **823** | **982** | **1,115** | **1,197** | **1,149** | **1,151** | **1,179** |
| | | | **Terminal charging zones** | **206** | **246** | **279** | **299** | **287** | **288** | **295** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Accounting provisions included in total exceptional items | | En-route charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Terminal charging zones | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Description of the main factors explaining the planned variations of other exceptional items over the reference period |
|---|
| Costs related to the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) are outside of the control of Met Éireann as contributions by each member state are apportioned based on Gross National Income. |

**d) Accounting provisions**

| Number of entries | 0 |
|---|---|

**3.4.6.2 - Investment costs**

**a) Depreciation costs**

| Method adopted for the calculation of the depreciation cost (point 1.3 of Table 1): | Historical |
|---|---|
| If current cost accounting is applied, equivalent historical cost accounting figures have to be provided in Annex E in order to allow for comparison | |

**b) Cost of capital**

| 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 |
|---|
| MET ASD did not propose to collect a cost of capital allowance, which would be small in any case. |

| Cost of capital assumptions | Description of each item |
|---|---|
| NBV fixed assets | N/A |
| Adjustments total assets | N/A |
| Net current assets | N/A |
| Cost of capital % | N/A |
| Return on equity | N/A |
| Average interest on debts | N/A |
| Share of financing through equity | N/A |

### 3.4.6.3 - Costs for VFR exempted flights

| 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 Article 31(3), 31(4) and 31(5) |
|---|
| The cost of VFR flights is captured in an annual amount of €127k, consistent with previous years. |

### 3.4.6.4 - NSA verification

| Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the determined costs of the ANSP with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification |
|---|
| The IAA has ensured that only eligible and efficient costs, based on prudent estimates and input assumptions, are included in the determined costs for MET ASD. This has resulted in a range of adjustments and alternative assumptions being adopted, as is apparent from the descriptions elsewhere in this template and the supporting documentation. |

## 3.4.7 - Pension assumptions

***AirNav Ireland***

### 3.4.7.1 Total pension costs, including retirement and pre-retirement schemes (in nominal terms in '000 national currency)

| Pension costs per segment | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| En-route activity | 12,852 | 13,344 | 13,612 | 13,930 | 14,144 |
| Terminal activity | 2,121 | 2,209 | 2,254 | 2,306 | 2,342 |
| Other activities | | | | | |
| **Total pension costs** | **14,973** | **15,553** | **15,866** | **16,236** | **16,486** |

### 3.4.7.2 Assumptions for the "State" pension scheme (in nominal terms in '000 national currency)

| Are there different contribution rates for different staff categories? If yes, how many? | No |
|---|---|

| **<Staff category name>** | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Total pensionable payroll to which this scheme applies | | | | | |
| Employer % contribution rate to this scheme | | | | | |
| **Total pension costs in respect of this scheme** | | | | | |
| Number of employees the employer contributes for in this scheme | | | | | |

| Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP4 |
|---|
| Not Applicable, there is no such pension scheme. |

| Description of the assumptions underlying the calculations of pension costs comprised in the determined costs, separately for retirement and early retirement |
|---|
| |

| Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users |
|---|
| |

### 3.4.7.3 Assumptions for the occupational "Defined contributions" pension scheme (in nominal terms in '000 national currency)

| Are there different contribution rates for different staff categories? If yes, how many? | Yes-2 |
|---|---|

| **DC Scheme** | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Total pensionable payroll to which this scheme applies | AirNav Ireland has advised that this data is commercially confidential, so it has not been made publically available. If required, the unredacted version of this tab can be provided directly to the PRB/EC on a confidential basis. | | | | |
| Employer % contribution rate to this scheme | | | | | |
| **Total pension costs in respect of this scheme** | **1,403** | **1,878** | **2,355** | **2,652** | **3,082** |
| Number of employees the employer contributes for in this scheme | 113 | 144 | 171 | 187 | 210 |

| **Hybrid Scheme** | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Total pensionable payroll to which this scheme applies | AirNav Ireland has advised that this data is commercially confidential, so it has not been made publically available. If required, the unredacted version of this tab can be provided directly to the PRB/EC on a confidential basis. | | | | |
| Employer % contribution rate to this scheme | | | | | |
| **Total pension costs in respect of this scheme** | **2,506** | **2,619** | **2,656** | **2,689** | **2,694** |
| Number of employees the employer contributes for in this scheme | 192 | 196 | 197 | 197 | 196 |

| Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP4 |
|---|
| AirNav Ireland have provided the following to the IAA:<br><br>Employees who joined the company from 1 January 2012 to 30 April 2023 are members of a hybrid pension scheme, i.e. a defined benefit scheme up to a cap and a defined contribution scheme thereafter.<br><br>For employees who joined the company from 1 May 2023, the company operates a Defined Contribution scheme.<br><br>It is assumed that annual pension costs are the amounts that will be paid over in contributions by the employer to the pension fund in each year of RP4. The percentage contribution has been determined by the schemes' actuary to be compliant with the requirement to fund the pension plan on an ongoing basis and on a Minimum Funding Standard basis. |

| Description of the assumptions underlying the calculations of pension costs comprised in the determined costs, separately for retirement and early retirement pension schemes |
|---|
| Information about pension costs as a proportion of staff salaries, and contribution rates, was provided by the ANSP. In the NSA forecasts, this was combined with the changing share of total staff in each year to derive an overall pension cost. |

| Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users |
|---|
| AirNav Ireland provided the following to the IAA:<br><br>All new employees are members of a defined contribution scheme which provides certainty to the airspace users of the cost of pension benefits.<br><br>The hybrid scheme includes a benefit cap, thereby managing variability of the cost of pension provision. From 1 May 2023 this scheme has been closed to new entrants and all new entrants are included in the defined contribution scheme. |

### 3.4.7.4 Assumptions for the occupational "Defined benefits" pension scheme (in nominal terms in '000 national currency)

| Are there different defined benefits schemes applicable? If yes, how many? | Yes-1 |
|---|---|

| DB scheme #1: name and short description | Main Defined Benefit Scheme |
|---|---|

| Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme? | Select |
|---|---|

| | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Total pensionable payroll to which this scheme applies | AirNav Ireland has advised that this data is commercially confidential, so it has not been made publically available. If required, the unredacted version of this tab can be provided directly to the PRB/EC on a confidential basis. | | | | |
| **Total pension costs in respect of this scheme** | **10,567** | **10,769** | **10,846** | **10,840** | **10,784** |
| - service costs (current and past) | | | | | |
| - net interest on the defined benefits liability /assets | | | | | |
| **Net funding surplus/deficit** | | | | | |
| Net funding surplus/deficit at 1 January | This data may be commercially confidential, so it has not been made publically available. If required, the unredacted version of this tab can be provided directly to the PRB/EC on a confidential basis. | | | | |
| - benefits paid | | | | | |
| - contributions to the fund | | | | | |
| Net funding surplus/deficit at 31 December | | | | | |
| **Actuarial assumptions** | | | | | |
| % discount rate | This data may be commercially confidential, so it has not been made publically available. If required, the unredacted version of this tab can be provided directly to the PRB/EC on a confidential basis. | | | | |
| % projected increase in benefits | | | | | |
| % annual increase in salaries | | | | | |
| % expected return on plan assets | | | | | |
| Number of employees the employer contributes for in this scheme | | | | | |

| Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP4 |
|---|
| The ANSP has provided the following information to the NSA:<br><br>Employees who joined the company prior to 1 January 2012 are members of a defined benefit contribution scheme. These schemes are subject to an actuarial valuation every three years and are funded in line with this outcome. |

| Description of the assumptions underlying the calculations of pension costs comprised in the determined costs, separately for retirement and early retirement pension schemes |
|---|
| The ANSP has provided the following to the IAA:<br><br>The pension trustees have submitted a draft of the triennial valuation, dated 1 January 2024, to the Company with a suggested ongoing Employer contribution rate. This is the rate that will apply until the next triennial valuation but, for the purposes of the Business Plan, the rate has been applied to the pensionable salaries of the member employees for the 5 years 2025 to 2029. The Employer is comitted to reviewing it's current policy in relation to reasonable increases to pensions in payment. |

| Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users |
|---|

The ANSP has provided the following information to the NSA:

From 1 January 2012 this scheme has been closed to new members, in addition the trustee's have de-risked the scheme considerabley over the years thereby providing more certainty to the cost of pension provision. The Board of AirNav Ireland decided, and communicated to all staff and pension trustees, that there would be no further increases granted on pensions payable under the scheme with effect from 01 January 2015.

## 3.4.8 - Interest rate assumptions for loans financing the provision of air navigation services

***AirNav Ireland***

| Select number of loans | Select |
|---|---|

**Interest rate assumptions for loans financing the provision of air navigation services**
**(Amounts in nominal terms in '000 national currency)**

| **Other loans** | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Description | Drop down selection does not allow 'zero'. AirNav Ireland currently does not have any outstanding loans. | | | | |
| Remaining balance | | | | | |
| Average weighted interest rate % | - | - | - | - | - |
| Interest amount | | | | | |

| **Total loans** | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| **Total remaining balance** | - | - | - | - | - |
| **Average weighted interest rate %** | - | - | - | - | - |
| **Interest amount** | - | - | - | - | - |

## 3.4.9 - Additional determined costs related to measures necessary to achieve the en route capacity targets

| | |
|---|---|
| Additional costs of measures necessary to achieve the capacity targets for RP4? | Yes |
| If yes, number of **en route** charging zones concerned | 1 |

**a) Overall description of the measures necessary to achieve the en-route capacity targets for RP4, which induce additional costs**

The key measures which the IAA has assessed to be necessary and proportionate to achieve the En Route capacity targets relate to significant investment by AirNav Ireland in its ATM systems, and in its operational staffing levels, particularly ATCOs and engineers. We have set out summary details below, and quantified the Determined Costs associated with each measure. Full details are available in the relevant sections of the IAA's Draft Decision and Final Decision documents, and, in the case of operating cost related measures, the efficiency assessment and forecasting analysis set out in the CEPA/THINK reports.

**b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4**

| | |
|---|---|
| Number of capacity measures, which induce additional costs | 8 |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #1: Recruitment of new ATCOs** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 7,448 | 11,524 | 14,166 | 17,988 | 20,485 |
| Description and justification of the additional determined costs of the measure | | | | | |
| The single biggest driver of the forecast increase in Determined Costs relates to the forecast direct staff costs of new ATCOs to be recruited. As set out in the CEPA/Think reports, we have concluded that AirNav Ireland is currently significantly understaffed in respect of ATCOs, which has led to excessive utilisation and insufficient roster resilience, the deferral of investment, and a deteriorating trend in capacity performance which has materialised as an increase in En Route ATFM delay and instances of 'zero flow rates' being imposed. The CEPA/Think forecast ATCO requirement out to 2029, while being somewhat lower than the level proposed by AirNav Ireland in its Business Plan submission, is based on an assumption of addressing this issue, while also taking account of the forecast growth in traffic during RP4, without adding excessive staff. We therefore consider this measure to be necessary and proportionate to achieve the capacity targets only to the extent accepted as necessary by the IAA, as reflected in the Determined Costs and as quantified here, rather than the higher level proposed by AirNav Ireland. We note that additional ATCO staffing was also supported by airspace users. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #2: Recruitment of new Engineers** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 3,351 | 3,543 | 3,763 | 4,018 | 4,253 |
| Description and justification of the additional determined costs of the measure | | | | | |
| A second area of staffing where we and CEPA/Think assess that AirNav Ireland is understaffed is in relation to engineers. Again, on the basis that meeting safety requirements cannot be the subject of trade-offs, the primary basis upon which we concluded that this increase is necessary is to deliver the investment programme, in particular the major investments in the ATM systems. We conclude that a step increase in engineers is necessary to deliver these investments. We also conclude that AirNav Ireland's Business Plan overstated the requirement, but that our adjusted estimate can be considered necessary and proportionate to deliver the investment programme, and consequently to achieve the capacity targets. We note that our lower forecast of engineer staffing requirements was generally supported by airspace users. We have quantified the proportionate cost of this measure as €4.3m by 2029. The second measure which we have reported as being necessary and proportionate to achieve the capacity targets is therefore the step change in engineers which we forecast to be necessary over RP4. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #3: Recruitment of new OMS staff** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 2,486 | 2,855 | 3,345 | 3,595 | 3,721 |
| Description and justification of the additional determined costs of the measure | | | | | |
| In its Business Plan submission, AirNav Ireland estimated that the level of Operations Management and Support (OMS) staff needed to increase to a total of 83 by 2029. This is intended to free up ATCOs and engineers from such administrative tasks, enabling the productivity of these staff to be maximised in relation to the provision of capacity and delivery of the investment programme. Through subsequent engagement, AirNav Ireland has provided further details of the specific roles being created. We and CEPA/THINK have concluded that this an efficient and proportionate measure, which partly offsets what would otherwise be a requirement for further increases in ATCOs/engineers. We conclude that this is a measure which is necessary and proportionate to achieve the capacity targets. We have quantified the cost of this measure as €3.7m by 2024. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #4: Other Operating Cost Measures** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 3,405 | 4,104 | 4,732 | 3,933 | 3,972 |
| Description and justification of the additional determined costs of the measure | | | | | |

In relation to Other Operating costs, we have also identified a number of measures which are required to achieve the local capacity targets, either by facilitating the delivery of the ATCOs to be recruited as outlined above, or to facilitate the new ATM system. We have again estimated the proportionate cost of these measures. The largest such cost line item relates to the cost of training the required new ATCOs, which is approximately €2m per year, tailing off towards the end of RP4. There is also a forecast step increase in the cost of maintenance and spares, particularly at the end of RP4, driven by the new ATM system. We have quantified the total costs of this measure as just under €4m by 2029, and reported it as the fourth measure.

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #5: Investment in Main ATM System** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 691 | 1,550 | 2,765 | 3,136 | 4,761 |
| Description and justification of the additional determined costs of the measure | | | | | |
| We have identified that major investment in the main ATM system is driving incremental capital costs for AirNav Ireland over RP4. Specifically, as noted elsewhere, this includes the replacement of the current ATM system with the TopSky ATC One ATM system, as well as further COOPANS builds. These projects provide for a range of enhanced functionality to support ATCO decision making, enhancing productivity, and facilitating AirNav Ireland in achieving the capacity targets. The shift towards modern, open architecture allows for new features such as Automatic Speech Recognition, Alternate Trajectories, and Conflict Resolution Advisories to be added. The automation of routine tasks is forecast to increase ATCO productivity. In our forecast ATCO requirements, the IAA has assumed ATCO productivity improvements over RP4 on the basis of this investment (and following our assessment that AirNav Ireland did not sufficiently account for this productivity improvement in its own Business Plan submission). We have quantified the capital costs of investing in the TopSky ATC One system, and in the planned COOPANS builds over RP4, at just under €5m by 2029. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #6: Investment in Contingency ATM System** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 0 | 214 | 835 | 805 | 900 |
| Description and justification of the additional determined costs of the measure | | | | | |
| AirNav Ireland proposes to invest in a new contingency ATM system, on the basis that it is necessary to ensure that the capacity targets can be met. It will provide increased capacity when relied upon over strips, or the current contingency system, and will mean that continuity of service is assured in such instances. If this project is not delivered, there is a risk that the existing system will become unserviceable in the near future. This would lead to a reversion to a manual fallback system which would cause significant flow control issues in Irish controlled airspace. We conclude that this investment is necessary and proportionate to ensure that the capacity targets can be achieved. We have quantified the capital costs of investing in the contingency ATM system over RP4 at just under €1m by 2029. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #7: Investment in RADAR Systems** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 71 | 527 | 1,562 | 1,977 | 2,162 |
| Description and justification of the additional determined costs of the measure | | | | | |
| AirNav Ireland proposes to invest in RADAR and surveillance systems, in support of the provision of air traffic control services, in particular by replacing end-of-life RADAR components that have reached end-of-life. The IAA has verified the end-of-life status of these components, as set out in sections 15 of the Draft Decision and Final Decision. The IAA notes that AirNav Ireland cannot provide a 5NM or 3NM radar separation service without sufficient reliable radar coverage. Procedures in place to cope with the loss of RADARs typically require increased separations, leading to reduced capacity and productivity. Our cost forecasts and capacity targets rely on the availability of such coverage. We therefore conclude that this investment is necessary and proportionate to achieve the capacity targets. We have quantified the capital cost of this investment at just over €2m by 2029. | | | | | |

| AirNav Ireland | | | | | |
|---|---|---|---|---|---|
| **Measure #8: Minor Investments Necessary for Capacity** | 2025D | 2026D | 2027D | 2028D | 2029D |
| Associated additional costs (nominal terms in '000 national currency) | 22 | 134 | 364 | 1,024 | 1,621 |
| Description and justification of the additional determined costs of the measure | | | | | |

We have also identified a number of smaller capacity related investments that primarily contribute to AirNav Ireland's ability to train ATCOs, maintain existing navigational equipment to ensure capacity is not compromised, and service or support the investments in the ATM systems.

The building extensions to both the Ballycasey and Dublin ACCs will increase capacity for test and proving facilities needed to implement new systems. The classroom capacity that will be added to both centres is necessary to deliver the future ATC service and will cater for the additional staff members which we have included in the Opex forecasts, as outlined above.

AirNav Ireland proposes to invest in the resilience of systems needed for service provision featuring a range of different power supplies. Modular UPS supporting TopSky ATC One will provide more resilient and scalable back-up power supplies to all ATC positions and will be more scalable to support TopSky ATC One systems. Similarly, the PV Installation is intended to ensure service continuity, and consequently capacity, is not impacted in the event of national power outages. By introducing fibre feeds in place of microwave links at certain remote sites, AirNav Ireland is working to ensure that capacity is not compromised during extreme weather conditions.

AirNav Ireland's investments in the NOKIA Service Aggregation Routers, Air Traffic Management Surveillance Tracker and Server (ARTAS) and Surveillance Analysis Support System for ATC Centres (SASS-C) projects are with a view to ensuring that AirNav Ireland continues to provide 5NM and 3NM RADAR separations. The ARTAS and SASSC systems in particular are needed to support the introduction of the new ATM system referenced above.

Finally, AirNav Ireland also proposes to invest in Distance Measuring Equipment (DME) to support En Route services in the event of Global Navigation Satellite System (GNSS) outages. We note that in the event of a GNSS outage, AirNav Ireland would need to rely on conventional NavAids to ensure that capacity is not constrained.

We conclude that the above investments are necessary and proportionate to achieve the capacity targets. We have quantified the total capital costs of these investments as €1.6m by 2029.

| | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| **Total additional costs of measures ('000 national currency)** | 17,474 | 24,450 | 31,533 | 36,476 | 41,875 |

**c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4 by nature by ANSP**

**Additional costs of measures necessary to achieve the capacity targets for RP4 (nominal terms in '000 national currency)**

| Ireland | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| Staff | 13,285 | 17,922 | 21,274 | 25,602 | 28,459 |
| of which, pension costs | 2,033 | 2,720 | 3,177 | 3,750 | 4,110 |
| Other operating costs | 3,405 | 4,104 | 4,732 | 3,933 | 3,972 |
| Depreciation | 279 | 1,083 | 2,825 | 3,482 | 5,487 |
| Cost of capital | 505 | 1,342 | 2,702 | 3,459 | 3,956 |
| Exceptional items | | | | | |
| **Total additional costs of measures** | 17,474 | 24,450 | 31,533 | 36,476 | 41,875 |

| | 2025D | 2026D | 2027D | 2028D | 2029D |
|---|---|---|---|---|---|
| **Total additional costs of measures ('000 national currency)** | 17,474 | 24,450 | 31,533 | 36,476 | 41,875 |

| Additional comments |
|---|
| |

**d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity**

To assess whether the deviation from the target trends is exclusively due to these measures, the IAA has converted the operating cost-related measures to real 2022 prices, and recalculated the DUC trend net of these measures. In that case, the short-term DUC trend reduces to -2.9%, and the long-term DUC trend reduces to -1.7%. These align with, and outperform, the EU-wide target trends of -1.2% and -1% respectively. We therefore conclude that the deviation from the target trends is exclusively driven by the additional determined costs of measures which are necessary and proportionate to achieve the En Route capacity targets.

## 3.4.10 - Restructuring costs

### 3.4.10.1 Restructuring costs from previous reference periods to be recovered in RP4

| | |
|---|---|
| Restructuring costs from previous reference periods approved by the European Commission? | No |

### 3.4.10.2 Restructuring costs planned for RP4

| | |
|---|---|
| Restructuring costs foreseen for RP4? | No |

| Additional comments |
|---|
| |

# SECTION 3.5: ADDITIONAL KPIS / TARGETS

**3.5 Additional KPIs / Targets**

**Annexes of relevance to this section**

ANNEX J. OPTIONAL KPIs AND TARGETS

## 3.5 - Additional KPIs / Targets

| | |
|---|---|
| Number of additional KPIs | 0 |

# SECTION 3.6: DESCRIPTION OF KPAS INTERDEPENDENCIES AND TRADE-OFFS INCLUDING THE ASSUMPTIONS USED TO ASSESS THOSE TRADE-OFFS

**3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs**

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

3.6.2 - Interdependencies and trade-offs between capacity and environment

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

3.6.4 - Other interdependencies and trade-offs

## 3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

### 3.6.1 - Interdependencies and trade-offs between safety and other KPAs

a) With regard to the over-riding safety objectives, what pressures does your organisation experience in meeting the cost, capacity and environmental KPAs? Describe how you ensure that these pressures do not negatively impact safety within your organisation. Describe the mitigation measures that have been introduced to demonstrate that safety performance has been sustained and what monitoring has been envisaged to measure the effectiveness of those mitigations.

While a trade-off between the Safety KPA and other KPAs exists, the importance of ensuring the required level of operational safety and safety management means that this interdependency should be reflected more as an input than a trade-off. In practice, this usually means including cost forecasting assumptions which are consistent with fully meeting the required levels of safety. It is then for AirNav Ireland to ensure, as it has outlined in its Business Plan, that where any such potential trade-offs arise, these are managed such that the required levels of safety is not compromised.

As to mitigation measures to ensure that safety performance is sustained and the monitoring of same by the IAA, AirNav Ireland did not achieve the target for safety risk management (SRM) during RP3. AirNav Ireland has put in place a project plan under the leadership of the Safety Manager to achieve Level D in SRM and maintain Level C or better in all other components during RP4. AirNav Ireland has documented this requirement as a Safety Objective which is reviewed at their Safety Review Board. AirNav Ireland has also directly assigned staff to safety management positions which will increase efficiencies of incident investigation and reporting (and the IAA has also taken account of this in the cost forecasts).

AirNav Ireland is also in the process of updating its SMS Training Programme to include Safety Assessment of Change Management Training within the programme which will facilitate the assurance that staff are trained and competent to perform their functions. AirNav Ireland will work to improve on its review of audit and survey trend analysis.

The IAA's risk-based oversight methodology indicated that increased scrutiny of AirNav Ireland's safety management processes was warranted and so the IAA has undertaken additional audits and inspections of the ANSP. Meetings and workshops on safety management system processes have also been held between the IAA and AirNav Ireland to provide for better safety performance.

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs? Please provide a detailed analysis.
Describe the analysis methodology and the data that has been used to assess the interdependencies between safety and other KPAs. What indicators, in addition to those described in the Regulation, are used for monitoring during the reference period to ensure that the targets in the KPAs of capacity, environment, and cost-efficiency are not degrading safety?

The required level of safety (as well as capacity and environment) performance have been used as inputs to the level of determined costs forecast by the IAA, such that those forecasts are consistent with AirNav Ireland having sufficient resources to meet the required levels of safety (and also service quality). This is the appropriate way to assess and take account of the referenced interdependency. For example, cost forecasts for RP4 allow for an additional 7 engineering staff that we concluded would be necessary to meet the requirements of EU Regulation 2017/373. Furthermore, the NSA factored the need to invest in safety performance (eg ASMGCS at Cork and Shannon airports) into its allowance of AirNav Ireland's capital investment programme.

In the context of other KPAs, all necessary costs should be incurred in order to achieve the required level of safety performance, irrespective of whether the funds and resources associated with these costs could yield greater improvements in performance in other KPAs (or adversely affect performance in other KPAs).

In terms of indicators, the IAA monitors a range of Safety Performance Indicators (SPIs), including the rate of Runway Incursions and Separation Minima Infringements. For the defined SPIs, there are associated safety targets and alert thresholds to provide quantifiable measures for the maintenance and/or improvement of the level of safety for the air navigation services domain. This methodology is developed to identify an Acceptable Level of Safety Performance (ALoSP) and is aligned with ICAO Doc 9859.

c) Describe the organisation's philosophy for managing competing priorities between the KPAs effectively – for instance delaying programmes to manage competing demands. It is expected that the organisation uses its business risk management processes to assess the consequential risks of the organisation's competing priorities to achieve its business goals.

AirNav Ireland has confirmed in its Business Plan that any decisions which include consideration of interdependencies or trade-offs between safety and other KPAs, will be managed such that the required level of safety performance will not be compromised. See in particular section 3.4 of the AirNav Ireland Business Plan.

d) What trade-offs in safety have been accepted to manage resources shortfalls in realising the organisation's objectives to meet the cost, capacity and environment KPA targets? Have trade-offs restricted the release of staff for safety activities, such as safety training (ATC training excepted), safety surveys, safety audits, safety assessments, safety studies and analyses?

Historically, AirNav Ireland has achieved both its Environment targets and En Route capacity targets. Although the KEA target was not met in 2023, this can be attributed to mitigating circumstances that were largely outside of AirNav Ireland's control. This implies that if additional resources were required in order to maintain safety performance, the capacity KPA targets could, up to a point, still be achieved with fewer resources. However, as noted above, given that safety performance is the primary priority, the resources required to maintain safety performance will be provided, even if this is at the expense of other KPA targets.

The IAA's cost forecasts are intended to allow AirNav Ireland to efficiently meet the required level of safety performance, safety activities such as training, and also fully meet the capacity targets. This draft Performance Plan for RP4 does not envisage or assume trade-offs in safety activities in order to improve capacity and/or cost efficiency performance (and it is not apparent that any such potential trade-off arises in practice in relation to the environment KPA). In its Business Plan, AirNav Ireland has outlined the additional staff positions it intends to assign to ensure improved safety performance. This includes allocating staff on a permanent basis to Accident Occurrence Investigation (AOI), who were previously included in the ATCO roster. AirNav Ireland has identified that additional staff is needed to improve the timeliness of accident occurrence investigations and to improve coordination of the organisation's safety and security activities. The IAA has taken account of these cost drivers in the cost forecasts underpinning the Determined Costs.

e) Has the State reviewed the ANSP financial and personnel resources that are needed to support safe ATC service provision through safety promotion, safety improvement, safety assurance and safety risk management in line with planned changes that will enable targets in other KPAs to be achieved? Please provide a detailed explanation.

As part of developing the RP4 draft Performance Plan, as well as using the required level of performance as inputs to the cost forecasts, the NSA has undertaken a financial viability and stress test assessment of AirNav Ireland. This is in line with our standard approach to regulatory price controls. Based on financial projections, AirNav Ireland's coverage ratios are well within a sustainable range and, even under a scenario of an unplanned increase in operating costs, the ratios remain within a sustainable range and within the Revolving Credit Facilities already in place.

AirNav Ireland's Business Plan reiterates its focus on safety, stating that safety remains its 'ultimate priority'. AirNav Ireland referenced the interdependency of safety and cost efficiency and stressed the need for sufficient funds to ensure safety performance. From our assessment, it is clear that AirNav Ireland will have sufficient funds to ensure resourcing need not impact on safety, even if it were to be unable to fully meet the cost efficiency targets in doing so.

Therefore, the NSA is confident that even in the event of a severe downside scenario where actual costs exceed Determined Costs to a significant extent, the assumed level of Determined Costs will generate a revenue stream which is sufficient to enable the financial viability of AirNav Ireland and the achievement of the other KPA targets. While we have set cost forecasts which we consider achievable, even if AirNav Ireland is unable to fully meet the cost efficiency KPA targets, performance in the other KPAs does not need to be degraded. It is therefore the NSA's view that, in the event that AirNav Ireland is unable to meet all KPA targets simultaneously, all necessary costs should be incurred to achieve the required level of safety performance, irrespective of whether the funds and resources associated with these costs would lead to a deterioration in the cost efficiency KPA. The financeability of the AirNav Ireland regulated entity is discussed further in Section 12 of the Final Decision.

### 3.6.2 - Interdependencies and trade-offs between capacity and environment

Less capacity and more congested airspace imply that airspace users have less ability to use the most efficient flight routing and, conversely, more capacity implies more efficient flight paths can be facilitated. In that regard, the IAA has reviewed the recent PRB study on the interdependency between capacity and environment which estimated that an increase of 1 minute of En Route ATFM delay per flight causes an increase of 0.14 percentage points in the KEA.

Therefore, while performance in these KPAs appears to be interdependent, there does not appear to be an inherent trade-off. AirNav Ireland stated in its RP4 Business Plan that by sufficiently increasing capacity, this will also contribute to positive performance in the Environment KPA, demonstrating the correlation between the two KPAs. From that perspective, and particularly given the relatively limited levers available to AirNav Ireland to further improve KEA performance directly, it appears that the primary environment trade-off is one of an indirect nature with cost efficiency, through the capacity and cost efficiency trade-off described below.

### 3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

For an ANSP operating efficiently, providing additional capacity will incur additional costs. However, establishing a relationship between cost efficiency and capacity is not straightforward in practice as there are a number of dimensions to consider.

The relationship between cost efficiency (as measured by the DUC) and ANSP-attributable delay is partly lagged, with additional capacity being significantly linked to investment in infrastructure or training of additional ATCOs, both of which have lead times of several years (although some additional capacity can be provided in the short term through, for example, additional overtime). There can also be a trade-off between current capacity and future capacity, where current capacity may be impacted by a requirement to resource the delivery of an investment programme which will ultimately lead to improvements in future capacity (such as, for example, AirNav Ireland's planned investment in the TopSky ATC One system during RP4). Such investment in future capacity is also an investment in future productivity and thus cost efficiency.

In its Business Plan, AirNav Ireland has laid out what it sees as the critical features needed to provide sufficient capacity. This includes delivering sufficient ATCO resources (reduced reliance on overtime, demand from staff for a better work-life balance, allowances for job-sharing, statutory and annual leave, etc.), and delivering a Capex programme which will allow it to cope with forecast traffic growth.

Ideally, capacity targets should be set at the optimum point where the marginal cost associated with any additional reduction in delay exceeds the marginal economic benefits associated with any further delay reduction. In practice, it is challenging to identify this optimum, given the extent of current and future uncertainties associated with the inputs to any such analysis. We have nonethess taken this interdependency into account by, in particular, proposing capacity targets which we consider to be appropriately challenging but not premised on eliminating all ATFM delay. Equally, we have sought to develop cost forecasting assumptions which are consistent with reversing the trend of increasing ATFM delay and delivering very low ATFM delay levels over RP4, in particular through significant investment in the ATM systems and in additional ATCO and engineering staff. Further detail on the cost-efficiency and capacity trade-offs are contained in Sections 12 and 13 of the Draft Decision and the Final Decision.

### 3.6.4 - Other interdependencies and trade-offs

# SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

**4.1 - Cross-border initiatives and synergies**

4.1.1 - Cross-border areas where the ANSP provides ANS outside the State's charging zone(s) in the scope of the performance plar

4.1.2 - Planned or implemented cross-border initiatives at the level of ANSPs

4.1.3 - Investment synergies achieved at FAB level or through other cross-border initiatives

4.2 - Deployment of SESAR Common Projects (CP1)

**4.3 - Change management**

**Annexes of relevance to this section**

ANNEX N. CROSS-BORDER INITIATIVES

ANNEX V. CONSISTENCY OF INVESTMENTS WITH ATM MASTER PLAN

## 4.1 - Cross-border initiatives and synergies at the level of the ANSP(s)

### 4.1.1 - Cross-border areas where the ANSP(s) provide(s) services outside of the State's charging zone(s) in the scope of the performance plan

*As indicated in section 1.1.1, the cross-border area(s) reported below are those cross-border areas or groups of adjacent cross-border areas of a size above 500 km2, unless the area or group of areas concerned has fewer than 7,500 controlled flight movements on average per year.*

| | |
|---|---|
| Number of cross-border area(s) where the ANSP(s) of the Member State provide(s) services in another State's charging zone(s) | 3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Cross-border area(s) #1** | Isle of Man (IOM) sector and L18 conditional route | Situated in: | London FIR | | | |
| Geographical scope of the cross-border area(s) | Two areas to the east of Dublin over the Irish Sea, with vertical limits from FL55/85/145 to FL245 only. Control of traffic above FL245 is not delegated. | | | | | |
| Rationale for establishing the cross-border area, including performance benefits | Dublin Airport is situated very close to the Ireland-UK FIR boundary. ATS delegation in the IoM sectors and the L18 conditional route, to the east of Dublin Airport at the FIR boundary, gives AirNav's ATCOs approximately 25% extra time and space to manage approximately 50% of Dublin Airport related traffic, alleviating what otherwise would be a capacity constraint, thereby enhancing ATCO productivity and reducing cost for AirNav Ireland. In addition, the delegation facilitates enhanced environment performance, in particular KEA, CCO, and CDO. | | | | | |
| Size of the cross-border area (km2) | 1,250 km2 and 548 km2, respectively, but only within certain flight levels. | | | | | |
| Estimated annual number of flights | 100,000 | | | | | |
| Estimated annual number of SUs, if available | - | | | | | |
| Description of the services provided by the ANSP in the cross-border area | | | | | | |
| Air Traffic Control Service | | | | | | |
| Annual cost incurred by the ANSP for the provision of services in the cross-border area | | 2025 | 2026 | 2027 | 2028 | 2029 |
| | | Net saving | Net saving | Net saving | Net saving | Net saving |
| Methodology used to estimate/establish these costs | | | | | | |
| It is difficult to precisely quantify the cost savings to AirNav Ireland generated by the provision of services in these boxes by AirNav Ireland without fully establishing a counterfactual re-designed airspace without the delegation box. THINK ATM consultancy has carried out a study in 2023 on the cost, capacity, and environment effects of the delegation arrangements, which estimated that this arrangement provides a 24% capacity benefit on the Irish side of the FIR boundary, which, if current capacity/environment performance were to be maintained by AirNav Ireland, would therefore require a significant increase in ATCO resourcing in the absence of the delegation. This report can be made available, if helpful. | | | | | | |
| Have these costs been excluded from the determined costs in the scope of the performance plan? | | | | | | No |
| No, such (negative) costs have not been excluded. If viewed from the perspective of a counterfactual scenario where no delegation arrangement was in place, as outlined above, this would lead to higher determined costs, all else equal. Alternatively, if viewed from the perspective of the total square kilometres of airspace in which delegation arrangements exist to/from the Irish charging zone, the total almost exactly balances out at c8,500km2 both ways, given that Donegal airspace above FL245 is delegated to NATS. From that perspective, either, there is not any justification to adjust the determined costs up or down for the purposes of a balancing item from a cost allocation perspective. | | | | | | |
| Description of the financial arrangements in place to cover these costs | | | | | | |
| All benefits and (net negative) costs have been included within the draft Performance Plan assumptions. | | | | | | |
| Additional comment | | | | | | |
| It can be noted that the environment and capacity benefits of this arrangement have also been included in the draft Performance Plan, given that those targets are based on a level of performance and productivity which has been facilitated by the delegation. Although details on the delegation of airspace from the Irish charging zone to other ANSPs has not been requested in this template, it can be noted that Donegal airspace in the North West of the Irish FIR has been delegated to NATS above FL245. This prevents a situation where transatlantic traffic crossing Northern Ireland is briefly handed over to AirNav Ireland, before being handed back to NATS, which leads to cost savings for AirNav Ireland. | | | | | | |

| | | | |
|---|---|---|---|
| **Cross-border area(s) #2** | BANBA Box | Situated in: | London FIR |
| Geographical scope of the cross-border area(s) | Located off the south east coast of Ireland, from FL195 to FL660, only. | | |
| Rationale for establishing the cross-border area, including performance benefits | The BANBA box is located at a three way junction between the Shannon FIR and two busy ATC sectors in the London FIR. The traffic flows across the area are multidimensional, with flights climbing and descending in a short time frame. The box of delegated airspace is used to manage that complex flow of traffic. The THINK report has assessed that, in the absence of the BANBA box, the coordination workload with the UK sectors would be increased, and there would also be knock-on impacts for NATS, resulting in reduction in capacity and less optimal trajectories. Although these impacts would primarily affect and be attributed to NATS, there would likely be ripple effects on AirNav Ireland impacting Cork and Dublin airports, including outbound delays on the ground at Cork and less optimal flight trajectories affecting both Cork and Dublin airports. | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Size of the cross-border area (km2) | 2,222 km2 | | | | | |
| Estimated annual number of flights | 55,000 to 62,000 | | | | | |
| Estimated annual number of SUs, if available | - | | | | | |
| Description of the services provided by the ANSP in the cross-border area | | | | | | |
| Air Traffic Control Service | | | | | | |
| Annual cost incurred by the ANSP for the provision of services in the cross-border area | 2025 | 2026 | 2027 | 2028 | 2029 | |
| | Uncertain | Uncertain | Uncertain | Uncertain | Uncertain | |
| Methodology used to estimate/establish these costs | | | | | | |
| Aside from the benefit to NATS in the case of this delegation, it is difficult to specifically quantify the level of cost which would be required for AirNav Ireland to deliver the equivalent levels of capacity and environment performance in a counterfactual scenario in which this delegation arrangement was not in place, relative to the incremental cost to AirNav Ireland of providing ATS in this box (above FL195 only). Based on the THINK analysis, it appears likely to also be net negative. | | | | | | |
| Have these costs been excluded from the determined costs in the scope of the performance plan? | | | | | | No |
| No- as noted above, the associated determined costs are likely net negative if viewed from a counterfactual perspective, or alternatively zero/negligible if viewed from a kilometre squared balancing item perspective across all delegated airspace. | | | | | | |
| Description of the financial arrangements in place to cover these costs | | | | | | |
| All benefits and costs have been included within the draft Performance Plan assumptions. | | | | | | |
| Additional comment | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| **Cross-border area(s) #3** | TAKAS Box | Situated in: | London FIR |
| Geographical scope of the cross-border area(s) | Located to the south of Ireland adjacent to the Shannon Oceanic Transition Area (SOTA) and French airspace, from FL245 to FL660 only. | | |
| Rationale for establishing the cross-border area, including performance benefits | The TAKAS box is used in conjunction with the LARLA triangle (which is delegated from NATS to the French DSNA) to transfer traffic directly between the Shannon South Oceanic (SOTA) and Brest ACCs, without the need for a very short intervention by NATS. The absence of this box would result in a series of rapid transfers from DSNA to NATS to AirNav Ireland for westerly flights, and vice versa for easterly flights, leading to a collective increase in workload. Additionally, this arrangement enables efficient routing of north-south traffic from Ireland and Scotland to Spain, the absence of which would, based on the THINK analysis, lead to a deterioration in the horizontal flight efficiency of these routes in the Shannon FIR. | | |
| Size of the cross-border area (km2) | 4,595 km2 | | |
| Estimated annual number of flights | 20,000 to 24,000 | | |
| Estimated annual number of SUs, if available | - | | |
| Description of the services provided by the ANSP in the cross-border area | | | |
| Air Traffic Control Service | | | |

| | | | | | |
|---|---|---|---|---|---|
| Annual cost incurred by the ANSP for the provision of services in the cross-border area | 2025 | 2026 | 2027 | 2028 | 2029 |
| | Uncertain | Uncertain | Uncertain | Uncertain | Uncertain |
| Methodology used to estimate/establish these costs | | | | | |
| Aside from the benefit to NATS in the case of this delegation, which is reciprocated in the case of the Donegal airspace which primarily benefits AirNav Ireland as outlined above, it is difficult to specifically quantify the level of additional cost which would be required for AirNav Ireland to deliver the same level of environment performance in a counterfactual scenario in which this delegation arrangement was not in place, relative to the cost to AirNav Ireland of providing ATS in this box (above FL195 only). | | | | | |
| Have these costs been excluded from the determined costs in the scope of the performance plan? | | | | | No |
| No- see above. | | | | | |
| Description of the financial arrangements in place to cover these costs | | | | | |
| All benefits and costs have been included within the draft Performance Plan assumptions. | | | | | |
| Additional comment | | | | | |
| | | | | | |

### 4.1.2 - Planned or implemented cross-border initiatives at the level of ANSPs

| | |
|---|---|
| Number of cross-border initiatives | 1 |

| Initiative #1 | |
|---|---|
| Name | COOPANS |
| Description | COOPANS is an international partnership that includes AirNav Ireland and ANSPs from five other states (Austria, Croatia, Denmark, Portugal and Sweden). COOPANS has a common managerial approach, whereby the six ANSPs act as one organisation together with the supplier (Thales). |
| Expected performance benefits | Across all KPAs- see below. |
| Additional comments | |

### 4.1.3 - Investment synergies achieved at FAB level or through other cross-border initiatives

| Details of synergies in terms of common infrastructure and common procurement |
| --- |
| The COOPANS partnership allows for the delivery of common ATM systems and functionality intended to steadily enhance safety and productivity. This also allows for economies of scale and common ATM systems, as 'builds', or packages of functionality, are agreed by the COOPANS Board, allowing for common development, integration, deployment, and maintenance. System incidents that occur in one ANSP can be remedied accross all the partners, before they cause service interruptions for other ANSPs.<br><br>AirNav Ireland has previously estimated that, as a result of the COOPANS partnership it has saved €50m since 2011. |

## 4.2 - Deployment of SESAR Common Projects (CP1)

| CP1 ATM Functionality (CP1-AF)/ Sub-functionality (CP1-s-AF) | Target date of implementation | Date of actual/expected deployment of s-AF | Description of realised and/or planned investment(s) related to the deployment of s-AF | Relevant investments (Ref. # as per section 2) | RP4 determined costs related to the sub-AF (in national currency and in nominal terms) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2025 | 2026 | 2027 | 2028 | 2029 |
| **CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs** | | | | | | | | | |
| CP1-s-AF1.1 AMAN extended to en-route airspace | *31/12/2024* | 15th October 2024 | Current COOPANS System is capable. Deployment of AMAN functionality and reconfiguration of existing ATM System to exchange the required information. | N/A | | | | | |
| CP1-s-AF1.2 AMAN/DMAN Integration | *31/12/2027* | N/A | N/A | N/A | | | | | |
| **CP1-AF2 - Airport Integration and Throughput** | | | | | | | | | |
| CP1-s-AF2.1 DMAN synchronised with predeparture sequencing | *31/12/2022* | 31/12/2022 | Deployment of IATS system at Dublin included the pre departure sequencer functionality. | N/A | | | | | |
| CP1-s-AF2.2.1 Initial airport operations plan (iAOP) | *31/12/2023* | 31/12/2024* *ACDM part | This is an airport operator (daa) deliverable. A pre-requisite for this is the implementation of ACDM including the connection with the Network Manager (NM). Airnav Ireland is working with daa to implement ACDM as an enable for daa to complete this AF. The IATS PDS functionality was upgraded to improve the ACDM performance. Testing with the NM is ongoing. | N/A | | | | | |
| CP1-s-AF2.2.2 Airport operations plan (AOP) | *31/12/2027* | | daa deliverable. | | | | | | |
| CP1-s-AF2.3 Airport safety nets | *31/12/2025* | 31/12/2025 | Upgrade of IATS system required and planned | N/A (not a major project) | | | | | |
| **CP1-AF3 - Flexible Airspace Management and Free Route Airspace** | | | | | | | | | |
| CP1-s-AF3.1 Airspace management and advanced flexible use of airspace | *31/12/2022* | 31/12/2022 | NM system for ASM capabilities has been adopted. CIAM token installed. FMP/AMC function is currently performed by NATS on behalf of Airnav Ireland, this will be performed by Airnav Ireland from 2026 (as explained elsewhere in the Performance Plan documentation). | N/A | | | | | |
| CP1-s-AF3.2 Free route airspace | *31/12/2025* | 31/12/2025 | Current COOPANS system is compliant. | N/A | | | | | |
| **CP1-AF4 - Network Collaborative Management** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CP1-s-AF4.1 Enhanced short-term ATFCM measures | *31/12/2022* | 31/12/2022 | NMP Flow Application is in use. | N/A | | | | | |
| CP1-s-AF4.2 Collaborative NOP | *31/12/2023* | 31/12/2024*<br>*ACDM part | Use of NM technical platform through NATS agreement in place. As noted above, FMP/AMC function is currently performed by NATS, this will be performed by AirNav Ireland from 2026.<br>The current Coopans system is compliant.<br><br>The Initial AOP/NOP Information sharing family is a daa deliverable, a pre-requisite for this is the implementation of ACDM including the connection with the NM. AirNav Ireland is working with daa to implement ACDM as an enable for daa to complete this AF.<br>The IATS PDS functionality was upgraded to improve the ACDM performance. Testing with the NM is ongoing. | N/A | | | | | |
| CP1-s-AF4.3 Automated support for traffic complexity assessment | *31/12/2022* | 31/12/2022 | Airnav CHMI tokens upgraded to incorporate NMP FLOW Application | N/A | | | | | |
| CP1-s-AF4.4 AOP/NOP integration | *31/12/2027* | 31/12/2027 | daa deliverable. AirNav Ireland is working with daa to implement ACDM as an enable for daa to complete this AF. | N/A | | | | | |
| **CP1-AF5 - SWIM** | | | | | | | | | |
| CP1-s-AF5.1 Common infrastructure components | *31/12/2024* | 31/12/2024 | SWIM Platform | N/A | | | | | |
| CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications | *31/12/2025* | 31/12/2025 | SWIM Platform | N/A | | | | | |
| CP1-s-AF5.3 Aeronautical information exchange | *31/12/2025* | 2029 | EAD upgrade<br>SmartSIS System - DNOTAM & AIF<br>Topsky ATC One<br>IATS<br>CASDS | Major investments #A1, #A5 | Not available | | | | |
| CP1-s-AF5.4 Meteorological information exchange | *31/12/2025* | 2029 | Topsky ATC One<br>IATS<br>CASDS<br>SmartMessenger AMHS<br>SmartSIS System - DNOTAM, MET & AIF<br>Met Converter | Major investments #A1, #A5 | Not available | | | | |
| CP1-s-AF5.5 Cooperative network information exchange | *31/12/2025* | 2029 | Topsky ATC One<br>IATS Upgrade<br>CASDS | Major investments #A1, #A5 | Not available | | | | |
| CP1-s-AF5.6 Flight information exchange (yellow profile) | *31/12/2025* | 2029 | Topsky ATC One<br>IATS Upgrade<br>CASDS | Major investments #A1, #A5 | Not available | | | | |
| **CP1-AF6 - Initial Trajectory Information Sharing** | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CP1-s-AF6.1 Initial air-ground trajectory information sharing | *31/12/2027* | 2029 | Topsky ATC One | Major investments #A1, #A5 | Not available | | | | |
| CP1-s-AF6.2 Network Manager trajectory information enhancement | *31/12/2027* | 2029 | NM deliverable | | | | | | |
| CP1-s-AF6.3 Initial trajectory information sharing ground distribution | *31/12/2027* | 2029 | Topsky ATC One | Major investments #A1, #A5 | Not available | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Total RP4 determined costs for common project related to the sub-functionalities across charging zones for the concerned entity | 0 | 0 | 0 | 0 | 0 |

## 4.3 - Change management

| Change management practices and transition plans for the entry into service of major airspace changes or for ATM system improvements, aimed at minimising any negative impact on the network performance |
| --- |
| AirNav Ireland's change management procedures are approved by the Competent Authority so as to be compliant with Regulation (EU) 2017/373. The change management practices and transition plans are documented in Safety Assessment of Change Manual and associated procedures. The ANSP has ensured that all staff involved in change management practices are trained and competent by completing approved training courses.<br><br>In accordance with Regulation (EU) 2017/373, the life cycle of the change spans from definition to operations, including transition into service. The ANSP, as part of change management procedures, ensures that the safety criteria:<br>(1) are justified for the specific change, taking into account the type of change;<br>(2) when fulfilled, predict that the functional system after the change will be as safe as it was before the change, or the air traffic services provider shall provide an argument justifying that:<br>(i) any temporary reduction in safety will be offset by future improvement in safety; or<br>(ii) any permanent reduction in safety has other beneficial consequences<br>AirNav Ireland uses the Safety Assessment of Change Manual (SACM)-001 to present the requirements and guidance for safety assessments of changes to the ATM/ANS Functional System for use by practitioners of safety in the ANSP. The manual consolidates all existing requirements and guidance material, some of which was previously contained in appendices to SP400 procedures.<br><br>EU Regulation 2017/373 requires that a safety assessment is performed when there is a change to any element of the ATM/ANS Functional System (i.e. people, procedures, equipment) or the operational environment in which services are provided (i.e. changes to airspace structure, traffic characteristics, etc.). AirNav Ireland uses safety assessments that follow a series of steps outlined in the SACM and the results are documented and distributed in a safety case according to the provisions of SP403 (major changes) or SP406/ENG-001 (minor changes). The safety case provides assurance that the safety criteria identified for the change will be satisfied and will remain satisfied i.e. that the change will be and will remain acceptably or tolerably safe.<br><br>The safety assessment is conducted by the ANSP's operational units that are introducing the change. For changes to ATM engineered systems, the change is led by Technical Services. For cross-boundary changes, the change is led by the ATM Operations and Strategy Directorate. Responsibility for the conduct of the assessment may be delegated as necessary.<br><br>Safety assessments may also be carried out by another organisation, on the ANSP's behalf, however, the responsibility for the safety assessment remains with the ANSP. The safety assessment when completed and notified to the Competent Authority before implementation, in accordance with extant ASAM 038 requirements. Where the Competent Authority decides to review a notified change, the change may not be implemented until approval has been granted.<br><br>Ops normal is always considered to be the case, as that is the baseline functions/services that are provided. Transition plans aim to safely manage a new system into service. If the safety assessment of their introduction necessitates restrictions, then they will be included, otherwise it is Ops normal.<br><br>It is not possible to guarantee that there will be no impact on the network on the introduction of TOPSKY1. AirNav Ireland has stated that, for safety reasons, it may be obliged to introduce regulation for a limited period of time to ensure that there is sufficient capacity to deal with any potential teething problems with the technology and also to allow ATCOs build a level of confidence with the system as they begin to use TOPSKY1 in live operations.<br><br>AirNav Ireland has stated that this will be taken into account in the safety case for the introduction of TOPSKY1. The extent of any regulations will depend on the amount of training required to transition to the new system which will be determined by a training needs analysis, and the extent of the differences between how the ATCOs interact with the current system, compared to TOPSKY1. At this time, it is not possible to confirm the extent and duration of any regulation that might be required, but AirNav Ireland has stated that the impact on airspace users and on the network will be kept to the minimum necessary. |

# SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

**5.1 - Traffic risk sharing parameters**

- 5.1.1 Traffic risk sharing - En route charging zones
- 5.1.2 Traffic risk sharing - Terminal charging zones

5.2 - Capacity incentive schemes

- 5.2.1 - Capacity incentive scheme - Enroute
  - a) Parameters for the calculation of financial advantages or disadvantages - En route
  - b) Pivot values - En route
  - c) Modulation mechanism (if applicable)
- 5.2.2 - Capacity incentive scheme - Terminal
  - a) Parameters for the calculation of financial advantages or disadvantages - En route
  - b) Pivot values - Terminal
  - c) Modulation mechanism (if applicable)

**5.3 - Optional incentives**

**Annexes of relevance to this section**

- ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING
- ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES
- ANNEX K. OPTIONAL INCENTIVE SCHEMES

## 5.1 - Traffic risk sharing

### 5.1.1 Traffic risk sharing - En route charging zones

| **Ireland** | | | Traffic risk-sharing parameters adapted? | | | no |
|---|---|---|---|---|---|---|
| | | | Service units lower than plan | | Service units higher than plan | |
| | Dead band | Risk sharing band | % loss to be recovered | Max. charged if SUs 10% < plan | % additional revenue returned | Min. returned if SUs 10% > plan |
| Standard parameters | ±2.00% | ±10.0% | 70.0% | 5.6% | 70.0% | 5.6% |

### 5.1.2 Traffic risk sharing - Terminal charging zones

| **Ireland - TCZ** | | | Traffic risk-sharing parameters adapted? | | | no |
|---|---|---|---|---|---|---|
| | | | Service units lower than plan | | Service units higher than plan | |
| | Dead band | Risk sharing band | % loss to be recovered | Max. charged if SUs 10% < plan | % additional revenue returned | Min. returned if SUs 10% > plan |
| Standard parameters | ±2.00% | ±10.0% | 70.0% | 5.6% | 70.0% | 5.6% |

## 5.2 - Capacity incentive schemes

### 5.2.1 - Capacity incentive scheme - En route

**a) Parameters for the calculation of financial advantages or disadvantages - En route**

| **En route** | Expressed in | Value |
|---|---|---|
| Dead band Δ | fraction of min | ±0 minutes |
| Max bonus (≤2%) | *% of DC* | 0.00% |
| Max penalty (≥ Max bonus) | *% of DC* | 1.00% |

**b) Pivot values - En route**

| | |
|---|---|
| Basis for the annual setting of pivot values | Fixed (equal to performance targets) |

**c) Modulation mechanism (if applicable)**

*Section to be filled out only if the option for modulated pivot values has been selected under b) above.*

| | |
|---|---|
| Modulation mechanism of pivot values | Click to select |

| |
|---|
| Based on the modulation mechanism(s) selected above, provide a detailed description of the principles and methodology used to modulate the pivot values |

**Option A) - Modulation based on unforeseen changes in traffic**

| | |
|---|---|
| **1)** the pivot value for the year N is **equal** to the yearly update of reference values provided by the Network Manager in the NOP | Click to select |
| **2)** the pivot value for year N is **informed** by the yearly update early update of reference values by the Network Manager in the NOP | Click to select |

| |
|---|
| If 2) applies describe the principle and formulas on the basis of which the pivot values are calculated |
| |

**Option B) - Modulation limiting pivot values to C, R, S, T, M, P delay codes**

| |
|---|
| The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual |
| Explanation on the methodology used to modulate the pivot values accordingly |
| |

**Additional information in the case of the combination of A) and B)**

| |
|---|
| If the modulation of pivot values is based on both options A) and B) above, provide additional information on how these two modulation mechanisms are applied in combination with each other |
| |

## 5.2.2 - Capacity incentive scheme - Terminal

**a) Parameters for the calculation of financial advantages or disadvantages - Terminal**

| **Terminal** | Expressed in | Value |
|---|---|---|
| Dead band Δ | fraction of min | 0 minutes |
| Max bonus (≤2%) | *% of DC* | 0.00% |
| Max penalty (≥ Max bonus) | *% of DC* | 1.00% |

**b) Pivot values - Terminal**

| | |
|---|---|
| Basis for the annual setting of pivot values | Modulated |

**c) Modulation mechanism (if applicable)**

*Section to be filled out only if the option for modulated pivot values has been selected under b) above.*

| | |
|---|---|
| Modulation mechanism of pivot values | B) Limited to CRSTMP delay causes |

| |
|---|
| Based on the modulation mechanism(s) selected above, provide a detailed description of the principles and methodology used to modulate the pivot values |

**Option A) - Modulation based on unforeseen changes in traffic**

| | |
|---|---|
| The pivot value for year N is modulated in order to enable significant and unforeseen changes in traffic to be taken into account | No |
| Description the principle and formulas on the basis of which the pivot values are calculated | |
| | |

**Option B) - Modulation limiting pivot values to C, R, S, T, M, P delay codes**

| |
|---|
| The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual |
| Explanation on the methodology used to modulate the pivot values accordingly |
| We have set the total arrival ATFM delay targets at 0.2 minutes for each year of RP4. Historically, the majority of arrival delay has not been ANSP attributable. We therefore intend to set the modulated pivot values of 0.1 minutes of delay per flight but limited to CRSTMP delay only. We have set a deadband of 0 minutes such that the penalty to AirNav Ireland will become payable if the pivot value is exceeded due to CRSTMP delay. The scheme is penalty-only. |

**Additional information in the case of the combination of A) and B)**

| |
|---|
| If the modulation of pivot values is based on both options A) and B) above, provide additional information on how these two modulation mechanisms are applied in combination with each other |
| |

# SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

**6.2 Non-compliance with targets during the reference period**

## 6 - IMPLEMENTATION OF THE PERFORMANCE PLAN

### 6.1 Monitoring of the implementation plan

| Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources |
|---|
| The IAA will monitor the performance of the regulated entities on an ongoing basis. On safety, the IAA will continue to conduct an annual review of the EoSM questionnaire, based on actual outcomes each year and impose remedial measures in any areas of noncompliance with the targets. The IAA also monitors a range of Safety Performance Indicators (SPIs), including the rate of Runway Incursions and Separation Minima Infringements. For the defined SPIs, there are associated safety targets and alert thresholds to provide quantifiable measures for the maintenance and/or improvement of the level of safety.<br><br>The IAA will continue to monitor the performance on Capacity and Environment (based on data from the NM) and strive to ensure that measures are taken to meet the performance targets. The IAA will hold regular meetings with AirNav Ireland to review data on taxi time and ASMA metrics and discuss any ATM factors that may impact performance. The IAA is also the competent authority for the purposed of the Slot Regulation EC 95/93, and is responsible for setting the slot coordination parameters at Dublin Airport. It is familiar with the broad range of factors that influence such PIs. On KEA, the IAA will continue to have regular performance review meetings to discuss progress on any actions which might be able to improve AirNav Ireland's performance, following a deterioration in the KEA score at the end of the previous reference period.<br><br>On cost efficiency, the IAA will monitor actual costs and financial performance through a review of regulated entity accounts and audits of the eligibility of reported actual costs. The NSA will ensure the under spend of the RP3 capex programme is returned to users in the manner agreed, throughout RP4, as has already been consulted on and included in the tables and forecast unit rates for RP4. We will monitor and report actual expenditure on and delivery of RP4 projects, at an individual project level. We will publish biannually on our website a report which focuses on what projects have been delivered or are progressing, material changes, and how expenditure is tracking against the Performance Plan assumptions. |

### 6.2 Non-compliance with targets during the reference period

| Description of the processes put in place and measures to be applied by the NSA to address the situation where targets are not reached during the reference period |
|---|
| If any performance shortfalls are identified, the NSA will make enquiries with the entity concerned, conduct a root-cause analysis and introduce potential corrective measures. The NSA will then monitor the implementation and impact of the corrective measures to determine their effectiveness. All protocols for reporting variances and corrective measures to other stakeholders or oversight bodies will be formally documented. The NSA will hold regular meetings with the entity in question and offer support to ensure the targets are not repeatedly missed. The NSA will consider whether the performance shortfalls warrant further scrutiny of the entity's protocols and internal processes. The NSA could explore further meetings, workshops and potential audits if necessary. |

# 7 - ANNEXES

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
- ANNEX A.x - En route Charging Zone #x

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
- ANNEX B.x - Terminal Charging Zone #x

ANNEX C. CONSULTATION
ANNEX D. LOCAL TRAFFIC FORECASTS
ANNEX E. INVESTMENTS
ANNEX F. BASELINE VALUES (COST-EFFICIENCY)
ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING
ANNEX H. RESTRUCTURING MEASURES AND COSTS
ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES
ANNEX J. OPTIONAL KPIs AND TARGETS
ANNEX K. OPTIONAL INCENTIVE SCHEMES
ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME
ANNEX M. COST ALLOCATION
ANNEX N. CROSS-BORDER ANS
ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS
ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS
ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX S. INTERDEPENDENCIES
ANNEX T. OTHER MATERIAL
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE
ANNEX V. IMPLEMENTATION OF ATM MASTER PLAN
ANNEX Y. RESPONSES TO COMPLETENESS VERIFICATION
ANNEX Z. CORRECTIVE MEASURES