

# Performance Plan

## Sweden

Fourth Reference Period (2025-2029)

Status: Draft performance plan (Art. 12 of IR  
2019/317)  
Date of issue: 4,56E+04

### STRUCTURE AND PURPOSE

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*\* Only as per Article 15(6) of the Regulation*

## Signatories

Performance plan details	
State name	Sweden
Status of the Performance Plan	Draft performance plan (Art. 12 of IR 2019/317)
Date of issue	2024-10-01
Date of adoption of Draft Performance Plan	
Date of adoption of Final Performance Plan	2025-06-19

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	
Jonas Bjelfvenstam, director general, Swedish Transport Agency	<i>(electronically signed)</i>

Additional comments	
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Document change record		
Version	Date	Reason for change
2	2024-12-20	Corrigendum LFV and Safety
3	2025-06-10	Further motivation terminal capacity target

## SECTION 1: INTRODUCTION

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### **1.1 The situation**

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### **Annexes of relevance to this section**

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- 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	The Swedish Transport Agency
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#### 1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	7		
ANSP name	Services	Type of entity	Geographical scope
LFV	En Route/TNC	ATSP/CNSP	Total SE Area (excl. areas below)
SDATS	En Route	ATSP/CNSP	ATS approach (where they are designated providers)
ACR	En Route	ATSP/CNSP	ATS approach (where they are designated providers)
SMHI	En Route	METSP	Total SE Area
Arvidsjaur/AFAB	En Route	ATSP/CNSP	ATS approach (where they are designated providers)
Swedavia	En Route/TNC	ATSP/CNSP	Swedavia is represented as an CNS Infrastructure provider. CNS Infrastructure owner for Approach. Their role in the system is the ownership of infrastructure used by other ATS providers. Swedavia have this role for ARN (TNC) and other airports providing approach (and therefore also is a provider En Route)
CNS providers		ATSP/CNSP	CNS Infrastructure owner for Approach. Their role in the system is the ownership of infrastructure used by other ATS providers.

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

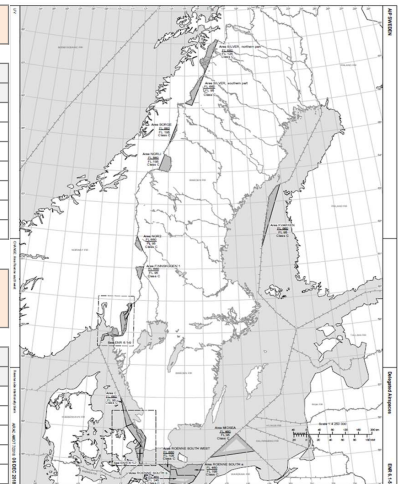
\* To be reported in the performance plan: any cross-border area or group of adjacent cross-border areas of a size above 500 km<sup>2</sup>, unless the area or group of areas concerned has fewer than 7,500 controlled flight movements on average per year

Number of cross-border area(s) where the ANSP(s) of the Member State provide(s) services in another State's charging zone(s)	8
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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
SMHI METSP	Danish FIR, Met-cooperation area	Denmark FIR
SMHI METSP	Finnish FIR, Met-cooperation area	Finland FIR
LFV	Kvarken	Finland
LFV	Mid sea and Ronne south	Poland
LFV	N/A	Denmark
LFV	N/A	Norway
LFV	Rønne SW	Germany

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	5
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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
Danish Meteorological Institute	Swedish FIR, Met-Cooperation area	Sweden FIR
Finnish Meteorological Institute	Swedish FIR, Met-Cooperation area	Sweden FIR
Danish Meteorological Institute	Southern part of Swedish FIR	Sweden FIR
Naviair, Denmark	N/A	Sweden
Avinor, Norway	N/A	Sweden



#### 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	2
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Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
Swedish Maritime Administration	Search and Rescue	Provision of Search and Rescue facilities for the civil air traffic
Swedish Transport Agency	Oversight	Oversight of regulations in the scope of ANS
PECASUS/Spectre France	Space Weather	Space weather service for the benefit of civil aviation. Costs are reported as exceptional costs under MET provider, SMHI

#### 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	Sweden	
Terminal	Number of terminal charging zones	1
Terminal charging zone 1	Sweden - TCZ	

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

Relevant local circumstances with high significance for performance target setting
Sweden has been severely hit by the effects of the war in Ukraine. As the traffic and service units are above 2019 already on a EU wide level, the

situation is quite different i Sweden where the restrictions over Russia led to a negative demand-shock for overflights. The situation, and the approach to tackle this by Sweden, is developed in Annex R.

Additional information
<p>A great part of the Swedish airports provides en route services due to the construction of large TMA:s that are far and between, hence making it cost-efficient to also allow for provision of en route/approach services. To increase the transparency of these costs, Sweden has introduced a separate reporting section "CNS-providers". This is the infrastructure of approach, the ATS is provided by either LFV, SDATS or ACR.</p> <p>Air Navigation Services (ANS) at several airports are provided under market conditions in Sweden since 2010. That is, the airport operator is free to choose provider, or to self-supply. As a consequence, the Air Navigation Service Provider (ANSP) at a specific airport can be changed during a reference period. This can impact the system for route charges as some of the costs for ANS provided at airports are allocated to the en route charging zone. The Swedish Transport Agency (STA), in its role as NSA, needs to ensure that each party in Sweden contributes towards the objective for cost-efficiency. To ensure this, the STA has decided on a breakdown of the Swedish cost efficiency objective for each party, i.e. for Luftfartsverket (LFV), ACR Aviation Capacity Resources AB, Saab Digital Air Traffic Solutions AB, Arvidsjaur Airport, Swedish Maritime Administration, Swedish Meteorological and Hydrological Institute (SMHI) and the STA. When an airport changes the ATS-P, the NSA transfers the corresponding determined costs between the relevant ATS-Ps. Therefore, the amounts for determined costs at ANSP level can diverge from what was communicated as part of the performance plan, but the overall amount for Sweden will not change.</p> <p>Current traffic situation. Sweden have applied the STATFOR base from Feb 2024.</p> <p>The list of ANSPs covered in 1.1.1 constitutes the relevant providers subject to this plan. The not listed constitutes minor airport operators where part of their CNS equipment are allocated to En Route in accordance with the regulations (EU) 2019/317 and TSFS 2020:44. For more information on the cost allocation method and the motives for inclusion of airports, please see Annex T.</p> <p>All Cross-Border initiatives for Meteorological Service Provision means that costs are shared between the service providers instead of all services providers having to bear the full cost. Some cooperation is however slow du to the fact that NSAs in SES have different opinions on compliance to the regulation.</p>

## 1.2 - Traffic Forecasts

### 1.2.1 - En route

#### En route Charging zone 1

Sweden

Local forecast

#### En route traffic forecast

Local forecast	2022A	2023A	2024	2025	2026	2027	2028	2029	CAGR 2024-2029
IFR movements (thousands)	585	636	665	701	721	739	758	772	3,0%
IFR movements (yearly variation in %)		8,8%	4,5%	5,4%	2,9%	2,5%	2,6%	1,8%	
En route service units (thousands)	2 472	2 666	2 888	3 046	3 135	3 212	3 297	3 359	3,1%
En route service units (yearly variation in %)		7,8%	8,3%	5,5%	2,9%	2,5%	2,6%	1,9%	

### 1.2.2 - Terminal

#### Terminal Charging zone 1

Sweden - TCZ

#### Terminal traffic forecast

STATFOR October 2024 (Base)

STATFOR October 2024 (Base)	2022A	2023A	2024	2025	2026	2027	2028	2029	CAGR 2024-2029
IFR movements (thousands)	85	95	96	103	106	109	112	115	3,6%
IFR movements (yearly variation in %)		11,0%	1,8%	6,6%	3,3%	2,9%	2,9%	2,2%	
Terminal service units (thousands)	108	119	122	130	134	138	142	145	3,6%
Terminal service units (yearly variation in %)		11,0%	1,9%	6,6%	3,2%	2,8%	3,2%	2,0%	



## 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
<p>See Annex C since this section is not complete in the PDF version</p> <p>An extra written consultation was held between the 5th-19th of December regarding a corrigendum for LFV costss 2026-2029. Only one user SAS has income with an opinion against the corrigendum. The STA has SAS opinion in account but will still go through with the corrigendum because the costs that is in regard is allowed and approved by teh STA.</p>

Topic of consultation	Applicable	Results of consultation
Establishment of determined costs included in the cost base for charges	Yes	Users were of the opinion that the cost efficiency targets were not ambitious enough and was not meeting the EU target for long term trend, and Sweden has to cope with the situation as prevailing for a long time. The material is somewhat complex but the two day arrangement was appreciated.
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Users questioned allocations of SWIM and Extended AMAN. Users also requested more information and details on matters pertaining certain other investments. The NSA has reviewed these issues (also contacting SJU and PRB) and done changes and amendments to the investment sheet. All matters were pertaing main ANSP LFV.
Charging policy	Yes	For 2024 LFV had a an impact of 2 bn SEK relating to re-valuation of the pension debt. This would imply a reimbursement to the users. There was an agreement to reimburse pension effects at a faster pace than according to the regulation.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	No major discussions on the presented proposal. No objections recorded other than that the users do not want to see a deterioration of service quality. No objection from LFV
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	No major discussions on the proposal. No objections.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	No major discussions on the proposal. No objections.
Establishment or modification of charging zones	No	
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	
Where applicable, decision to apply the simplified charging scheme	No	
Where applicable, decision to diverge from the STATFOR base forecast	No	

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

#1 - ANSPs	
Stakeholder group composition	ANSPs, LFV, SDATS, MET-provider, SMA and Swedavia (airport provider holding infrastructure)
Dates of main meetings / correspondence	Auditing correspondence January-June 2024, writing and meetings. Marketconsultations with providers and users. RP4 consultations 27-28 of August 2024. NSA sent a proposal for cost base for each provider in June which then was the basis for the consultation on the 27-27 of August. National reference group for RP4.
Main issues discussed	Different cost aspects, both levels and eligibility especially certain investments. Matters pertaining capacity targets.
Actions agreed upon	After consultation and clarifications from the ANSPs there have changes in some elements and proposals from the SE NSA.
Points of disagreement and reasons	<p>Several ATC providers do not agree with STA reductions of costs of ATCO FTEs. The STA has assessed the providers individually and the different conditions. Demographic issues are considered being taken care of in the draft. Also the training needs of introducing new CP1 compliant ATM system. For assumptions regarding training the STA has audited the forecasted success rates as this is very important. The STA wants to see ambitious but realistic targets. Training of LFV is developed under "ATCO planning". Traffic volatility is considered through the introduction of the modulated incentive scheme by using the latest NOP as Pivot value. Volatility compared to the traffic forecast could be handled through a revision of the performance plan.</p> <p>Discussions has also been concerning return on different investments, for example Remote tower, and investment expenditures which are influenced by the weak swedish currency and inflation. From the STA point of view, long term planning like this needs to take predictions and forecasts from relevant institutes into consideration and not only look at the current situation. Investment costs can also be adjusted according to the provisions in article 28 EU 2019/317.</p>
Final outcome of the consultation	Minor adjustments to the cost base have been done after the consultation.

Additional comments

#2 - Airspace Users	
Stakeholder group composition	IATA, local airline associations, SAS
Dates of main meetings / correspondence	Marketconsultations with providers and users. RP4 consultations 27-28 of August 2024. Local reference group for RP4.
Main issues discussed	The cost efficiency targets. The reference value for capacity. The handling of adjustments for pensions. Wants to see Government funding to mitigate the increase in charges.
Actions agreed upon	<p>On matters for cost efficiency, the STA has explained its position and the arguments thereof (developed in Annex R). STA recognise that the draft targets do not comply with long term trend according to EU targets, but do however believe that a long term efficiency trend is demonstrated through the volume comparison.</p> <p>The STA considers the introduction of modulations in the incentive schemes, both En Route and TNC, to be efficient and motivating providers to preserve service quality.</p> <p>For pensions and the 2 billion SEK adjustment that has arisen from the increase in interest rates (going back to users), the STA has listened to users (and LFV) and is proposing to deviate from the regulation and reimburse the funds at an earlier pace in order to mitigate the increase of charges. This applies to both En Route and TNC.</p>
Points of disagreement and reasons	Cost efficiency and that the proposed targets for Sweden should be more ambitious. Se annex R for STA arguments.
Final outcome of the consultation	Users do not support the targets proposed for cost efficiency

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	Not represented
Dates of main meetings / correspondence	N/A
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

#4 - Airport operators	
Stakeholder group composition	Airport operators are represented in both RP4 Council and in consultations but prominently in their role as holding part of the infrastructure (CNS).
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	N/A
Dates of main meetings / correspondence	N/A
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

#6 - Other (specify)	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	N/A
Main issues discussed	N/A
Actions agreed upon	N/A
	N/A

Points of disagreement and reasons	None
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 $\geq 80\,000$ )

ICAO code	Airport name	Charging Zone	IFR air transport movements			
			2021	2022	2023	Average
ESSA	Stockholm Arlanda	Sweden - TCZ	91 016	170 407	189 280	150 234

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

Number of airports	0		
ICAO code	Airport name	Charging Zone	Additional information

Additional comments
It is only Arlanda that has the level of traffic to qualify inclusion in the plan. SE NSA has not considered including other airports as relevant, taking into concern that the level of impact to the European Network is limited.

1.5 - Services under market conditions

Number of services under market conditions	Click to select
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Services	Charging zone	Geographical scope of the services	State decision and assessment report	Reference to the agreement of the European Commission
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Additional comments

## 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
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### 1.7.1 - Scope of the simplified charging scheme

Description of the application of the simplified charging scheme

Number of charging zones affected by the simplified charging scheme	Click to select
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Charging Zone	ANSP(s)
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### 1.7.2 - Conditions for the application of the simplified charging scheme

Specify how the conditions of Article 34(2) for the establishment of a simplified charging scheme are being met:

*NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives and ANSPs on the intention to establish and apply a simplified charging scheme.*



## SECTION 2: INVESTMENTS

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### **2.0 - Summary of investments**

#### **2.1 - Investments - LFV**

- 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 - SDATS**

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

#### **2.3 - Investments - ACR**

- 2.3.1 - Summary of investments
- 2.3.2 - Detail of new major investments
- 2.3.3 - Other new and existing investments

#### **2.4 - Investments - SMHI**

- 2.4.1 - Summary of investments
- 2.4.2 - Detail of new major investments
- 2.4.3 - Other new and existing investments

#### **2.5 - Investments - Arvidsjaur/AFAB**

- 2.5.1 - Summary of investments
- 2.5.2 - Detail of new major investments
- 2.5.3 - Other new and existing investments

#### **2.6 - Investments - Swedavia**

- 2.6.1 - Summary of investments
- 2.6.2 - Detail of new major investments
- 2.6.3 - Other new and existing investments

#### **2.7 - Investments - CNS providers**

- 2.7.1 - Summary of investments
- 2.7.2 - Detail of new major investments
- 2.7.3 - 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

LFV

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				2025	2026	2027	2028	2029
New major investments for RP4 (Table A)	905 872 500	905 872 500	Average NBV	187 736 250	436 816 250	666 233 750	754 243 750	739 838 125
			Depreciation	390 000	13 397 500	32 927 500	56 177 500	71 133 750
			Cost of leasing	0	0	0	0	0
Other new investments for RP4 (below 5M€) (Table B)	618 714 000	618 714 000	Average NBV	346 352 566	465 089 910	515 542 596	541 823 432	552 116 937
			Depreciation	28 207 445	56 263 115	67 188 586	77 737 385	82 717 744
			Cost of leasing	0	0	0	0	0
Major investments from RP3 (Tables C + D)	210 572 240	157 929 180	Average NBV	166 182 832	139 826 542	123 571 820	112 662 366	103 567 538
			Depreciation	31 572 329	21 140 252	11 369 191	10 449 717	7 739 937
			Cost of leasing	0	0	0	0	0
Existing investments from previous reference periods (Table E)	0	0	Average NBV	405 024 717	299 997 902	259 414 347	235 822 027	236 230 687
			Depreciation	93 640 591	84 269 554	79 183 813	72 264 187	57 805 971
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	1 735 158 740	1 682 515 680	Average NBV	1 105 296 365	1 341 730 604	1 564 762 513	1 644 551 574	1 631 753 287
			Depreciation	153 810 365	175 070 422	190 669 090	216 628 790	219 397 402
			Cost of leasing	0	0	0	0	0

**SDATS**

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				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)	0	0	Average NBV	0	0	0	0	0
			Depreciation	0	0	0	0	0
			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)	13 562 000	13 562 000	Average NBV	6 611 519	5 594 358	4 577 198	3 560 037	2 542 877
			Depreciation	1 017 161	1 017 161	1 017 161	1 017 161	1 017 161
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	13 562 000	13 562 000	Average NBV	6 611 519	5 594 358	4 577 198	3 560 037	2 542 877
			Depreciation	1 017 161	1 017 161	1 017 161	1 017 161	1 017 161
			Cost of leasing	0	0	0	0	0

ACR

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				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)	0	5 000 000	Average NBV	300 000	825 000	1 200 000	1 425 000	1 500 000
			Depreciation	280 000	420 000	560 000	700 000	700 000
			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)	0	0	Average NBV	789 742	714 742	639 742	564 742	489 742
			Depreciation	70 157	70 220	70 283	70 346	70 346
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	0	5 000 000	Average NBV	1 089 742	1 539 742	1 839 742	1 989 742	1 989 742
			Depreciation	350 157	490 220	630 283	770 346	770 346
			Cost of leasing	0	0	0	0	0

**SMHI**

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				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)	0	17 154 295	Average NBV	1 970 000	5 450 000	8 906 000	10 147 000	9 440 000
			Depreciation	304 000	885 000	1 697 000	2 294 000	2 538 000
			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)	37 370 299	6 510 404	Average NBV	5 823 000	4 568 000	3 593 000	2 877 000	2 257 000
			Depreciation	1 374 000	1 136 000	815 000	618 000	622 000
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	37 370 299	23 664 699	Average NBV	7 793 000	10 018 000	12 499 000	13 024 000	11 697 000
			Depreciation	1 678 000	2 021 000	2 512 000	2 912 000	3 160 000
			Cost of leasing	0	0	0	0	0

**Arvidsjaur/AFAB**

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				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)	0	6 900 000	Average NBV	285 000	255 000	5 002 500	4 777 500	4 552 500
			Depreciation	30 000	30 000	225 000	225 000	225 000
			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)	3 931 000	3 931 000	Average NBV	1 389 000	1 204 500	1 026 750	855 000	690 000
			Depreciation	193 500	177 750	177 750	165 000	165 000
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	3 931 000	10 831 000	Average NBV	1 674 000	1 459 500	6 029 250	5 632 500	5 242 500
			Depreciation	223 500	207 750	402 750	390 000	390 000
			Cost of leasing	0	0	0	0	0

**Swedavia**

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				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)	0	80 072 000	Average NBV	41 924 917	46 180 833	53 631 832	57 809 498	53 968 831
			Depreciation	1 869 167	5 069 001	5 979 001	7 465 667	8 215 667
			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)	155 342 667	69 711 119	Average NBV	35 588 859	31 433 352	27 416 888	23 638 517	20 283 887
			Depreciation	4 174 913	4 136 100	3 896 826	3 659 914	3 049 343
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	155 342 667	149 783 119	Average NBV	77 513 776	77 614 185	81 048 720	81 448 014	74 252 717
			Depreciation	6 044 080	9 205 101	9 875 827	11 125 581	11 265 010
			Cost of leasing	0	0	0	0	0



**CNS providers**

	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)	0	0	Average NBV	63 003 600	87 337 420	86 516 337	82 452 753	76 150 419
			Depreciation	4 531 275	7 587 334	8 329 834	8 557 334	8 399 834
			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)	0	0	Average NBV	143 110 857	126 529 377	110 394 266	94 721 092	79 459 434
			Depreciation	17 100 718	16 336 706	15 888 463	15 520 309	14 702 417
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	0	0	Average NBV	206 114 457	213 866 798	196 910 603	177 173 845	155 609 853
			Depreciation	21 631 992	23 924 041	24 218 297	24 077 643	23 102 252
			Cost of leasing	0	0	0	0	0

## 2.1 - Investments - LFV

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

### 2.1.1 - Investments from RP4

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

3

Ref. #	Name of new major investments (i.e. above 5 M€) for RP4	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
					2025	2026	2027	2028	2029			En route*	Terminal*
<a href="#">A1</a>	COOPANS ATC ONE (modernising Topsky)	755 625 000	755 625 000	Average NBV	126 750 000	324 187 500	532 837 500	626 559 375	628 021 875	5, 10 and 12 years (different components)	ATC ONE for LFV 2029 but depreciation for the the	100%	0%
				Depreciation	0	8 750 000	21 975 000	40 106 250	55 468 750				
				Cost of leasing									
<a href="#">A2</a>	Fallback ATCC och ATS-units (replacement RUFF)	59 572 500	59 572 500	Average NBV	16 331 250	46 117 500	58 491 875	53 405 625	48 319 375	12	2027	100%	0%
				Depreciation	0	0	5 086 250	5 086 250	5 086 250				
				Cost of leasing									
<a href="#">A3</a>	EU 2021/116 - CP1 AF1-AF6	90 675 000	90 675 000	Average NBV	44 655 000	66 511 250	74 904 375	74 278 750	63 496 875	5 and 10 years (different components)	Start from 2025	100%	0%
				Depreciation	390 000	4 647 500	5 866 250	10 985 000	10 578 750				
				Cost of leasing									
Subtotal of new major investments from RP4		905 872 500	905 872 500	Average NBV	187 736 250	436 816 250	666 233 750	754 243 750	739 838 125				
				Depreciation	390 000	13 397 500	32 927 500	56 177 500	71 133 750				
				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	618 714 000	618 714 000	Average NBV	346 352 566	465 089 910	515 542 596	541 823 432	552 116 937			100%	0%
			Depreciation	28 207 445	56 263 115	67 188 586	77 737 385	82 717 744				
			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

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

3

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	0	0	Average NBV						N/A	N/A	100%	0%
				Depreciation									
				Cost of leasing									
C2	Expansion RTS	210 572 240	157 929 180	Average NBV	166 182 832	139 826 542	123 571 820	112 662 366	103 567 538	5-12	The building was taken in to operations	75%	25%
				Depreciation	31 572 329	21 140 252	11 369 191	10 449 717	7 739 937				
				Cost of leasing									
C3	Other development	0	0	Average NBV						N/A	N/A	100%	0%
				Depreciation									
				Cost of leasing									
Subtotal of major investments from RP3 performance plan		210 572 240	157 929 180	Average NBV	166 182 832	139 826 542	123 571 820	112 662 366	103 567 538				
				Depreciation	31 572 329	21 140 252	11 369 191	10 449 717	7 739 937				
				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

**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			Average NBV	405 024 717	299 997 902	259 414 347	235 822 027	236 230 687			100%	
			Depreciation	93 640 591	84 269 554	79 183 813	72 264 187	57 805 971				
			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

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 ATC ONE (modernising Topsky)			Reference #	A1	Total value of the asset		755 625 000	
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		<p>The existing ATM system in use has been in operational service for over 12 years, making it outdated and at the end of its operational life. Modifications are done to enable easier integration with third-party solutions, enhancing the system's adaptability. This updated system also features new capabilities such as Dynamic Airspace Management, Aircraft Capability Management, Virtual Central Operations, Open ATM, and Automatic Speech Recognition (exclusively for simulations). New research has also been taken into account to refine the HMI, making it more user-friendly.</p> <p>In summary, a comprehensive overhaul of the existing air traffic management system is performed, resulting in a simplified, more intelligent, and more interoperable solution. These improvements enhance its capabilities, adaptability, and usability, ultimately contributing to more effective air traffic control operations.</p> <p>The system is used by LFV in several places and handle ATS services in all controlled airspace in Swedein FIR above FL95 and in Stockholm, Göteborg and Malmö TMA. It is also used for FIS in all uncontrolled airspace. In total around 100 operational CWP that are complemented with test and training systems.</p>							
Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference		Yes	<p>Modernization is necessary to achieve the CP1 (Common Project 1) compliance. The compliance with regulatory standards and requirements is crucial for maintaining operational integrity and safety. The upgraded system will incorporate features and capabilities that fulfil CP 1 requirements and create better possibilities to align with future requirements and standards.</p> <p>As for now Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/2014.</p>						
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 will bring LFV and COOPANS in line with the European ATM Master Plan and the Digital European Sky initiative. This overhaul creates enblers for the future DPO implementation. Annex V						
Level of impact of the investment		Network level	Continous dialouge with NM regarding implemmentation and consequences for the Network.						
		Local level							
Quantitative impact per KPA		Safety		Environment		Capacity		Cost Efficiency	
		Major		Significant		Significant		Major	

Benefits for airspace users and results of the consultation of airspace users' representatives		<p><b>Resilience (Business Continuity and Security)</b> The upgraded ATM system is expected to be more resilient in terms of software, and security. This enhanced resilience directly contributes to maintaining the safety and security of air traffic operations.</p> <p><b>Safety</b> The upgraded ATM system enhances operational safety through introducing a variety of new features. These provide ATCOs with better situational awareness, improving decision making and equipping them with the tools to respond swiftly to any arising issues.</p> <p><b>Capacity</b> The upgraded system is anticipated to offer greater capacity, enabling it to handle a higher flights volume. As air travel demand continues to increase, having the ability to manage more flights efficiently is crucial for avoiding congestion and delays within the airspace.</p> <p><b>Productivity</b> The upgraded ATM system will incorporate advanced controller tools that empower air traffic controllers (ATCOs) to efficiently manage more flights per ATCO hour.</p> <p><b>Cost effectiveness</b> The decision to upgrade the current system to the TopSky One system provides a cost-effective solution that is compatible with the previous levels of capital expenditure by the COOPANS partners and which, through cost-sharing, represents a considerably lower investment rate per ANSP than for the other ANSPs served by the same supplier or, indeed, the other suppliers in Europe.</p>	
Joint investment / partnership	Yes	If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives	COOPANS Digital Sky Demonstrator - Project 101122636 — 22-EU-TG-

Name of new major investment 2		Fallback ATCC och ATS-units (replacement RUFF)		Reference #	A2	Total value of the asset		59 572 500	
Main category of the investment			New ATM system	Overhaul of existing ATM system	Other ATM	CNS	Infrastructure	Ancilliary	Other
			x						
Description of the asset			Current Fall-back system (RUFF) is based on software from the 1980s and further development and support is not possible for the whole RP4 time period. Commission Delegated Regulation (EU) 2023/1768 laying down detailed rules for the certification and declaration of air traffic management/air navigation services systems and Commission Implementing Regulation (EU) 2023/1769 of 12 September 2023 laying down technical requirements and administrative procedures for the approval of organizations involved in the design or production of air traffic management/air navigation services systems and constituents cannot be applied on the current system and the supplier of the system and a replacement is therefore required during the RP4 time period. The fallback system is used as a bussiness and safety system when/if hte primary system TopSky/ATC 1 fails. It shall provide safe reduction of capacity and deliver business continuity for LFV and operators under such circumstances.						
Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference		Yes	Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/201						
			The purpose of a fallback system is to ensure the delivery of a limited ATS services even if the primary ATM system becomes entirely						

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		inoperative, as well as to provide a limited service during significant upgrades to the primary ATM system. Given the infrequency with which a fallback system will be utilized, LFV has chosen a strategy that limits its functionality to essential features only. This includes a radar display system with STCA and a simple flight plan system that offers adequate support for managing limited traffic. For this reason, LFV does not intend at this early stage to invest in future SDOs, as doing so may increase investment needs for a traffic level where such enhancements are unnecessary.			
Level of impact of the investment	Network level				
	Local level				
Quantitative impact per KPA		Safety	Environment	Capacity	Cost Efficiency
		Major	Negligeable	Major	Significant
Benefits for airspace users and results of the consultation of airspace users' representatives		Measures to secure a safe delivery of ATS-service, even though LFV main ATM-system isn't available			
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	EU 2021/116 - CP1 AF1-AF6			Reference #	A3	Total value of the asset		90 675 000	
Main category of the investment		New ATM system	Overhaul of existing ATM system		Other ATM	CNS	Infrastructure	Ancilliary	Other
			x						
Description of the asset		In order to comply to EU 2021/116 regulations LFV have to implement and deploy functionality in systems used by ATCOs, contribute with information to Network Manager, establish SWIM-services for information, meteorological and flight information exchange and in flight tracectory sharing. LFV has established a separate project in order to handle all investments required to fulfil CP1 requirements related to LFV.							
Is the investment mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? If yes please provide description/reference		Yes	Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/2014						
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	Requirement to implement coordinated with all stakeholders within the netowrk system						
		Local level	The investment have an major impact on all en route and ATS Arlanda ATM-systems and communications-infrastruktur						
Quantitative impact per KPA			Safety	Environment		Capacity		Cost Efficiency	
			Negligeable	Negligeable		Negligeable		Negligeable	
Benefits for airspace users and results of the consultation of airspace users' representatives		EU 2021/116 Common Projects 1 is based on a business case an a European level. For our part of the European region isn't the business case valid. For the best of the European Network will LFV secure that LFV fulfill our part of the regulation. LFV has no individual business case or reflection regarding how it affects our KPI:s or how it connects with ATM MP. LFV has taken for granted that the overall European business cases and analyses produced before making it a legal requirement are sufficient enough.							
Joint investment / partnership		Yes	If yes, please provide reference to joint project and/or indicate reference to cross-border initiatives			Partly via CINEA financed project CLEAN ATM			

### 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											
The investments below contain smaller overhaul items where existing infrastructure is replaced by newer due to mostly EoL, EoS or new regulations . There is also a couple of smaller investments that together wit airspace changes and changes in operational concept that enable higher efficiency. All of them are deemed necessary to be able to continue fulfillment and improvement of existing KPI and provide various attribution to Safety, Capacity, Efficiency and Cost effectiveness.											

Ref. #	Name of other new investments for RP4	Master Plan reference (if any)	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Description
						2025	2026	2027	2028	2029	
B1	SWEA		11 700 000	11 700 000	Average NBV	7 312 500	8 336 250	7 458 750	8 531 250	12 041 250	Optimizing procedures in Stockholm and Gothenburg TMA
					Depreciation	0	877 500	877 500	877 500	877 500	
					Cost of leasing						
B2	Sweden Flight Information Service		6 825 000	6 825 000	Average NBV	3 737 500	5 850 000	4 550 000	3 250 000	1 950 000	Establishment of separate EnRoute FIS in order to reduce the need of ATCO:s, enhance sector capacity in controlled airspace and maintain level of safety in a market with with increased number of drones. For FIS there is a saving that not is obvious in these papers. For a small investment in current VCS and ATS infrastructure we enable the possibility to have a separate FIS service in uncontrolled airspace and through that we save money and increase capacity and provide a better service in uncontrolled airspace.  Current figures estimate 14 ATCO FTE saving to a cost of 17 FISO FTE. With current cost base for these roles its an estimated saving on more than 1 MEUR/year with better services provided in both controlled and uncontrolled airspace.
					Depreciation	1 300 000	1 300 000	1 300 000	1 300 000	1 300 000	
					Cost of leasing						
B3	Investments in environmental mesures		9 750 000	9 750 000	Average NBV	4 745 000	6 370 000	7 865 000	9 230 000	10 465 000	Mainly smaller investments in local mesures for example in enviromental heating in the premises
					Depreciation	260 000	390 000	520 000	650 000	780 000	
					Cost of leasing						
B4	Other investments in En Route		32 175 000	32 175 000	Average NBV	24 568 051	32 873 290	30 377 758	26 809 725	25 679 193	Smaller investments for example in planning tools for more effective rouster
					Depreciation	978 989	4 835 532	6 005 532	6 005 532	6 005 532	
					Cost of leasing						
B5	Other investments in APP		22 779 000	22 779 000	Average NBV	14 297 872	20 008 122	22 245 122	18 986 372	14 223 122	Many smaller investments in upgrades in systems for APP, (for example Voice Communication system and IRIS)
					Depreciation	2 597 500	3 685 000	6 235 000	5 358 500	4 672 000	
					Cost of leasing						
B6	Replacement of LAN network at ACC Stockholm and Malmö		37 128 000	37 128 000	Average NBV	20 509 125	37 128 000	42 963 375	42 663 075	38 172 225	Replacement of network equipment due to EoL and EoS
					Depreciation	0	0	0	4 490 850	4 490 850	
					Cost of leasing						
B7	Replacement of radio		25 200 000	25 200 000	Average NBV	19 361 585	29 123 193	33 069 525	31 398 510	28 563 860	Replacement of radio equipment due to EoL and EoS
					Depreciation	1 376 830	2 099 955	2 707 380	2 834 650	2 834 650	

					Cost of leasing						EoS
B8	Other investments COM (maintenance)		111 174 750	111 174 750	Average NBV	42 419 130	49 019 495	57 423 995	71 028 650	85 627 636	Many smaller investments in replacement och upgrades in communication equipment (Radio, network, transmission) due to EoL and EoS
					Depreciation	9 721 644	10 342 626	11 330 626	12 369 813	12 432 213	
					Cost of leasing						
B9	Investments NAV (maintenance)		43 875 000	43 875 000	Average NBV	14 191 259	22 625 009	30 863 759	38 907 509	46 756 259	Upgrades/replacements of DME's
					Depreciation	243 750	438 750	633 750	828 750	1 023 750	
					Cost of leasing						
B10	Investments SUR (maintenance)		19 750 000	19 750 000	Average NBV	21 178 049	26 959 548	28 673 463	27 675 939	25 133 641	Upgrades/replacements of mainly WAM-sensors
					Depreciation	1 175 166	2 761 836	3 060 336	3 184 711	3 149 886	
					Cost of leasing						
B11	Investments ATM other (maintenance)		101 419 500	101 419 500	Average NBV	32 032 883	53 091 908	61 903 958	72 334 508	83 983 808	Investments due to EOL/EOS with the purpose to maintain ATS service level and fulfillment of new requirements such as 1768/2023. Replacement of VOLMET and investments and securing cyber-threats in informationssystem (IRIS), voice recording (Legal recording), time systems and meteorological information for aircraft in flight.
					Depreciation	1 170 000	4 506 450	5 949 450	7 314 450	9 361 950	
					Cost of leasing						
B12	Other investments in buildings (operational buildings)		56 550 000	56 550 000	Average NBV	26 911 664	36 125 414	39 303 914	40 922 414	40 054 664	Cluster of investments in building measures mainly for the ACC buildings (example supply systems and upgrades in server/computer room)
					Depreciation	2 837 250	7 010 250	8 082 750	9 155 250	10 130 250	
					Cost of leasing						
B13	Investments Topsy (maintenance)		53 706 250	53 706 250	Average NBV	73 763 901	82 755 026	90 613 526	95 547 026	93 168 026	Upgrade of HW and builds necessary before ATC ONE goes in into operation
					Depreciation	2 632 500	7 741 500	7 741 500	7 741 500	7 741 500	
					Cost of leasing						
B14	Investments RTC (maintenance)		28 687 500	28 687 500	Average NBV	10 421 349	18 345 190	22 809 955	21 965 806	19 025 250	Investments in upgrade of SW and HW
					Depreciation	545 081	2 732 237	4 088 235	4 912 561	5 468 550	
					Cost of leasing						
B15	Other investments in buildings (non-operational buildings)		9 214 000	9 214 000	Average NBV	6 573 605	7 278 885	7 821 228	8 448 243	9 117 911	Smaller investments in non-operational buildings
					Depreciation	829 644	1 011 797	1 155 516	1 384 453	1 612 212	
					Cost of leasing						
B16	Other investments (ADMIN)		48 780 000	48 780 000	Average NBV	24 329 093	29 200 581	27 599 270	24 124 405	18 155 092	Many smaller investments in replacement och upgrades in administrative tools (example business system, integration platform, deviation
					Depreciation	4 039 091	9 529 683	11 001 011	13 428 864	15 136 900	
					Cost of leasing						



## 2.2 - Investments - SDATS

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

### 2.2.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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Ref. #	Name of new major investments (i.e. above 5 M€) for RP4	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*		
					2025	2026	2027	2028			2029	En route*	Terminal
Subtotal of new major investments from RP4		0	0	Average NBV	0	0	0	0	0				
				Depreciation	0	0	0	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%.

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

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
				2025	2026	2027	2028			2029	En route*
Subtotal of other new investments from RP4			Average NBV								
			Depreciation								
			Cost of leasing								

\* 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

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	0
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<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.2.3 - Existing investments from previous reference periods

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

	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 <b>national currency</b> )					Lifecycle	Planned date	Allocation (%)*
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	contractual leasing value) (in national currency)	performance plan (in national currency)		2025	2026	2027	2028	2029	(Amortisation period in years)	of entry into operation	En route*	Terminal*
Subtotal of existing investments from previous RPs	13 562 000	13 562 000	Average NBV	6 611 519	5 594 358	4 577 198	3 560 037	2 542 877				
			Depreciation	1 017 161	1 017 161	1 017 161	1 017 161	1 017 161			70%	30%
			Cost of leasing									

\* 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

Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period											

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					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						

## 2.4 - Investments - SMHI

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

### 2.4.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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Ref. #	Name of new major investments (i.e. above 5 M€) for RP4	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*		
					2025	2026	2027	2028			2029	En route*	Terminal
Subtotal of new major investments from RP4		0	0	Average NBV	0	0	0	0	0				
				Depreciation	0	0	0	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%.

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

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					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	104 050 000	17 154 295	Average NBV	1 970 000	5 450 000	8 906 000	10 147 000	9 440 000			100%	0%
			Depreciation	304 000	885 000	1 697 000	2 294 000	2 538 000				
			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%.

### 2.4.2 - Investments from RP3

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	0
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<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.4.3 - Existing investments from previous reference periods

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

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle	Planned date	Allocation (%)*
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	contractual leasing value) (in national currency)	performance plan (in national currency)		2025	2026	2027	2028	2029	(Amortisation period in years)	of entry into operation	En route*	Terminal*
Subtotal of existing investments from previous RPs	37 370 299	6 510 404	Average NBV	5 823 000	4 568 000	3 593 000	2 877 000	2 257 000				
			Depreciation	1 374 000	1 136 000	815 000	618 000	622 000			100%	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%.

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

Not applicable

#### 2.4.5 - 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											
Several upgrades are needed within the Swedish meteorological infrastructure during RP4 to meet the needs and requirements of aviation stakeholders; meteorological observations and sensors at automated observation sites, upgrades in the weather radar system and aerological measurements as well. A new visualization system is also needed to transform data from observations and numerical weather prediction models to products and services for aviation stakeholders.											

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	Present weather sensors		16 600 000	3 276 840	Average NBV	761 000	2 165 000	2 575 000	2 107 000	1 638 000	During the years 2024-2026, SMHI will replace all PW (Present Weather) sensors. PW sensors are used to observe visibility conditions, precipitation type and intensity. PW sensors are mounted on 125 of SMHI's automatic weather stations. There is also an ambition to eventually add PW sensors to all automatic stations. The current sensors have reached the end of their lifetime and SMHI currently only has spare parts to repair a few sensors. Modern sensors generally have better properties and are expected to measure accumulated precipitation better.
					Depreciation	117 000	351 000	468 000	468 000	468 000	
					Cost of leasing	0	0	0	0	0	
					Average NBV	316 000	744 000	943 000	1 092 000	1 193 000	Several improvements are necessary, as the
					Depreciation	49 000	122 000	171 000	221 000	270 000	

B2	Automatic surface weather stations		10 450 000	2 062 830	Cost of leasing	0	0	0	0	0	observation network already consists largely of older sensors for which support and spare parts are no longer available. Upgrading of sensors that detect current weather (precipitation type, intensity) and visibility are key parameters for SMHI's ability to act as a meteorological watch office (MWO) and to brief operators on current aviation weather. In the coming year, it is planned to make observations available to users at more frequent intervals, which the aviation industry has requested and can benefit from. Furthermore, activities are also planned to collect observations from third parties to complement SMHI's high-quality measurements.
B3	Automatic climatological observation network		500 000	329 000	Average NBV	3 000	9 000	14 000	17 000	20 000	SMHI's network of climatological weather observations will be gradually automated in the coming years, which means that the aviation weather service will have access to more observations that report at more frequent intervals.
					Depreciation	1 000	2 000	2 000	3 000	4 000	
					Cost of leasing	0	0	0	0	0	
B4	Weather radar		52 500 000	4 318 125	Average NBV	248 000	706 000	1 088 000	1 394 000	2 387 000	SMHI has invested in the Swedish weather radar network in recent years. In the coming years, further investments are needed and the network needs to be expanded to cover the needs of society. Weather radar provides detailed information on the occurrence of Cumulonimbus (CB) clouds which can have a major impact on operators, airports and air traffic control. Upcoming upgrades will also make it possible to detect supercooled precipitation, which has a major impact on aviation. Quality-assured information from weather radar also provides opportunities to create more reliable short-term forecasts for both CB and subcooled precipitation. Increased costs related to this are expected in RP4
					Depreciation	38 000	115 000	191 000	267 000	461 000	
					Cost of leasing	0	0	0	0	0	
					Average NBV	642 000	1 826 000	2 171 000	1 777 000	1 382 000	Soundings are instruments that measure
					Depreciation	99 000	295 000	395 000	395 000	395 000	

B5	Aerological observations		14 000 000	2 763 600	Cost of leasing	0	0	0	0	0	temperature, humidity and air pressure in a vertical profile as a helium balloon rises towards the sky. The data collected provides a picture of the layering of the atmosphere that the aviation meteorologist can then use to determine which layers are causing icing or turbulence. The data is also used in SMHI's weather forecasting calculations and has a documented quality-enhancing effect. In the coming years, the technology will be upgraded and investments and development for this must be carried out, which is expected to result in increased costs during RP4.
B6	Visualization system		10 000 000	4 700 000	Average NBV	0	0	2 115 000	3 760 000	2 820 000	All meteorologists at SMHI work in an outdated visualization and production system that risks ceasing to function in a few years. SMHI is planning to invest in a new one during RP4, which the aviation weather service will also be using. A modern system is expected to increase the efficiency of aviation weather production and in the long term reduce system costs and increase forecast quality
					Depreciation	0	0	470 000	940 000	940 000	
					Cost of leasing	0	0	0	0	0	
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						

## 2.5 - Investments - Arvidsjaur/AFAB

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

### 2.5.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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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
Subtotal of new major investments from RP4		0	0	Average NBV	0	0	0	0	0				
				Depreciation	0	0	0	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%.

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

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						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	6 900 000	6 900 000	Average NBV	285 000	255 000	5 002 500	4 777 500	4 552 500			75%	25%
			Depreciation	30 000	30 000	225 000	225 000	225 000				
			Cost of leasing									

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

### 2.5.2 - Investments from RP3

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	0
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<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.5.3 - Existing investments from previous reference periods

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

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle	Planned date	Allocation (%)*
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	contractual leasing value) (in national currency)	performance plan (in national currency)		2025	2026	2027	2028	2029	(Amortisation period in years)	of entry into operation	En route*	Terminal*
Subtotal of existing investments from previous RPs	3 931 000	3 931 000	Average NBV	1 389 000	1 204 500	1 026 750	855 000	690 000				
			Depreciation	193 500	177 750	177 750	165 000	165 000			75%	25%
			Cost of leasing									

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

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

Not applicable

## 2.5.5 - 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											
All planned investments over the reference period is necessary to be able to continue operating the business. All investments are replacements for existing equipment that have become too inefficient. Before allocation according to TSFS 2020:44.											

Ref. #	Name of other new investments for RP4	Master Plan reference (if any)	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Description
						2025	2026	2027	2028	2029	
B1	Upgrade RPU		400 000	400 000	Average NBV	380 000	340 000	300 000	260 000	220 000	Radar data presentation device
					Depreciation	40 000	40 000	40 000	40 000	40 000	
					Cost of leasing						
B2	Localizer 30		3 500 000	3 500 000	Average NBV			3 430 000	3 290 000	3 150 000	Instrument landing system
					Depreciation			140 000	140 000	140 000	
					Cost of leasing						
B3	GP 12		3 000 000	3 000 000	Average NBV			2 940 000	2 820 000	2 700 000	Instrument landing system
					Depreciation			120 000	120 000	120 000	
					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						

## 2.6 - Investments - Swedavia

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

### 2.6.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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Ref. #	Name of new major investments (i.e. above 5 M€) for RP4	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
					2025	2026	2027	2028	2029		En route*	Terminal*
Subtotal of new major investments from RP4		0	0	Average NBV	0	0	0	0	0			
				Depreciation	0	0	0	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%.

<b>Table B - Other new investments (below 5M€) from RP4</b>
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	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						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	80 072 000	80 072 000	Average NBV	41 924 917	46 180 833	53 631 832	57 809 498	53 968 831			0%	100%
			Depreciation	1 869 167	5 069 001	5 979 001	7 465 667	8 215 667				
			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%.

### 2.6.2 - Investments from RP3

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	0
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<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.6.3 - Existing investments from previous reference periods

<b>Table E - Existing investments from previous RPs</b>
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	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 <b>national currency</b> )					Lifecycle	Planned date	Allocation (%)*
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	contractual leasing value) (in national currency)	performance plan (in national currency)		2025	2026	2027	2028	2029	(Amortisation period in years)	of entry into operation	En route*	Terminal*
Subtotal of existing investments from previous RPs	155 342 667	69 711 119	Average NBV	35 588 859	31 433 352	27 416 888	23 638 517	20 283 887				
			Depreciation	4 174 913	4 136 100	3 896 826	3 659 914	3 049 343			0%	100%
			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%.

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

Not applicable

## 2.6.5 - 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											
Swedavia as an CNS infrastructure provider is certified in accordance to EG 2017/373 (previous 550/2004). The investmentplan related to TNC at Stockholm Arlanda Airport contains the necessary need of technical infrastructure to meet the demand of capacity, availability and compliance to regulations.											

Ref. #	Name of other new investments for RP4	Master Plan reference (if any)	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Description
						2025	2026	2027	2028	2029	
B1	E-strip	CP1/AF2/2 .1.1	21 572 000	21 572 000	Average NBV	21 572 000	20 223 750	17 527 250	14 830 750	12 134 250	Reinvestment due to an update of the system. The implementation of the investment has been delayed and was initially planned to take place in
					Depreciation	0	2 696 500	2 696 500	2 696 500	2 696 500	
					Cost of leasing	0	0	0	0	0	
B2	A-SMGCS level 2	CP1/AF2/2 .1.3	2 500 000	2 500 000	Average NBV	2 031 250	1 718 750	1 406 250	1 093 750	781 250	Investment due to Master Plan. The implementation of the investment has been delayed primely due to circumstances caused by
					Depreciation	312 500	312 500	312 500	312 500	312 500	
					Cost of leasing	0	0	0	0	0	
B3	Solution for Contingency	N/A	6 000 000	6 000 000	Average NBV	0	0	0	3 000 000	5 625 000	Investment in a prestudy of different solutions of contingency at Stockholm Arlanda Airport in order to maintain operation in time of crisis.
					Depreciation	0	0	0	0	750 000	
					Cost of leasing	0	0	0	0	0	
B4	E-strip	CP1/AF2/2 .1.1	2 000 000	2 000 000	Average NBV	0	0	0	0	1 000 000	Reinvestment of new computer servers and computer clients due to make a life extension of the system.
					Depreciation	0	0	0	0	0	
					Cost of leasing	0	0	0	0	0	
B5	DME	N/A	6 600 000	6 600 000	Average NBV	2 160 000	2 700 000	4 593 334	5 646 668	5 206 669	Reinvestment due to end of life.
					Depreciation	160 000	160 000	253 333	439 999	439 999	
					Cost of leasing	0	0	0	0	0	
B6	MET sensors	N/A	3 700 000	3 700 000	Average NBV	1 471 667	2 643 333	3 329 998	3 083 330	2 836 662	Reinvestment due to end of life.
					Depreciation	76 667	130 001	246 668	246 668	246 668	
					Cost of leasing	0	0	0	0	0	
B7	PRNAV DME ANE, ANW, ASW, ASF	N/A	3 600 000	3 600 000	Average NBV	3 420 000	3 060 000	2 700 000	2 340 000	1 980 000	Reinvestment due to end of life.
					Depreciation	360 000	360 000	360 000	360 000	360 000	

	ASVV, ASL				Cost of leasing	0	0	0	0	0	
B8	MLAT	N/A	10 000 000	10 000 000	Average NBV	7 375 000	8 850 000	7 850 000	6 850 000	5 850 000	Reinvestment due to an update of the system.
					Depreciation	550 000	1 000 000	1 000 000	1 000 000	1 000 000	
					Cost of leasing	0	0	0	0	0	
B9	A-SMGCS	N/A	20 000 000	20 000 000	Average NBV	0	3 500 000	13 150 000	18 300 000	16 300 000	Reinvestment due to end of life.
					Depreciation	0	0	700 000	2 000 000	2 000 000	
					Cost of leasing	0	0	0	0	0	
B10	Transfer SUR to LFV	N/A	4 100 000	4 100 000	Average NBV	3 895 000	3 485 000	3 075 000	2 665 000	2 255 000	Investment in technical solutions needed to be able to transfer operation of SUR-systems into LFV as a subcontractor.
					Depreciation	410 000	410 000	410 000	410 000	410 000	
					Cost of leasing	0	0	0	0	0	

## 2.7 - Investments - CNS providers

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

### 2.7.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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Ref. #	Name of new major investments (i.e. above 5 M€) for RP4	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
					2025	2026	2027	2028	2029		En route*	Terminal*
Subtotal of new major investments from RP4		0	0	Average NBV	0	0	0	0	0			
				Depreciation	0	0	0	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%.

<b>Table B - Other new investments (below 5M€) from RP4</b>
---

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					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			Average NBV	63 003 600	87 337 420	86 516 337	82 452 753	76 150 419			70%	30%
			Depreciation	4 531 275	7 587 334	8 329 834	8 557 334	8 399 834				
			Cost of leasing									

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

### 2.7.2 - Investments from RP3

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	0
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<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.7.3 - Existing investments from previous reference periods

<b>Table E - Existing investments from previous RPs</b>
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	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					Lifecycle	Planned date	Allocation (%)*
--	--	--	---	--	--	--	--	-----------	--------------	-----------------

	contractual leasing value) (in national currency)	performance plan (in national currency)		2025	2026	2027	2028	2029	(Amortisation period in years)	of entry into operation	En route*	Terminal*
Subtotal of existing investments from previous RPs			Average NBV	143 110 857	126 529 377	110 394 266	94 721 092	79 459 434			70%	30%
			Depreciation	17 100 718	16 336 706	15 888 463	15 520 309	14 702 417				
			Cost of leasing									

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

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

Not applicable

## 2.7.5 - 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											
Different infrastructure allocated by the TSFS 2020:44. Examples are ILS, glidepath,											

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					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						



## SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

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### 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

### 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		4				
LFV NUAC		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
	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					
ACR		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
	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					
AFAB		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
	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					
SDATS		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
	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

Entering the last year of RP3 some ATPC are below target level in one of the indicators and some are above target level in a couple of the indicators. The NSA expect the ones below target to reach target in the end of RP3. NSA has taken the EC decision on RP4 targets and section 5 of the "PRB Advice on the Union-wide target ranges for RP4" into consideration which result in setting the targets in the advice and starting RP4 according to the advice of treating every ATPC in the start to be one level down from the set target level.

For further details please see Annex O

\* Refer to Annex O, if necessary.

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

The situation in Sweden is considered stable on the safety side. Safety is also overriding, and therefore always the top priority. The industry has taken many steps to exchange information regarding safety issues.

Starting from the point where NSA expect the ATCP to reach level in RP3 and treat it as one level below entering RP4 the growth over RP4 to reach the target level should be within reasonable reach. The EoSM yearly follow up and the regular oversight and processes for approvals should be enough to cover the normal case. In the case of an ATCP drifting measures like theme oversights can be one way to go. To conclude all the ATCP in Sweden act in a manner to improve maturity and to become better, no doubts are risen that the normal organisational improvements will take them to reach target levels.

Example of measures/considerations during the planning process:

In assessment of staffing for the providers, special concerns have been taken into consideration concerning the level and the competence of the staff. In organisations where the NSA has assessed a need of development increased staffing has been approved in the cost bases.

On the investment planning, new or modified equipment for maintain and support information for flights in Sweden has been approved although the usage of airlines are not 100 percent. But the equipment has been considered enough valuable for the airlines making use of it since it would not constitute changes for airline pilots.

All through the planning of RP4 the safety has been a top priority, and there is no example where the NSA has not approved any costs that the provider has argued and been able to verify as being a necessity for safety.

For further details please advice Annex O

*\* Refer to Annex O, if necessary.*

## SECTION 3.2: ENVIRONMENT KPA

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### 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	1,73%	1,71%	1,69%	1,67%	1,65%

	2025	2026	2027	2028	2029
	Target	Target	Target	Target	Target
National targets	1,73%	1,71%	1,69%	1,67%	1,65%

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

The targets are set according to the reference values for Sweden.

*\* Refer to Annex P, if necessary.*

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

It is import to initially consider the situation from an ANSP performance perspective.

Different environment KPIs are of major importance to Sweden and there were extensive work in the preparation of RP4 from the NSA side to consider areas where an incentive scheme for environment could be introduced. The final proposal is however to postpone such introduction since there were no relevant area identified, mature enough, where these two conditions were appropriate met ; 1 an area where the performance in Sweden is worse than its peers and therefore extra important to work with 2 the sole ANSP performance could be isolated and therefore appropriate to issue monetary conditions for.

One of the areas that were under investigation was KEA, and improvements of the metric since it has deteriorated substantially after the Russian war in Ukraine. The result was however not different from previous investigations, the local added KEA is very low, not only in numbers but also in comparison to other zones. This implies that the main measures within reach are to cater for a ongoing efficient provision of services in the Swedish airspace where this performance plan suggests an incentive scheme for capacity (assumed to be correlated with KEA performance) and set all other targets so that the system will be able to contribute positively to both local and network performance under different future scenarios. The toolbox is not however empty so a description of projects relevant for the KEA KPI follows:

From European Network Operations Plan 2024-2029, edition of April 2024 there are initiatives that could help improve the KEA performance, whereof the one identified as most likely to improve performance is SWEA. SWEAs aim is to make changes to airspace in the direction to shorten routes to and from Stockholm Arlanda and also Gothenburg Landvetter. Besides effects regarding the environment KPI, there are also improvements in cost efficiency KPI while certain elements of safety also can be improved. SWEA will be introduced in several phases through RP4.

Sweden has large area of Free Route Airspace so major projects supporting increased performance in this perspective are limited due to only minor expansion.

FUA concept is introduced and the main ANSP LFV is the sole provider for both civil and military.

*\* Refer to Annex P, if necessary.*

### 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	0,18	0,13	0,11	0,11	0,11

	2025	2026	2027	2028	2029
	Target	Target	Target	Target	Target
National targets	0,18	0,13	0,11	0,11	0,11

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

Targets are set according to the local reference values. There are no objections to the targets from the Swedish point of view. Taking into consideration the historical values and also looking forward where there could be issues relating to increased influence by weather and also new ATM systems, the targets provide for fair conditions.

For the purpose of the incentive scheme the NSA has applied a modulation according to NOP. NOP values for Sweden capacity are, at the drafting of this performance plan, significantly lower than the reference values.

*\* Refer to Annex Q, if necessary.*

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

The number one priority would be to cater for the possibility for ANSPs to sustain an accurate level of staffing and training. These are interdependent factors as the right level of staff needs to be available in order to produce training for new ATCOs. The plans for staffing is developed further in 3.3.3.

The infrastructure needs to be resilient in case of technical failures. First of all there is the safety perspective, but the capacity is also considered.

NOP, April 2024 edition - 2024-2029 - Operational Performance Enhancement Plans and Actions at Local Level

- Sektor optimisering 2026-27 -
- ATFCM procedures(?) 2024-29 -
- ASM improvements 2024-29 -
- Sektor dynamic config 2024-29 -
- SWEA Phase 1 (2026); SWEA Phase 2 (2027) - Stockholm ACC - SWEA Phase 1 (2026); SWEA Phase 2 (2027)

The above points are taken into consideration in the draft performance plan and stem from SWEA and various ATM system modernisations, for example SWIM/LARA and cross border management with Poland.

*\* 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	0,35	0,35	0,35	0,35	0,35
Additional comments					

Airport level	ESSA-Stockholm Arlanda	0,35	0,35	0,35	0,35	0,35
	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

The targets are set as to reflect historical performance and the relation to expected traffic development. As described in 1.2 the traffic development is forecasted at a growth rate exceeding the rate of En Route (3,3%/2,8%). From a historical perspective the weather impact of delays is dominating by constituting approximately 90 percent of existing delays. **In 2023 the delay number was 0,32, in 2024 it was 0,07.** As supported by the PRB target reports of RP4, weather phenomenon and its impact on delays are expected to increase. SE NSA do not have any other information in this context and arguments applicable for local level so the assumption of increased impact of weather is considered valid.

Stockholm area is performing sufficiently and is a contributor to a well functioning Network performance in both covering capacity- and environment aspects. Project Swea will help increase performance in the region. SE NSA is of the opinion that the presented plans covering capacity and the trade off to cost efficiency provides a well balanced and efficient approach to meet the expected traffic growth and the expected service for users.

The targets are underpinned by an incentive scheme presented in 5.2.2. **Since SE is applying the CRSTMP method, the calculated Pivot value constitutes 10 percent of the targets each year. The low Pivot value is explained by the fact that the weather related delays is the dominating factor and the that the weather is considered uncontrollable by the ANS provision. So in order to apply a sound and motivating target and incentive scheme SE has decided upon this model. If weather related delays increases with increasing traffic, the targets need to be realistic. With the imposed incentive scheme SE motivates the providers for the right behaviour.**

*\* Refer to Annex Q, if necessary.*

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

SE NSA has audited the ATCO staffing plans of LFV and has come to the conclusion that plans of staffing and training should be sufficient in order to meet the targets. On infrastructure side sufficient funds have been provided in this proposal of Swedens draft Performance Plan.

*\* Refer to Annex Q, if necessary.*

### 3.3.3 - ATCO planning and training

#### LFV

#### 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	251	248	242	244	254	262	260
	APP	78	77	53	53	53	53	53
	TWR	87	90	106	106	106	106	106
Number of ATCOs in OPS (year-end FTEs) allocated to the en route cost base(s)		329	325	295	297	307	315	313
Number of ATCO on other duties (year-end FTEs) employed by the ANSP		100	100	82	82	82	82	82

#### b) ATCO planning at ACC level

Malmo (ESMM ACC)		Actual	Forecast	Planned				
		2023	2024	2025	2026	2027	2028	2029
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)		4	9	8	11	14	10	6
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)		13	6	10	12	11	4	6
Number of ATCOs in OPS planned to be operational at year-end (FTEs)		122	125	123	122	125	131	131

Stockholm (ESOS ACC)		Actual	Forecast	Planned				
		2023	2024	2025	2026	2027	2028	2029
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)		3	2	7	11	15	14	14
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)		5	8	11	8	8	12	16
Number of ATCOs in OPS planned to be operational at year-end (FTEs)		129	123	119	122	129	131	129

#### Additional comments

ACC, civil part - figures reported in the top row are staff in the two ACCs as in the two tables above: During RP4 En Route is due to meet a traffic increase of 20% compared to 2023 according to the STATFOR forecast. The Commissioning of ATC One includes training of all operational ATCOs in 2028, affecting the needed number of ATCOs. The actual available number of FTE ATCOs will be lower than the outcome in the chart, depending on changes in maternal leave/leave of absence. This leave turns out lower than forecasted in 2023 due to demographic reasons and is estimated at a higher level later in the RP4. With a new generation of ATCOs starting, the maternity leave/leave of absence is estimated to increase during the RP4, and requires a higher number of employed ATCOs. The additional ATCOs are not overlapping the retirements. The actual yearly outcome of FTE ATCOs is shown in the chart below. This is equivalent to the calculated cost and shows a lower number in 2029 than in 2023. The actual outcome of the number of ATCOs in 2023/24 is lower than planned for in RP3. This is due to ATCOs leaving LFV ACCs and a lower successrate concerning ATCO students. The capacity has although been reached due to less leave of absence and lower traffic numbers than planned. Even in the next coming RP5 the retirements will be numerous and continous training of new ATCOs is necessary.

ACC	2023	2024	2025	2026	2027	2028	2029
ATCOs in ops FTE 12 months	264	252	240	239	243	249	254
ATCOs in ops leave of absence	-21	-25	-26	-26	-27	-28	-28

APP-row = Two separate APP-units (ÖKC, TMC Landvetter) as well as approach in towers financed by en route charges as decided by the Swedish Transport Agency in TSFS 2020:44. Two APPs are not included in the en route-financing from 2025 and onwards, however part of the system in RP3.  
TWR-row = Civil parts of tower services - all LFV operated civil towers incl Stockholm-Arlanda.

ATCO on Other Duties: the lower numbers in 2025 mainly a result of changed cost allocations in RP4 (both civil-military and Towers as reported above). Most of ATCOs on other duties are part-time operational and part-time on other duties.

The NSAs cost reductions of LFVs initial requested costs are not reflected in this reporting.

#### c) ATCO Training

ATCO trainees of the ANSP	Actual	Forecast	Planned
---------------------------	--------	----------	---------

ATCO trainees of the ANSP		2023	2024	2025	2026	2027	2028	2029
Number of trainees planned to enter the training program(s) during the year.		33	37	33	33	33	33	33
Number of trainees expected to complete the training program(s) during the year based on statistical estimates.		27	31	27	27	27	27	27
Number ATCO trainees at year end.		17	24	31	27	27	27	27

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.
<p><i>General information ATCO-training in LFV:</i>  New courses start two times every year, already from the start ATCO students are allocated to either En route (APP/ACC-course) or Tower (TWR/APP-course) - there is no point where you can change course.</p> <p>ATCO training includes 1,5 Year at EPN (ATS Academy) and 1 year of local training/OJT.  24 ACC students will start at the academy each year, 12 in Januari and 12 in august, a part is financed by the military. Estimated 20 students out of the 24 will be checked out 2,5 years after the start at the ATS academy.  TWR/APP students are to a larger extent financed by the military, only civil-financed ATCO students reported (9 per year except for 2024 when there are 13 ATCO students starting training), these are financed through en route charges, terminal charge or in contract with airport operators.</p> <p>Success-rate for LFV ATCO students is based on the last 100 ATCO students in completed classes.  The latest figures are for Initial Training 82 % and for Unit Training 85 % (figures not to be added, not the same courses included).</p>

## 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 - Sweden

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

En route charging zone Sweden	Baseline 2019	Baseline 2024	RP4 cost-efficiency targets (determined 2025-2029)					2029D vs. 2019B (CAGR)	2029D vs. 2024B (CAGR)
	2019 B	2024 B	2025 D	2026 D	2027 D	2028 D	2029 D		
Total en route costs in nominal terms (in national currency)	2 036 382 554	2 360 518 834	2 388 603 216	2 379 635 488	2 403 235 939	2 459 481 344	2 477 368 857	2,2%	0,9%
<b>Total en route costs in real terms (in national currency at 2022 prices)</b>	<b>2 217 644 507</b>	<b>2 213 434 626</b>	<b>2 205 893 980</b>	<b>2 169 035 905</b>	<b>2 161 039 944</b>	<b>2 182 175 863</b>	<b>2 166 553 213</b>	-0,3%	-0,5%
Total en route costs in real terms (in EUR2022) <sup>1</sup>	208 745 024	208 430 782	207 638 956	204 169 536	203 416 883	205 406 390	203 935 843	-0,3%	-0,5%
YoY variation			-0,003406762	-1,7%	-0,4%	1,0%	-0,7%		
Total en route Service Units (TSU)	3 788 684	2 888 000	3 046 000	3 135 000	3 212 000	3 297 000	3 359 000	-1,3%	3,1%
YoY variation			0,054709141	2,9%	2,5%	2,6%	1,9%		
<b>Real en route unit costs (in national currency at 2022 prices)</b>	<b>585,33</b>	<b>766,73</b>	<b>724,19</b>	<b>691,88</b>	<b>672,80</b>	<b>661,87</b>	<b>645,00</b>	1,1%	-3,4%
Real en route unit costs (in EUR2022) <sup>1</sup>	55,10	72,17	68,17	65,13	63,33	62,30	60,71	1,1%	-3,4%
YoY variation			-0,055101356	-4,5%	-2,8%	-1,6%	-2,5%		

National currency	SEK
<sup>1</sup> Average exchange rate 2022 (1 EUR=)	10,62
Forecast inflation index 2024 - Base 100 in 2022	108,63

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

En route charging zone Sweden	Baseline 2019	Baseline 2024	Actuals 2019	Forecast 2024	2019 Baseline	2024 Baseline
	2019 B	2024 B	2019 A	2024 F	2019 Baseline adjustments	2024 Baseline adjustments
Total en route costs in nominal terms (in national currency)	2 036 382 554	2 360 518 834	2 179 365 205	2 818 586 764	-142 982 651	-458 067 930
<b>Total en route costs in real terms (in national currency at 2022 prices)</b>	<b>2 217 644 507</b>	<b>2 214 306 099</b>	<b>2 377 493 149</b>	2 635 999 335	-159 848 643	-421 693 236
Total en route costs in real terms (in EUR2022) <sup>1</sup>	208 745 024	208 430 782	223 791 443	248 124 414	-15 046 419	-39 693 632
Total en route Service Units (TSU)	3 788 684	2 888 000	3 788 684	2 888 000	-31 709	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	6
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Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
EU-funding	LFV	ANSP	Staff	15 900 000	17 775 537	1 673 196
Description and justification of the adjustment						
Until 2019 LFV has used net-accounting for some INEA-funding which has changed to gross accounting from 2020 and onwards.						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
New airports in the system	0	ANSP	Other operating	14 888 250	16 644 443	1 566 727
Description and justification of the adjustment						
From 2020 there is three new airports that is part on the system compared to 2019. The new airports are Scandinavian Mountain Airport, Skövde and Eskilstuna. Please see further description and justification in						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Adverse impact from uncontrollable costs (Pensions)	LFV	ANSP	Staff	-114 894 000	-128 446 702	-12 090 581
Description and justification of the adjustment Please see further justification in Annex F						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Landvetter ATCO allocation	LFV	ANSP	Staff	-26 248 328	-29 344 536	-2 762 177
Description and justification of the adjustment NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above. Further information on cost allocation in Annex T.						

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Sturup	LFV	ANSP	Staff	-24 283 653	-27 148 112	-2 555 429
Description and justification of the adjustment NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above. Further information on cost allocation in Annex T.						

Adjustment #6	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Säve	ACR	ANSP	Staff	-9 291 565	-10 387 583	-977 774
Description and justification of the adjustment NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above. Further information on cost allocation in Annex T.						

Adjustment #7	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Space weather services	MET	MET	Exceptional items	946 645	1 058 310	99 618
Description and justification of the adjustment Joint Declaration. The costs are according to nominal values in 2025 as Sweden has understood its share. The costs are not fluctuating significantly during RP4, and since there are not any information of 2019 and 2024 costs, Sweden has choosen to apply the best known value. In relation to the cost base						

Total adjustments to the 2019 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2022
	-142 982 651	-159 848 643	-15 046 419

#### 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
	3 820 393	-0,83%	CRCO correction factor May 2019 (on 12 months)	3 788 684	-31 709

Other adjustment to the 2019 service units	No
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<b>Total adjustments to the 2019 service units</b>	<b>-31 709</b>
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#### c.3) Adjustments to the 2024 baseline value for the determined costs

Number of adjustments	5
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Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Landvetter	LFV	ANSP	Staff	-44 194 070	-40 684 665	-3 829 614
Description and justification of the adjustment						

NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above.

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Sturup	LFV	ANSP	Staff	-27 785 605	-25 579 179	-2 407 747
Description and justification of the adjustment						
NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above.						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Säve	ACR	ANSP	Staff	-12 634 900	-11 631 576	-1 094 871
Description and justification of the adjustment						
NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above.						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Adverse impact from uncontrollable costs (Pensions)	LFV	ANSP	Staff	-270 000 000	-248 559 583	-23 396 706
Description and justification of the adjustment						
LFV has in the forecast 2024 calculated the uncontrollable costs connected to pensions						

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
A general adjustment to forecast 2024	All	ANSP	Other operating	-104 400 000	-96 109 706	-9 046 726
Description and justification of the adjustment						
In the auditing process, there have been several indications of cost drivers underpinning the values presented 2024. However, from experience and historical performance the forecasts of providers have been overestimated. Since the baseline value of 2024 is very important parameter for assessing the cost efficiency performance of RP4, the NSA proposes to apply a 5 percent reduction of the baseline in this regard. This value could be updated prior to the 1st of October submission. The 5 percent reduction is calculated excluding pensions, which are recalculated above.						

Adjustment #6	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Space weather services	MET	MET	Exceptional items	946 645	871 473	82 031
Description and justification of the adjustment						
Joint declaration						

Total adjustments to the 2024 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2022
	-458 067 930	-421 693 236	-39 693 632

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

Other adjustment to the 2024 service units	No
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#### d) Justification of the consistency of the local en route cost-efficiency performance targets with the Union-wide targets

Targets for RP4 Trend. As the table above demonstrates the targets are met.

Targets for long term trend. As the consequences of Russian aggression in Ukraine have led to a severe and lasting reduction in traffic for Sweden the EU wide long term trend is challenging. In order to demonstrate the continuous improvement of the ATM efficiency, the NSA will point to alternative and, considered, relevant criterias which are developed in Annex R.

\* 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	No	
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**

Annex R

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

#### Terminal Charging Zone #1 - Sweden - TCZ

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

Terminal charging zone Name of the CZ	Baseline 2024	RP4 cost-efficiency targets (determined 2025-2029)					2029D vs. 2024B (CAGR)
	2024 B	2025 D	2026 D	2027 D	2028 D	2029 D	
Total terminal costs in nominal terms (in national currency)	225 458 526	221 679 160	221 736 749	228 733 793	231 552 766	239 431 687	1,2%
<b>Total terminal costs in real terms (in national currency at 2022 prices)</b>	<b>208 325 967</b>	<b>201 152 859</b>	<b>197 837 132</b>	<b>200 418 322</b>	<b>199 369 300</b>	<b>202 305 519</b>	-0,6%
Total terminal costs in real terms (in EUR2022) <sup>1</sup>	19 609 549	18 934 351	18 622 244	18 865 209	18 766 466	19 042 849	-0,6%
YoY variation		-0,034432135	-1,6%	1,3%	-0,5%	1,5%	
Total terminal Service Units (TNSU)	122 000	130 000	134 000	138 000	142 000	145 000	3,5%
YoY variation		0,06557377	3,1%	3,0%	2,9%	2,1%	
<b>Real terminal unit costs (in national currency at 2022 prices)</b>	<b>1 707,59</b>	<b>1 547,33</b>	<b>1 476,40</b>	<b>1 452,31</b>	<b>1 404,01</b>	<b>1 395,21</b>	-4,0%
Real terminal unit costs (in EUR2022) <sup>1</sup>	160,73	145,65	138,97	136,70	132,16	131,33	-4,0%
YoY variation		-0,093851695	-4,6%	-1,6%	-3,3%	-0,6%	

National currency	SEK
1 Average exchange rate 2022 (1 EUR=)	10,62
Forecast inflation index 2024 - Base 100 in 2022	108,63

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

Terminal charging zone Name of the CZ	Baseline 2024	Forecast 2024	2024 Baseline adjustments
	2024 B	2024 F	
Total terminal costs in nominal terms (in national currency)	225 458 526	250 458 526	-25 000 000
<b>Total terminal costs in real terms (in national currency at 2022 prices)</b>	<b>208 325 967</b>	231 338 570	-23 014 776
Total terminal costs in real terms (in EUR2022) <sup>1</sup>	19 609 549	21 775 706	-2 166 362
Total terminal Service Units (TNSU)	122 000	122 000	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
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Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2022
Pensions	LFV	ANSP	Staff	-25 000 000	-23 014 776	-2 166 362
Description and justification of the adjustment						
Justification of the pensions cost to not include uncontrollable pension costs.						

Total adjustments to the 2024 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2022
	-25 000 000	-23 014 776	-2 166 362

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

Adjustment to the 2024 service units	No
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**d) Justifications for the local terminal cost-efficiency performance targets, including contribution to the improvement of the European ATM network performance**

During the audit the NSA has focused on allowing the right level of staffing and training during the circumstance. The demographic change puts downward pressure on the staff costs as retired ATCPOs are replaced. There is no significant change to staffing volumes. On the technical and infrastructure side, necessary replacements and upgrades have been taken into account and the plans have been justified properly. In summary the plan is sufficient in order to keep a well achieved performance, while meeting the increased demand of travel to/from Arlanda Airport.

The contribution to the network performance is fulfilled through compliance to common requirements and delivering a sustained performance.

*\* Refer to Annex R, if necessary.*

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

See section d)

*\* 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
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### 3.4.3 - Cost allocation ATSP/CNSP - LFV

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	Air traffic control (ATC), Flight information service (FIS), advisory service
Communication	Yes	Aeronautical mobile service (air-ground communication), Aeronautical fixed service (ground-ground communication), Aeronautical mobile satellite service (AMSS)
Navigation	Yes	Provision of NDB, VOR, DME, ILS
Surveillance	Yes	Provision of data from primary surveillance (PS) and data from secondary surveillance (SS) and automatic dependent surveillance (ADS) data
Search and rescue	No	
Aeronautical Information	Yes	Aeronautical information products
Meteorological services	Yes	MET briefing service. (A part of the service of an Aerodrome Meteorological office). Meteorological observations (Aeronautical Meteorological station)
Services to OAT	Yes	LFV is ANSP for the military in Sweden, both ATS/ATM, CNS and AIS-services. No costs for the military are included in the performance plan.
Cross-border ATS	Yes	Areas with neighbouring countries as reported in 1.1 and 4.1

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

The services above are according to LFV certificate.

LFV allocate the costs between the services in the accounting based on systems and cost centers, common costs are allocated based on direct costs.

The military pays for all their services according to a full cost recovery agreement.

#### 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	1 693 218	1 672 863	1 683 805	1 734 144	1 744 064
Determined costs for terminal charging zone(s) in the scope of the performance plan	151 647	144 521	145 998	145 803	149 130
Forecasted costs for terminal services at airports outside the scope of the performance plan	170 071	158 659	152 964	144 473	145 965

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

Costs are allocated between en route and terminal according to regulations set by the NSA, TSFS 2020:44. All costs are allocated to the right charging zone with different allocation keys. Common costs are allocated based on direct costs.

#### 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	158 332	152 017	156 223	157 862	161 230
Determined costs for approach services allocated to the en route charging zone(s)	158 332	152 017	156 223	157 862	161 230
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan	0	0	0	0	0

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

Approach costs are the costs in the two specific TMC-centres and approach costs in towers allocated to en route-services as decided by the Swedish Transport Agency in TSFS 2020:44.

#### 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)	Yes
If yes, description of the nature of the services provided and the geographical scope	
Air navigation services at Stockholm-Bromma, Göteborg-Landvetter and Malmö airport	
If yes, description of the arrangements for the financing of the services provided	

Services financed through agreement with the airport operator Swedavia. LFV is sole provider of state owned airports as decided by the government.	
Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
Financial agreement with the military, full cost recovery.	
Other ANS	Yes
If yes, description of the nature of the services provided and the geographical scope	
LFV provides services to customers in commercial agreements. Customers are mainly Swedish, but also AIS-services to ANSPs in Denmark and Iceland (ADQ-related). Other areas are technical services to airports (systems and equipment including maintenance) and airspace services (like procedure construction).	
If yes, description of the arrangements for the financing of the services provided	
Commercial agreements, all costs excluded from the en route and terminal cost base.	
Non ANS	Yes
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	
Consultancy services and obstacle surveys for swedish customers, all costs are excluded from the cost base.	

#### e) Changes in cost allocation methodology

Are there changes in the cost allocation criteria with respect to the previous reference period?	Yes
If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	
Cost allocation is similar to previous RPs. An in-dept audit has led to exclusion of costs pertaining to Landvetter and Sturup. It does not constitute a new allocation model, the change arises from an operational assessment. The sums are described in the baseline adjustments. Certain provision of Radar and the pertaining costs has been transferred from LFV and is now covered in the cost base of CNS providers. This constitutes approx 16 m SEK/year.	

#### 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
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### 3.4.3 - Cost allocation ATSP/CNSP - SDATS

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	ATS/ATM, single operated Tower, to 4 airports. Aerodrome control and approach control (TWR, ADI, APP, RAD)
Communication	Yes	Communication Air/Ground and Ground/Ground (ANS) and communication fixed services (AFS)
Navigation	No	
Surveillance	No	
Search and rescue	No	
Aeronautical Information	No	
Meteorological services	Yes	Observations, METOBS and METAR, during opening hours. Input to TAF.
Services to OAT	No	
Cross-border ATS	No	

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	58 968	56 485	57 331	59 035	60 012
Determined costs for terminal charging zone(s) in the scope of the performance plan					
Forecasted costs for terminal services at airports outside the scope of the performance plan					

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

SDATS total cost is allocated according to TSFS 2020:44 by Swedish regulator. With airports a contracted is signend under buisness confidentiality.

#### 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	58 968	56 485	57 331	59 035	60 012
Determined costs for approach services allocated to the en route charging zone(s)	58 968	56 485	57 331	59 035	60 012
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan					

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

SDATS total cost is allocated according to TSFS 2020:44 by Swedish regulator. With airports a contracted is signend under buisness confidentiality.

#### 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)	Yes
If yes, description of the nature of the services provided and the geographical scope	
Provider of ATS services at airports for Terminal/Aerodrome	
If yes, description of the arrangements for the financing of the services provided	
Contracts with the airports	
Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
Financing via contracts with the airport, where relevant	
Other ANS	No
If yes, description of the nature of the services provided and the geographical scope	
If yes, description of the arrangements for the financing of the services provided	
Non ANS	No
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	

#### e) Changes in cost allocation methodology

Are there changes in the cost allocation criteria with respect to the previous reference period? 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
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### 3.4.3 - Cost allocation ATSP/CNSP - ACR

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	ACR is a fully certified Air Navigation Service Provider (ANSP) for the provision of ATS (ATC/AFIS) and is the core service for ACR.
Communication	Yes	ACR today is not certified for the provision of communication, navigation and surveillance services (CNS) itself yet, but these services can be offered in cooperation with partners.
Navigation	Yes	ACR today is not certified for the provision of communication, navigation and surveillance services (CNS) itself yet, but these services can be offered in cooperation with partners.
Surveillance	Yes	ACR today is not certified for the provision of communication, navigation and surveillance services (CNS) itself yet, but these services can be offered in cooperation with partners.
Search and rescue	No	
Aeronautical Information	No	
Meteorological services	Yes	ACR is a partly certified Metrological services (MET) provider and offers meteorological services for air navigation.
Services to OAT	No	
Cross-border	No	

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	136 750	142 782	145 459	148 178	151 509
Determined costs for terminal charging zone(s) in the scope of the performance plan					
Forecasted costs for terminal services at airports outside the scope of the performance plan					

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

ACR total cost is allocated according to TSFS 2020:44 by Swedish regulator.

#### 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	136 750	142 782	145 459	148 178	151 509
Determined costs for approach services allocated to the en route charging zone(s)	136 750	142 782	145 459	148 178	151 509
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan					

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

ACR total cost is allocated according to TSFS 2020:44 by Swedish regulator.

#### 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)	Yes
If yes, description of the nature of the services provided and the geographical scope	
Provider of ATS services at airports for Terminal/Aerodrome	
If yes, description of the arrangements for the financing of the services provided	
Contracts with the airports	



Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
<b>Financing via contracts with the airport, where relevant</b>	

Other ANS	No
If yes, description of the nature of the services provided and the geographical scope	
If yes, description of the arrangements for the financing of the services provided	

Non ANS	No
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	

#### e) Changes in cost allocation methodology

Are there changes in the cost allocation criteria with respect to the previous reference period?	Yes
If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	
NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44.	
The assessment resulted in the exclusion of ATCO staff costs and the related other operating costs presented above for Söve Airport. The change affect the baseline 2019 and 2024 and are described in 3.4.1	

#### 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
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### 3.4.3 - Cost allocation ATSP/CNSP - Arvidsjaur/AFAB

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	ATC and AFIS
Communication	Yes	Radar data, air-ground communications, legal recorder, VHF, UHF
Navigation	Yes	Instrument landing systems, distance measure, flight procedure
Surveillance	Yes	Fixed point at ATCC Stockholm
Search and rescue	No	
Aeronautical Information	Yes	NOTAM SNOTAM IAIP
Meteorological services	Yes	MET OPS
Services to OAT	No	
Cross-border ATS	No	

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	10 053	9 362	9 359	9 340	9 643
Determined costs for terminal charging zone(s) in the scope of the performance plan					
Forecasted costs for terminal services at airports outside the scope of the performance plan					

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	10 053	9 362	9 359	9 340	9 643
Determined costs for approach services allocated to the en route charging zone(s)					
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan					

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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)	Yes
If yes, description of the nature of the services provided and the geographical scope	
<b>Terminal/Aerodrome ATS and other ANS provision</b>	
If yes, description of the arrangements for the financing of the services provided	
<b>Financed through local agreements with users.</b>	
Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
<b>Where relevant, local agreements with users.</b>	
Other ANS	No
If yes, description of the nature of the services provided and the geographical scope	

If yes, description of the arrangements for the financing of the services provided

Non ANS	No
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	

**e) Changes in cost allocation methodology**

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

**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
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### 3.4.3 - Cost allocation ATSP/CNSP - Swedavia

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	Includes costs for tower building, ATS/ATM equipment and systems, work with air space procedures and Arlanda's share of costs for corporate functions and IT-systems in Swedavia.
Communication	Yes	Includes costs for communication systems, both ground-ground communication and air-ground comm
Navigation	Yes	Includes costs for navigation systems and back-up power supply.
Surveillance	Yes	Includes costs for ground radar systems and air radar systems (invoiced by LFV).
Search and rescue	No	
Aeronautical Information	No	
Meteorological services	Yes	Includes costs for MET-systems.
Services to OAT	No	
Cross-border ATS	No	

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

Swedavia is using a cost accounting model where costs are separated into cost centres. A cost centre is an operational site where all costs and revenues for managing the site are allocated. The net result of a cost centre is allocated to terminal cost base by determined allocation figures. A cost centre is defined after what service it provides and allocated to the specific service specification in the cost base. At Stockholm Arlanda Airport costs related to air navigation charges is allocated by 100 percent to Terminal Navigation Charges (TNC).

Swedavia owns and operates nine other airports. In this sheet Stockholm Arlanda is represented. For the other airports relevant to this scheme, Swedavia owns the infrastructure used for approach and the relevant cost base of these airports are presented under sheet "CNS-providers".

#### 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	0	0	0	0	0
Determined costs for terminal charging zone(s) in the scope of the performance plan	70 062	77 121	82 480	85 250	89 792
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

The NSA has defined the criteria in the regulation TSFS 2020:44 and at Stockholm Arlanda Airport costs related to air navigation services are allocated by 100 percent to Terminal Navigation Charges (TNC).

#### 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	0	0	0	0	0
Determined costs for approach services allocated to the en route charging zone(s)	0	0	0	0	0
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan	0	0	0	0	0

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

N/A

#### 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
If yes, description of the nature of the services provided and the geographical scope	
If yes, description of the arrangements for the financing of the services provided	

Services to OAT	No
If yes, description of the arrangements for the financing of the services provided	

Other ANS	No
If yes, description of the nature of the services provided and the geographical scope	
If yes, description of the arrangements for the financing of the services provided	

Non ANS	Yes
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	
<p>Swedavia owns, operates and develops Sweden's basic infrastructure of airports. The company was formed in 2010 and is wholly owned by the Swedish State. Swedavia owns all of the airports except Ronneby Airport and Luleå Airport. At those two airports Swedavia is responsible for commercial air traffic. Swedavia's airport operations are divided into aviation business and commercial services. In aviation business Swedavia's 10 airports offer a wide range of airport services to support efficient handling of passengers and airlines, on both arrival and departure. For these services Swedavia charge the airlines and the ground handling agents in accordance with EU regulations and Swedish law. The part of Swedavia's aviation business relating to the terminal navigation charge at Stockholm Arlanda Airport is a relatively small share. Swedavia's airport charges are determined on basis of a "single till" approach, or more precisely a "hybrid till". In this "hybrid till", net profit from commercial services and ground handling services subsidize airport charges. Other parts of the business that are excluded from the model are charges administrated by the Swedish Transport Agency (Security charge, Terminal Navigation charge at Arlanda and En-route charge).</p>	

#### e) Changes in cost allocation methodology

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

#### 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
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### 3.4.3 - Cost allocation ATSP/CNSP - CNS providers

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	ATS
Communication	Yes	Communication Air/Ground and Ground/Ground (ANS) and communication fixed services (AFS)
Navigation	Yes	Provision of NDB, VOR, DME, ILS
Surveillance	No	
Search and rescue	No	
Aeronautical Information	No	
Meteorological services	No	
Services to OAT	Yes	Where OAT services are provided, there is separately agreements with the military
Cross-border ATS	No	

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	113 245	117 767	121 328	122 902	124 872
Determined costs for terminal charging zone(s) in the scope of the performance plan					
Forecasted costs for terminal services at airports outside the scope of the performance plan					

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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	113 245	117 767	121 328	122 902	124 872
Determined costs for approach services allocated to the en route charging zone(s)	113 245	117 767	121 328	122 902	124 872
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan					

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

The allocation is regulated in the NSA regulation TSFS 2020:44

#### 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)	Yes
If yes, description of the nature of the services provided and the geographical scope	
Costs not allocated to en route and infrastructure connected to landing	
If yes, description of the arrangements for the financing of the services provided	
Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
Where OAT services are provided, there is separately agreements with the military	
Other ANS	No

If yes, description of the nature of the services provided and the geographical scope	
If yes, description of the arrangements for the financing of the services provided	
Non ANS	No
If yes, description of the nature of activities (products and/or services) performed and the relevant markets/customers	

**e) Changes in cost allocation methodology**

Are there changes in the cost allocation criteria with respect to the previous reference period?	Yes
If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	
NSA have assessed the operational conditions and that they are in compliance of the cost allocation model in TSFS 2020:44. Cost allocation is similar to previous RPs. An in-depht audit has led to exclusion of costs pertaining to S�ve and Sturup. It does not constitute a new allocation model, the change arises from an operational assessment. The sums are described in the baseline adjustments.	

**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
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### 3.4.4 - Cost allocation METSP - SMHI

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
SMHI is designated for civil aviation weather services in Sweden FIR. Products and services are provided according to (EU) 2017/373 and the national regulation TSFS 2019:95. The designation includes products and services within the function Aeronautical meteorological office and Meteorological Watch Office as described in (EU) 2017/373

#### 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	81 213	79 078	80 960	80 080	79 217
Determined costs for terminal charging zone(s) in the scope of the performance plan	0	0	0	0	0
Forecasted costs for terminal services at airports outside the scope of the performance plan	0	0	0	0	0

#### 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')
Methodology in ICAO doc. 9161 is used for identifying and allocating direct costs and core costs. In Sweden all MET cost connected to SMHIs provision of meteorological services for aviation in financed by En route. MET costs at an airport concerning infrastructure are fully financed by terminal, there is no allocation. The STA do not make any revision of the terminal MET costs outside the scope of the Performance scheme since they are not deemed eligible. Since STAs audits exclude the MET costs from Terminal there is no data available. Note that MET is provided by several ATS providers also among other MET obs. For example ACR and SDATS and theirs costs is allocated between en route and terminal due to TSFS 2020:44.  The MET costs at Stockholm Arlanda consists of LFVs and Swedavias costs for MET provision.

#### 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 Sweden	38 943	33 486	33 359	33 692	31 980
Terminal charging zone 1 Sweden - TCZ	0	0	0	0	0
Total forecasted costs for the concerned entity	38 943	33 486	33 359	33 692	31 980

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).
Services needed to serve exclusively aeronautical requirements. This consist of staff costs (meteorologists and technicians required for development and maintenance for systems for aviation), operating costs for aviation IT systems and training of meteorologists and technicians (ATSEPs). Also interest on loans covering the missing payments during the pandemic is included. The Swedish NSA decides how to allocate the costs between En route and Terminal.

#### 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 Sweden	42 270	45 592	47 601	46 388	47 237
Terminal charging zone 1 Sweden - TCZ	0	0	0	0	0
Total forecasted costs for the concerned entity	42 270	45 592	47 601	46 388	47 237

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.
Costs of facilities and services needed to serve both aeronautical and non-aeronautical requirements. Including general analysis and forecast offices, meteorological data processing, commonly used meteorological telecommunications facilities and services, surface synoptic observation stations, climatological observation stations, upper-air observation stations, weather radar, meteorological satellite image reception, core training, core research, core technical support (including administration).  The Swedish NSA decides how to allocate the costs between En route and Terminal.

#### f) Changes in cost allocation methodology

Are there changes in the cost allocation criteria with respect to the previous reference period? If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	No
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**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
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### 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
Supervision activities for ATM/ANS in accordance with (EU) 2017/373, (EU) 2021/116, (EU) 549/2004, (EU) 550/2004, (EU) 551/2004, (EU) 376/2014, (EU) 2015/2150, (EU) 255/2010, (EU) 2019/317 and national legislation. The estimation of costs is calculated on the basis of the number of activates needed in accordance with the regulation and the number of ANSP's under oversight of the Swedish NSA. Since Sweden has several ANSP's due to that the market for approach ATS partly is subject for competition, the NSA activities can differ depending on movements within the market. For example can the number of designation processes be dependent on number of procurements.

Description of the methodology used to allocate NSAs supervision costs between en route and terminal as well as across different charging zones
Only salary costs is allocated towards terminal and that allocation is made by time-reporting.

#### 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
Swedish Maritime Administration (SMA) has reported in line with Same calculation method as previous reporting periods. According to our Financial model this means 16,16% of all costs distributed to En route.
The NSA has however in its proposal for draft performance plan taken into consideration both the general cost development of SMA aswell as the PRB report of SAR costs. In the NSAs opinion the SAR costs of Sweden should develop in a direction towards the average of EU states (which includes these costs).

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	88 978	90 121	91 747	93 317	95 377
Determined costs for terminal charging zone(s) in the scope of the performance plan					
Forecasted search and rescue costs outside the scope of the performance plan					

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 current Financial model (2010) means that financial cost relationships are decisive for how costs are distributed between the sea and air rescue services. Costs that are linked to both services to the same extent are distributed equally between them. Cost distribution between beneficiaries and/or those who have cost responsibility for each service is distributed according to the same principle.
Other beneficiaries, besides those potentially in need of sea and air rescue, are charged variable costs for operations and a certain mark-up to help cover fixed costs. Of the Total cost, 16,16% was distributed to En route for RP3 and previous.
The Financial model are about to be updated since new beneficiaries are added and it has been years since last update. In the RP4 submission this is reflected but not finalised, the allocation is decreased by approximately 1 percent.

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
Costs are only allocated to En route according to above mentioned Financial model.

#### c) Changes in cost allocation methodology

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

#### 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
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### 3.4.6 - Determined costs assumptions - LFV

#### 3.4.6.1 - Operating costs

##### a) Staff costs

Number of entries	4
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#	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	Salary	Salary and salary related costs	En-route charging zones	583 012	627 566	603 347	618 552	618 954	631 090	636 121
			Terminal charging zones	61 032	62 111	63 907	65 192	66 796	69 835	71 418
2	Social security costs	Social security costs, also described in 3.4.7	En-route charging zones	191 123	197 181	189 571	193 296	193 399	197 189	198 746
			Terminal charging zones	19 538	19 418	20 080	20 483	20 987	21 942	22 440
3	Pensions	Pension costs as reported separately in 3.4.7	En-route charging zones	808 212	685 919	331 197	265 220	242 250	230 290	226 632
			Terminal charging zones	88 392	70 186	35 641	28 811	26 630	25 659	25 789
4	Other staff costs	Other staff costs like certain courses, travelling expenses (not tickets), health	En-route charging zones	15 395	15 383	21 204	18 174	19 733	19 787	19 806
			Terminal charging zones	1 153	1 224	1 664	2 023	2 252	2 376	2 413
Total staff costs			En-route charging zones	1 597 742	1 526 049	1 145 319	1 095 241	1 074 336	1 078 356	1 081 306
			Terminal charging zones	170 115	152 939	121 292	116 510	116 664	119 811	122 060

Accounting provisions included in total staff costs	Provisions for pensions one-off effect outcome 23 o 24. The full amount of 2024 is NOT reported above. For further information Annex R, last segment and sheet 3.4.7. Not developed in section d) due to that matter	En-route charging zones	380 425	-2 104 915						
		Terminal charging zones	46 066	-195 328						

Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)	As reported in 3.4.7	En-route charging zones								
		Terminal charging zones								

Description of the main factors explaining the planned variations of staff costs over the reference period

Main variation is in pension costs, as described in 3.4.7. Eventhough salaries increased in Sweden in late 2023 and 2024 we see costs on the same level as a result of cost allocations and retirements being replaced by young staff (ATCOs and others).

##### b) Other operating costs

Number of entries	5
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#	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	Property and rent expenditures	Rent, electricity and other property related costs	En-route charging zones	40 684	54 924	55 473	56 305	57 994	59 734	60 630
			Terminal charging zones	8 275	8 723	8 985	9 100	9 350	9 550	9 750
2	Materials, maintenance, transport		En-route charging zones	134 430	150 151	140 240	141 036	145 469	157 594	153 159
			Terminal charging zones	2 430	4 013	4 753	4 212	4 492	3 513	3 707
3	Travel expenses	tickets, hotels etc	En-route charging zones	13 410	19 632	17 783	17 789	18 824	20 554	20 162
			Terminal charging zones	354	610	835	772	833	744	812
4	External services	Incl training costs and consultancy services	En-route charging zones	111 282	136 396	113 459	112 501	112 151	128 336	117 941
			Terminal charging zones	7 816	10 875	12 400	10 974	11 615	9 674	10 135
5	Administrative costs	Incl for instance insurance, supervision etc	En-route charging zones	38 426	49 140	45 419	45 136	48 011	31 837	49 912
			Terminal charging zones	1 567	2 391	2 882	2 566	2 810	2 509	2 666
Total other operating costs			En-route charging zones	338 232	410 243	372 374	372 767	382 449	398 055	401 804
			Terminal charging zones	20 442	26 612	29 855	27 624	29 100	25 990	27 070

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

Costs for ground-ground communication services	Network costs for communication	En-route charging zones	41 100	41 100	44 300	46 900	48 500	50 300	51 800
		Terminal charging zones							
Costs for air-ground communication services via terrestrial link	Datalink: SITA & ARINC	En-route charging zones	3 400	3 300	3 500	3 600	4 400	5 200	5 400
		Terminal charging zones							
Costs for air-ground communications services via satellite link		En-route charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Terminal charging zones							

Description of the main factors explaining the planned variations of other operating costs over the reference period

Costs are increasing in 2024 mainly due to cost increases in all areas (inflation very high in Sweden 2023-2024 which is now seen in the costs for all system, maintenance and property expenses. Also consultancy costs are increasing as a result of increasing salaries in Sweden.

The costs for satellite link is N/A due to that factors as technical solution, deployment and availability are under discussions and/or development – nor is contract(s) available.

##### c) Exceptional items

Number of entries	Click to select
-------------------	-----------------

#	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
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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

##### d) Accounting provisions

Number of entries	1
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#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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 asset base used is to a very large extent fixed assets. The assets are allocated to en route or to other financing sources. The return on equity used is assumed to be on the same level as before the covid pandemic, 4 % after tax.

Cost of capital assumptions	Description of each item
NBV fixed assets	All fixed assets allocated to en route
Adjustments total assets	0
Net current assets	0
Cost of capital %	Calculated based on cost of capital in relation to asset base. 1,96 % in 2025 and increasing to 2,55 % in 2029.
Return on equity	Requirement from the Government, will be required from 2025 after a paus in RP3 over the pandemic
Average interest on debts	LFV has not any loans but uses the pension debt to finance investments. The pension debt in indexed by the rate of the inflation and therefore the inflation is the interest rate applied.
Share of financing through equity	As calculated, estimated to increase from 14 % in 2024 to 15,90 % in 2029.

#### 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)

#### 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 NSA has made an individual revision of all providers cost-bases. Regarding this provider changes to the initial requested was made within allocation. Other changes was made to cost efficiency.

### 3.4.6 - Determined costs assumptions - SDATS

#### 3.4.6.1 - Operating costs

##### a) Staff costs

Number of entries Click to select

#	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
Total staff costs			En-route charging zones	0	33 868	33 580	32 207	33 694	33 929	34 756
			Terminal charging zones	0	0	0	0	0	0	0

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

Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)	The pension costs are based on pension requirements from 60 years for ATCO since company was established. In the 2021 RP3 update, SDATS pension costs are correct periodized. All new ATCO have 65 years pension agreement.	En-route charging zones		8 583	7 355	6 518	6 657	6 188	6 203
		Terminal charging zones							

Description of the main factors explaining the planned variations of staff costs over the reference period

In 2025, 2026 and 2027, retirements will occur and be replaced by new students from the school. The volume of ATCO is based on the volume of FL existing at the start of RP4 and that it should not be increased taking into account the existing opening. The increase in costs is also based on an assumption of 3% annual salary increase.

##### 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		Facility, system and maintenance of RTC and systems.	En-route charging zones	22 134	21 066	20 070	20 606	21 054	21 361	21 788
			Terminal charging zones							
2		Training of ATCO	En-route charging zones	1 656	2 475	2 092	1 015	496	2 227	2 271
			Terminal charging zones							
3			En-route charging zones							
			Terminal charging zones							
4			En-route charging zones							
			Terminal charging zones							
5			En-route charging zones							
			Terminal charging zones							
6			En-route charging zones							
			Terminal charging zones							
7			En-route charging zones							
			Terminal charging zones							
8			En-route charging zones							
			Terminal charging zones							
9			En-route charging zones							
			Terminal charging zones							
10			En-route charging zones							
			Terminal charging zones							
11			En-route charging zones							
			Terminal charging zones							
12			En-route charging zones							
			Terminal charging zones							
13			En-route charging zones							
			Terminal charging zones							
14			En-route charging zones							
			Terminal charging zones							
15			En-route charging zones							
			Terminal charging zones							
Total other operating costs			En-route charging zones	23 790	23 541	22 162	21 621	21 550	23 587	24 059
			Terminal charging zones	0	0	0	0	0	0	0

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

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

Description of the main factors explaining the planned variations of other operating costs over the reference period

Facilities operations over the period are constant with an annual indexation based on the October 2023 IMF inflation forecast. This item includes WAN, electricity consumption, premises costs, technical operation and maintenance, etc.

Education costs lower in 2025 and 2026 to rise at the end of the period.

##### c) Exceptional items

Number of entries Click to select

#	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
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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

d) Accounting provisions

Number of entries	Click to select
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#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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
Calculation of capital costs are based on the Asset Base. The yearly average of the opening balance and closing balance of the net current assets multiplied with the required return of equity

Cost of capital assumptions	Description of each item
NBV fixed assets	Average booked value of fixed assets of technical infrastructure for ATS and MET providers to a new constructed airport - a Remote Tower Module with included subsystems.
Adjustments total assets	No adjustment
Net current assets	The companies current assets are recovery from the pandemic years 2020 and 2021. 24500 tkr in 2025 decreasing to 0 in 2029
Cost of capital %	Calculation of WACC based on debt-to-equity ratio prevailing for the vast majority of the year. 7,10 % all years in RP4
Return on equity	Based on estimated share of equity. 10,5 % in 2025 decreasing to 7,2 % in 2029
Average interest on debts	2% yearly average interest on debts until January 1 2027. No debts or interest from 2028 and 2029
Share of financing through equity	60 % in 2025 and increasing to 98,6 % in 2029.

### 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)

### 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 NSA has made an individual revision of all providers cost-bases. Regarding this provider no corrections applied

### 3.4.6 - Determined costs assumptions - ACR

#### 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 2023	Forecast 2024	2025	2026	2027	2028	2029
			En-route charging zones	110 722	127 788	113 554	118 970	121 838	124 770	127 767
			Terminal charging zones	0	0	0	0	0	0	0

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

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 included in the amount for the total staff costs. Pension cost determined by the applicable collective agreement.	En-route charging zones	19 178	24 063	19 700	20 548	20 956	24 891	21 799
		Terminal charging zones							

Description of the main factors explaining the planned variations of staff costs over the reference period										
Staff cost are mainly driven by the expected increased amount in total number of FTEs, the salary base and the training plan.										

##### 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 2023	Forecast 2024	2025	2026	2027	2028	2029
			En-route charging zones	17 799	22 448	18 420	19 605	20 027	20 490	21 734
			Terminal charging zones	0	0	0	0	0	0	0

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

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

Description of the main factors explaining the planned variations of other operating costs over the reference period										
Increased costs, f.e. due to inflation and higher amount of FTEs, for operational and administrative costs as office rent, IT/software, insurance and travel.										

##### c) Exceptional items

Number of entries Click to select

#	Exceptional items building blocks (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Actual 2023	Forecast 2024	2025	2026	2027	2028	2029
			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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										
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##### d) Accounting provisions

Number of entries Click to select

#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast 2024	2025	2026	2027	2028	2029
			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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):	Select
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	
According to model provided by the Swedish Transport Agency.	

Cost of capital assumptions	Description of each item
NBV fixed assets	Average net book value for invetsetting in a simulator, 1090 tkr in 2025 increasing to 1990 tkr in 2029
Adjustments total assets	0
Net current assets	Recovery from the pandemic years 2020 and 2021 and low traffic 2022-2024 . 78957 tkr in 2025 decreasing to 16465 in 2029
Cost of capital %	Calculation of WACC based on debt-to-equity ratio prevailing for the vast majority of the year. 5,53 % in 2025 increasing to 6,71 % in 2029
Return on equity	According to model provided by the Swedish Transport Agency. 35,91% in 2025 decreasing to 15,59 % in 2029
Average interest on debts	1,03 % in 2025 increasing to 1,08 % in 2029
Share of financing through equity	Increasing from 12,89 % in 2025 to 38,8 % in 2029

#### 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)	
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#### 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 NSA has made an individual revision of all providers cost-bases. Regarding this provider the NSA has made corrections due to cost-efficiency and costs not covered by this regulation.



### 3.4.6 - Determined costs assumptions - SMHI

#### 3.4.6.1 - Operating costs

##### a) Staff costs

Number of entries	1
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#	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	Total staff costs	En-route charging zones	19 653	26 535	33 576	33 093	33 525	33 675	32 632
			Terminal charging zones							
Total staff costs			En-route charging zones	19 653	26 535	33 576	33 093	33 525	33 675	32 632
			Terminal charging zones	0	0	0	0	0	0	0
Accounting provisions included in total staff costs		En-route charging zones								
		Terminal charging zones								
Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)		Assumptions made by the forecast from SPV	En-route charging zones	2 238	2 650	3 962	3 905	3 956	3 974	3 851
			Terminal charging zones							

Description of the main factors explaining the planned variations of staff costs over the reference period

The staff situation is strained at the moment due to years of efforts to meet the targets on cost-efficiency. There is not enough staff to meet the challenges in RP4 so we simply have to hire meteorologists and technicians. The main challenges are: EU 2021/116 and related major changes to the production, products and services, EU 2023/203 on information security with significant impact on SMHI as a whole, EU 2023/1768 with an increased amount of bureaucracy and an audit on ATSEP which also results in more bureaucracy.

##### b) Other operating costs

Number of entries	4
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#	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	Infrastructure	Costs for SMHI's meteorological infrastructure (operation, service, maintenance, etc.). It also includes processing, quality assurance and correction of collected data.	En-route charging zones	13 064	13 150	16 035	15 996	15 720	15 538	15 536
			Terminal charging zones	0	0	0	0	0	0	0
2	IT systems	Operation, maintenance and development of IT systems for aviation	En-route charging zones	7 777	8 949	10 235	12 462	13 649	11 835	11 844
			Terminal charging zones	0	0	0	0	0	0	0
3	Other costs	Other costs such as training, rent for premises, IT common costs and other staff costs.	En-route charging zones	7 527	3 836	10 049	5 841	5 871	6 453	6 428
			Terminal charging zones	0	0	0	0	0	0	0
4	Overhead	Costs for common functions	En-route charging zones	5 739	6 565	7 636	7 812	7 968	8 127	8 290
			Terminal charging zones							
Total other operating costs			En-route charging zones	34 106	32 500	43 955	42 111	43 208	41 953	42 098
			Terminal charging zones	0	0	0	0	0	0	0

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

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

Description of the main factors explaining the planned variations of other operating costs over the reference period

The main factors for the variations is; an increase due to the fact that SMHI will provide some services (consultation, weather chart production) under RP4 instead of LFV, and an increase related to both EU 2021/116 and EU 2023/203 where meteorological services for aviation will undergo a paradigm shift in terms of service production, delivery and information security.

##### c) Exceptional items

Number of entries	0
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#	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
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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

##### d) Accounting provisions

Number of entries	0
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#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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):

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

With regard to interest on investments, we assume an annual interest rate of 2% for the years 2025-2029.

Cost of capital assumptions	Description of each item
NBV fixed assets	The NBV is calculated by adding the opening balance to the closing balance divided by two.
Adjustments total assets	0
Net current assets	Recovery from the pandemic years 2020 and 2021 and unit rate 2022. 42491 tkr in 2025 decreasing to 4660 tkr in 2029
Cost of capital %	Interest rate 2% for the years 2025-2029
Return on equity	0 % under RP4
Average interest on debts	Interest rate 2% for the years 2025-2029
Share of financing through equity	0% under RP4

#### 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 NSA has made an individual revision of all providers cost-bases. Regarding this provider corrections have been made due to cost-efficiency

#### 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

3.4.6 - Determined costs assumptions - Arvidsjaur/AFAB

3.4.6.1 - Operating costs

a) Staff costs

a) Staff costs		Number of entries	4							
#	Staff costs building blocks (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Actual 2023	Forecast 2024	Determined				
				2025	2026	2027	2028	2029		
1	Salary	Annual salary including holiday pay, sick pay, inconvenient working hours,	En-route charging zones	2 394 000	3 351 815	3 452 369	3 555 941	3 662 618	3 772 497	3 885 671
			Terminal charging zones							
2	Social fees	Employer fee and payroll tax	En-route charging zones	752 250	993 529	1 023 335	1 054 034	1 085 655	1 118 225	1 151 772
			Terminal charging zones							
3	Pension costs	Calculated based on results from previous years	En-route charging zones	962 250	1 157 858	1 192 594	1 228 371	1 265 222	1 303 145	1 342 274
			Terminal charging zones							
4	Indirect costs	Internal training, medical examinations, travel, simulators etc.	En-route charging zones	500 250	1 139 790	2 369 160	1 137 750	815 198	820 493	874 943
			Terminal charging zones							
Total staff costs			En-route charging zones	4 608 750	6 642 991	8 037 458	6 976 096	6 828 693	7 014 360	7 254 660
			Terminal charging zones	0	0	0	0	0	0	0
Accounting provisions included in total staff costs			En-route charging zones							
			Terminal charging zones							
Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)			En-route charging zones	962 250	1 157 858	1 192 594	1 228 371	1 265 222	1 303 145	1 342 274
			Terminal charging zones							
Description of the main factors explaining the planned variations of staff costs over the reference period										
The variation between the years is mostly due to the high turnover of traffic controllers and the difficulty in recruiting. Arvidsjaur Airport plans to train an air traffic controller every two years, starting in 2025. The own staffing has been lower in 2023 and to meet needs, staff has been hired externally. This results in lower personnel costs and higher operating costs om 2023. The plan in the future (2024-2027) is to have our own staff.										

b) Other operating costs

b) Other operating costs			Number of entries	10						
#	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	Maintenance equipment	ATS and CNS equipment	En-route charging zones	316 500	304 274	312 488	319 676	326 070	332 591	339 242
			Terminal charging zones							
2	Reserve Power	Secure the electricity supply in the event of a power outage (ATS/CNS)	En-route charging zones	37 500	49 511	50 847	52 017	53 057	54 119	55 201
			Terminal charging zones							
3	Radar Service	The current supplier of surveillance and radar data transmission has been	En-route charging zones	132 750	310 800	516 817	420 516	434 927	449 625	464 618
			Terminal charging zones							
4	Annual fees	Annual fees to the Swedish Transport Agency (ATS and CNS)	En-route charging zones	120 750	137 024	140 042	142 862	145 719	148 634	151 607
			Terminal charging zones							
5	Flight measurement	CNS	En-route charging zones	204 000	205 595	211 145	216 002	220 322	224 728	229 223
			Terminal charging zones							
6	Review approach procedures	N equipment	En-route charging zones	0	75 000		464 039			
			Terminal charging zones							
7	Data and telephony communication		En-route charging zones	55 725	88 951	91 352	93 454	95 323	97 229	99 173
			Terminal charging zones							
8	Management systems	Opscom	En-route charging zones	30 000	31 080	31 919	32 654	33 306	33 973	34 652
			Terminal charging zones							
9	Premises and insurance	Electricity, heating, claning etc	En-route charging zones	150 975	275 139	283 206	290 729	297 866	305 234	312 843
			Terminal charging zones							
10	Other	Consumables, flight charts, support and consulting services	En-route charging zones	356 505	121 406	124 684	127 552	379 440	132 704	135 359
			Terminal charging zones							
Total other operating costs			En-route charging zones	1 404 705	1 598 778	1 762 500	2 159 498	1 986 029	1 778 836	1 821 916
			Terminal charging zones	0	0	0	0	0	0	0
Accounting provisions included in total other operating costs			En-route charging zones							
			Terminal charging zones							
Costs for ground-ground communication services			En-route charging zones							
			Terminal charging zones							
Costs for air-ground communication services via terrestrial link			En-route charging zones							
			Terminal charging zones							
Costs for air-ground communications services via satellite link			En-route charging zones							
			Terminal charging zones							
Description of the main factors explaining the planned variations of other operating costs over the reference period										
The variation between the years is explained by the review approach procedures in 2026 and upgrade flight charts in 2027. Beyond that, the operating costs, do not differ a lot between the years. The current supplier of surveillance and radar data transmission has been cancelled, and the cost is calculated based on estimated factors. In 2023 outcome the cost for hired Air Traffic Management is included in other costs.										

c) Exceptional items

c) Exceptional items		Number of entries	0							
#	Exceptional items building blocks (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Actual 2023	Forecast 2024	Determined				
				2025	2026	2027	2028	2029		
Total exceptional items			En-route charging zones	0	0	0	0	0	0	
			Terminal charging zones	0	0	0	0	0	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										

d) Accounting provisions

d) Accounting provisions		Number of entries	0							
#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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
Cost of capital pre tax rate = (return of equity * share of financing through equity)+(Average interest on debts* (1-share of financing through equity))

Cost of capital assumptions	Description of each item
NBV fixed assets	Incoming balance plus outgoing balance divided by 2, new investsemnets
Adjustments total assets	0
Net current assets	0
Cost of capital %	1,77 % in 2025 increasing to 3,37 % in 2029
Return on equity	0% under RP4
Average interest on debts	2,51 % in 2025 increasing to 4,77 % in 2029
Share of financing through equity	Equity through total assets, 29,50 % in 2025 decreasing to 29,30 % in 2029

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)

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 NSA has made an individual revision of all providers cost-bases. Regarding this provider corrections have been made due to cost-efficiency

3.4.6 - Determined costs assumptions - Swedavia

3.4.6.1 - Operating costs

a) Staff 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 2023	Forecast 2024	Determined				
				2025	2026	2027	2028	2029		
1	Staff costs at the corporate ATM/ANS-function in Swedavia (part of).	The corporate ATM/ANS-function that has two main functions partly "Infrastructure and Systems" and "Production and service." Infrastructure and Systems is responsible for development, planning and management of telecommunications equipment at Swedavia airports and airport facilities. The department has Swedavia EU certificate for air navigation services relating to communications (C), navigation (N) and surveillance (S) and manages Swedavia telecommunications technical equipment fr.om 1 January 2014. The feature production and services are responsible for functional requirement specifications for Air Navigation Services (ANS Air Navigation Services), strategic planning of airspace and procedural design and allied services in the ATM area (ATM, Air Traffic Management). This implies a responsibility to develop and ensure the quality, function and performance of the local air traffic control with a common view where other functional areas interests are considered.	En-route charging zones	0	0	0	0	0	0	
			Terminal charging zones	8 460	13 019	12 504	12 817	13 887	14 234	14 590
Total staff costs			En-route charging zones	0	0	0	0	0	0	
			Terminal charging zones	8 460	13 019	12 504	12 817	13 887	14 234	14 590
Accounting provisions included in total staff costs		N/A	En-route charging zones							
			Terminal charging zones							
Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)	Swedavia applies a defined contribution pension plan. At the formation of Swedavia, by the split of LFV, Swedavia overtook a defined benefit occupational pension liability. Most of the defined benefit obligation is a paid-up-policy and new payments does not occur within the defined obligation. The expected pension costs development follows the development of salary costs.	En-route charging zones	0	0	0	0	0	0		
		Terminal charging zones	1 393	1 432	1 375	1 410	1 528	1 566	1 605	

Description of the main factors explaining the planned variations of staff costs over the reference period

The main factor behind the increase in staff costs over RP4 is the requirement of an additional FTE from 2027 and for the following years at the corporate ATM/ANS-function in Swedavia. The regulations (EU) 2023/203 and 2022/1645 Part -IS will bring an additional workload that can not be managed without an increase of FTE.

b) Other operating costs

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	The corporate ATM/ANS-function in Swedavia (part of).	This includes costs for staff education, business travel expenses, external consultancy services, external audits etc.	En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	3 218	7 266	5 036	5 137	5 240	5 344	5 401
			En-route charging zones	0	0	0	0	0	0	0
2	Subcontractor LFV	This includes operating and maintenance costs for the facilities and equipment used for ATM, CNS and MET services. The forecast for maintenance requirements is made in collaboration with the subcontractor LFV.	Terminal charging zones	18 038	16 261	18 525	20 850	22 694	23 170	23 972
			En-route charging zones	0	0	0	0	0	0	0
3	Other subcontractors	This includes operating and maintenance costs for the facilities and equipment used for ATM, CNS and MET services. The forecast for maintenance requirements is made in collaboration with the subcontractors.	En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	8 047	8 323	7 902	8 138	8 380	8 630	8 888
			En-route charging zones	0	0	0	0	0	0	0
4	Air space procedures	This group of costs includes the cost of work with air space procedures.	Terminal charging zones	47	950	350	0	0	0	3 156
			En-route charging zones	0	0	0	0	0	0	0
5	IT infrastructure (part of)	This includes costs for IT-infrastructure in Swedavia used for ATM, CNS and MET services.	Terminal charging zones	5 219	5 272	5 307	5 681	6 229	6 178	5 713
			En-route charging zones	0	0	0	0	0	0	0
6	Tower building and back-up power supply (part of)	This includes costs for premises used for ATM, CNS and MET services and also back-up power supply.	Terminal charging zones	1 359	1 548	1 487	1 516	1 547	1 577	1 609
			En-route charging zones	0	0	0	0	0	0	0
7	Airport management and corporate functions in Swedavia (part of)	This includes costs for airport management and corporate business functions.	Terminal charging zones	7 342	8 587	8 604	9 471	10 129	10 469	11 027
			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	43 270	48 208	47 212	50 792	54 219	55 370	59 816
Total other operating costs			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	43 270	48 208	47 212	50 792	54 219	55 370	59 816
Accounting provisions included in total other operating costs		N/A	En-route charging zones							
			Terminal charging zones							
Costs for ground-ground communication services		Allocated to the cost base for TNC	En-route charging zones							
			Terminal charging zones							
Costs for air-ground communication services via terrestrial link		Allocated to the cost base for TNC	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

The main factor behind the increase in operating costs over the reference period is related to costs from LFV as a subcontractor of facilities and systems. The forecast includes several reinvestments that LFV needs to make in RP4.

c) Exceptional items

c) Exceptional items			Number of entries	0						
#	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
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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

d) Accounting provisions

Number of entries

0

#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
Total exceptional items			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	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
Computed cost of capital according to WACC (weighted average cost of capital) of 5,55 % is based on the net book value of the premises and equipment included in the services. The assumptions used are a return on equity of 9,53 %, an interest on debts of 2,9 %

Cost of capital assumptions	Description of each item
NBV fixed assets	Swedavia owns, operates and develops a network of 10 Swedish airports. The company was formed in 2010 and is owned by the Swedish State. The part of Swedavia's activities relating to the terminal navigation charge at Stockholm Arlanda Airport is therefore a relatively small share. Swedavia has no separate balance sheet for this part of the business, but only for Swedavia as a whole. This means that it's only for the tangible fixed assets that Swedavia can identify a direct link to the terminal navigation charge. The NBV is calculated per tangible fixed asset as (OB for January + CB for December)/2. 77514 tkr in 2025 decreasing to 74253 tkr in 2029
Adjustments total assets	0
Net current assets	0
Cost of capital %	5,55 % all years in RP4
Return on equity	9,53 % all years in RP4
Average interest on debts	2,9 % all years in RP4
Share of financing through equity	39,9 % all years in RP4

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)

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 NSA has made an individual revision of all providers cost-bases. Regarding this provider no corrections have been made.

### 3.4.6 - Determined costs assumptions - CNS providers

#### 3.4.6.1 - Operating costs

##### a) Staff costs

Number of entries	1
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#	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, salary, social fees and pensions	En-route charging zones	16 375	18 155	17 672	17 548	18 217	18 474	19 155
			Terminal charging zones							
			En-route charging zones	16 375	18 155	17 672	17 548	18 217	18 474	19 155
			Terminal charging zones	0	0	0	0	0	0	0
Total staff costs										

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

Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)	Forecasts from different pensioninstitutions	En-route charging zones	1 453	1 532	1 425	1 456	1 498	1 533	1 570
		Terminal charging zones							

Description of the main factors explaining the planned variations of staff costs over the reference period

No major variations, the increase is affected by inflation and yearly salary increases

##### 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	Maintenance equipment, reserve power, radar service, data and telephony communications, insurances, flight measurement, review approach procedures, annual fees to STA	En-route charging zones	63 430	70 499	65 573	67 334	70 684	72 940	76 018
			Terminal charging zones							
			En-route charging zones	63 430	70 499	65 573	67 334	70 684	72 940	76 018
			Terminal charging zones	0	0	0	0	0	0	0
Total other operating costs										

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

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

Description of the main factors explaining the planned variations of other operating costs over the reference period

The main factor to the variations is inflation

##### c) Exceptional items

Number of entries	0
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#	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
			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	0
Total exceptional items										

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

##### d) Accounting provisions

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

#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
			En-route charging zones	0	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	0
Total exceptional items										

#### 3.4.6.2 - Investment costs

##### a) Depreciation costs

Method adopted for the calculation of the depreciation cost (point 1.3 of Table 1):

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

Calculation of capital costs are based on the Asset Base. The yearly average of the opening balance and closing balance of the net current assets multiplied with the WEIGHTED AVERAGE COST OF CAPITAL

Cost of capital assumptions	Description of each item
NBV fixed assets	Average based on the investments, 206114 tkr in 2025 decreasing to 155610tkr in 2029
Adjustments total assets	0
Net current assets	Where applicable the NSA has audited, 3411 tkr in 2025 increasing to 6348 tkr in 2029

Cost of capital %	Weighted average of interest and RoE 3,97 % in 2025 increasing to 4,04% in 2029
Return on equity	Where applicable the NSA cap the RoE to 7,1% so in total 4,55 % in 2025 decreasing to 4,45 % in 2029 but fluctating during the years.
Average interest on debts	Where applicable the NSA has audited, 3,80 % in 2025 increasing to 3,91 % in 2029
Share of financing through equity	Where applicable the NSA has audited 21,80 % in 2025 increasing to 24,02% in 2029

#### 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)

#### 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 NSA has made an individual revision of all providers cost-bases. Regarding this provider corrections have been made due to cost-efficiency and costs not covered by this regulation



### 3.4.7 - Pension assumptions

#### LFV

#### 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	331 197	263 853	240 853	228 862	230 116
Terminal activity	35 641	28 811	26 630	25 659	25 789
Other activities	189 948	195 821	167 973	157 552	157 901
<b>Total pension costs</b>	<b>1 021 352</b>	<b>883 852</b>	<b>777 248</b>	<b>729 699</b>	<b>731 504</b>

#### 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					
<b>Total pension costs in respect of this scheme</b>					
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

"LFV's employees are covered by the public pension system in Sweden as well as the pension agreement for government employees, called PA16. The pensions are "state" pensions - no private pension schemes/no privat pension insurance. The public pension is financed through employers contribution for national social security purposes, LFV does not account for this as pensions costs - instead we include it in staff costs as social security costs. Total employers' contributions are paid by employers to the Swedish Tax Authorities of 31.42 % on salaries, whereof 10.81 % are state pensions. According to Swedish Accounting principles employers contribution (including theses 10.81 %) are classified in the accounts as social security contributions, not pension costs.

Defined-contribution and defined-benefit pensions within the framework of PA16 are reported and commented under section 3.4.7.3 and 3.4.7.4 below. Pensions costs based on PA16 are recorded and presented in the accounts as "pension costs".

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
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<Staff category name>	2025D	2026D	2027D	2028D	2029D
Total pensionable payroll to which this scheme applies	1 019 508	1 031 937	1 039 491	1 050 278	1 073 197
Employer % contribution rate to this scheme	9,05%	9,02%	9,01%	8,99%	8,96%
<b>Total pension costs in respect of this scheme</b>	<b>92 219</b>	<b>93 118</b>	<b>93 664</b>	<b>94 446</b>	<b>96 108</b>
Number of employees the employer contributes for in this scheme	1 179	1 172	1 170	1 168	1 171

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 defined contribution plan for LFV staff is part of the pension system for government employees (called "PA16"). The defined contribution pensions are accounted for in accordance with Swedish GAAP and the Swedish National Financial Management Authority's regulations (ESV). The pensions are administrated

by SPV (National Government Employee Pensions Board). The premium for the pensions are based on what's stipulated in PA16 and invoiced by SPV. The premium/cost to be paid by LFV for each employee is a certain percentage of gross salary and a special employer's contribution on the premium/cost. The costs are accounted for in the P/L as pension costs.

Category 1: Employees born in 1988 or later (2024: appr 190 members of staff) are only covered by defined contribution scheme (no part is defined benefit). The contribution rate for these employees are 6 % in general and then 31,5 % on monthly gross salaries above SEK 47,6k (2024). On these premiums a special employer's contribution of 24.26 % is accounted for and paid to the state/the Tax Authorities. Calculations of actual outcome for 2023 shows an average contribution rate of appr. 15 -20% including special employer's contribution (in percent of total salaries for category 1).

All active employees of LFV born before 1988 connected to the defined benefit scheme also have a part of the pensions through a defined contribution scheme. The contribution rate is 6.0 % of gross salaries. On these premiums a special employer's contribution of 24.26 % is accounted for and paid to the state/the Tax Authorities.

~~We report on any expected changes of the regulations during RP4 of the state pension system. The assumptions for defined contribution scheme are the~~

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs, separately for retirement and early retirement  
See above. The premiums are in accordance with PA16 and administrated by National Government Employee Pensions Board.

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

See above. The premiums are in accordance with PA16 and administrated by National Government Employee Pensions Board. The cost is based on the regulations in PA16 and is calculated based on gross salaries of the employees and therefore deemed to be of the character that no special risk mitigating action against unforeseen change is applicable.

#### 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? Select

DB scheme #1: name and short description

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	912 460	923 584	930 344	939 999	960 511
<b>Total pension costs in respect of this scheme</b>	<b>464 566</b>	<b>395 367</b>	<b>341 792</b>	<b>317 627</b>	<b>317 698</b>
- service costs (current and past)	850	850	850	850	850
- net interest on the defined benefits liability /assets	-2 916	-58 332	-49 257	-45 715	-45 715
<b>Net funding surplus/deficit</b>					
Net funding surplus/deficit at 1 January		-2066	-59548	-107955	-152820
- benefits paid					
- contributions to the fund					
Net funding surplus/deficit at 31 December	-2 066	-59548	-107955	-152820	-197685
<b>Actuarial assumptions</b>					
% discount rate	0,50%	0,50%	0,50%	0,50%	0,50%
% projected increase in benefits	N/A	N/A	N/A	N/A	N/A
% annual increase in salaries	2,50%	2,50%	2,50%	2,00%	2,00%
% expected return on plan assets	N/A	N/A	N/A	N/A	N/A
Number of employees the employer contributes for in this scheme	2 002	2 002	2 002	2 002	2 002

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 table above is not fully applicable for the accounting of provision for pensions according to Swedish accounting principles.

As a "state enterprise", LFV follows the accounting rules of Swedish GAAP in accordance the Swedish National Financial Management Authority's regulations (ESV), which is different from IFRS (international accounting rules).

Pensions for LFV-staff are based on a pension agreement for personnel employed by the state, called "PA16". The LFV staff is to the largest extent covered by a Defined Benefit Scheme.

~~The pensions are administrated by SPV (National Government Employee Pensions Board) and the pensions rights are calculated yearly at present value by SPV~~

The pensions are administrated by SPV (National Government Employee Pensions Board) and the pensions rights are calculated yearly at present value by SPV and accounted for in LFV's balance sheet. The assumption are decided by SPV and the interest rate is set each year before closing date 31 December on the basis of the interest rate from Swedish Financial Supervisory Authority, which is an average of the interest rates for a year for long-term real obligation (for the period 1 Oct - 30 Sept).

The yearly change in the debt and costs are affected by a number of circumstances that LFV cannot control; for example inflation, forecasted interest rates, and expected average lifetimes. Largest fluctuations between the years mainly are dependent and explained by the fluctuation of the interest rate – the discount rate, however in the last years of RP3 inflation did affect the indexation amount substantially.

No changes of PA16 (the pension agreement) are expected during 2025-2029.

LFVs pension costs in the performance plan for 2025-2029 are based on a forecast made by SPV (National Government Employee Pensions Board). The forecast is updated yearly and the forecast used for the performanceplan was obtained in May 2023.

The forecast used in the PP is based on the current interest rates 0,5 %, the gross rate decided for 2024. The same interest rate 0,5 % [the gross rate decided 2024] is used for the entire period 2025-2029. A forecast with different discount rates each year will be both very complex to calculated as well as hard to follow up on when the interest rate will fluctuate over the years. The interest rate for the coming years is currently unknown and not possible to determine - it is set annually based on market interest rates for long term government bonds. Interest rate development is uncertain.

Since the basis for pension debt and cost is decided by The Swedish Pensions Agency and is depending on the development of market interest rates, inflation etc. it is an "uncontrollable" cost for LFV and variations compared to the plan will be recoverable. This implies that the final costs can be lower or higher than estimated and out of control of LFV.

Part of the cost for defined benefit obligations is interest (indexation and interest) which is included in staff cost (cost for pensions). This is however accounted for as interest expenses (line item in financial cost) in the financial statement of LFV in accordance with Swedish Accounting principles.

Return on the funding of pension obligation (cash and bank balances) has reduced the cost for pensions. Interest income is recorded as financial income in the financial statment of LFV. Avarage interest income for the period has been forcasted to app. 3.8 %.

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

See above. The obligation for defined benefit scheme and cost for pensions is regulated by PA16, the Swedish accounting principles and regulations and assumptions etc decided by National Government Employee Pensions Board based on the market delopment of interest and inflation. Therefore deemed to be out of control of LFV and of the character that no special risk mitigating action against unforeseen change is applicable.

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

LFV

Select number of loans = 0

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	LFV is financing its assets through its pension funds. For financing/loan information by the other ATS providers ACR and SDATS, SMHI pleas see Annex T.				
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?	No
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### 3.4.10 - Restructuring costs

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#### 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
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#### 3.4.10.2 Restructuring costs planned for RP4

Restructuring costs foreseen for RP4?	No
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Additional comments
<div></div>

## SECTION 3.5: ADDITIONAL KPIS / TARGETS

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### [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				
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<Insert name of additional KPI>		Related KPA		Select KPA		
---------------------------------	--	-------------	--	------------	--	--

		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
National level	<insert appropriate breakdown level>					
	Description and explanation of how this additional KPI and targets support the achievement of the EU and local performance targets					

KPI details	
KPI description and rationale	
Formula, metric and parameters	
Data sources	

Additional comments



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

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### **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.

From the NSA perspective and its decisions in relation to local performance targets covered by the performance scheme, there is always a safety issue as the top priority. The NSA is organised so that the section for market oversight is in lead of producing the Swedish draft performance plan, while the safety and compliance issues are the responsibility of the section for ANS. The cooperation between the two departments is extensive, but with focal points on each side. On matters where there could be a possible question of interdependency, the ANS section always has the last word.

There is no identified safety implication stemming from trade offs from other KPIs. The responsibility for the NSA, as well as the providers of ANS, is however to secure and demonstrate that there are both available resources and competence to secure these conditions continuously.

For more details see Annex S

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 main assumption is straight forward that safety is always overriding.

From a performance planning perspective it is important in the in-depth auditing of business plans and proposed investments and other operating costs to have an individual approach to all providers.

The NSA section for ANS oversight do only supervise safety achievements and safety assessments. All other aspects are secondary. A different section, the section for market oversight, prepares the Performance plans and do always consult the ANS Safety section.

From an ANS safety perspective indicators are within change management, occurrence reports and reports according 373, including financial aspects.

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.

Where LFV can anticipate that issues may occur for any reason, a risk will be included in the risk management process. The most serious risks will then be handled within the project portfolio process.

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?

There is no example from the NSAs point of view. To some extent there have been changes to how different tasks have been carried out, but there are no known cancellations.

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.

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This is part of the Swedish Transport Agency ANS section oversight. For performance planning purposes these issues are collaborated between the ANS section, in charge of safety oversight, and the section of market oversight, which are in lead and responsible for drafting and submission of Performance plans.

SWEA is one example of a planned change in RP4. SWEA is basically a airspace project with targeted improvements in several KPIs; it will improve KEA, simplifying the airspace with less ATCO workload leading to a reduction of staffing and improve capacity. The project has been monitored from a financial perspective by the NSA. The safety monitoring process follows as:

SWEA is developed in several phases (NOP April 2024 edition). Every phase consists of one or more segments of changes. Each segment is subject to the change management procedure which is audited by the NSA ANS section. The audits are performed according to the regulation the NSA follows to determine whether the changes will lead to a sustained/improved level of Safety. EU 2017/373, EU 923/2012, TSFS 2019:126, EU 2015/340.

During the implementation, the ANSP follows its safety management system.

After the implementation the NSA follow up the specific change where considered necessary, otherwise during the audit interval.

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

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Sweden agrees that there is an interdependence. As Sweden performs well in both aspects the intention is to continue on the same path. There are ongoing, and to be introduced, projects acting as enabler to increase performance further with the intention to keep KPIs on targets as the traffic volumes increases.

The projects in NOP 2024 April edition are supporting efficient provision. Especially SWEA project will drive KPIs in several aspects where both capacity- and environment improvements are targeted. SWEA is basically an airspace project that will create more efficient flight routes from/to Arlanda and Landvetter. Especially certain important routes will be affected and get shorter distance flown. From the capacity point of view, SWEA will also decrease workload for ATCOs, which will decrease needed number of ATCOs (also implying a capacity buffer, if needed).

For Sweden, the interdependence capacity/environment is somewhat contradictory in the local reference values. While capacity targets implies raised levels of delay minutes, environment targets are going in the opposite with a marginal improvement. The Swedish draft performance plan do however aim to handle both these perspectives under the current traffic forecast and the proposed incentive scheme for capacity.

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

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According to historical and present capacity performance the local reference values for RP4 are generous in the sense that they could appear to cater for further reductions in costs. When the Swedish NSA has assessed the situation it has drawn the conclusion that the proposed level is accurate and presents a balanced approach to both a network perspective and the case of sudden traffic shifts where the ANSP LFV would need to meet a much higher demand.

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### 3.6.4 - Other interdependencies and trade-offs

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*Should additional space be needed for any of the items, please use Annex S.*

## SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

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### 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 plan
- 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

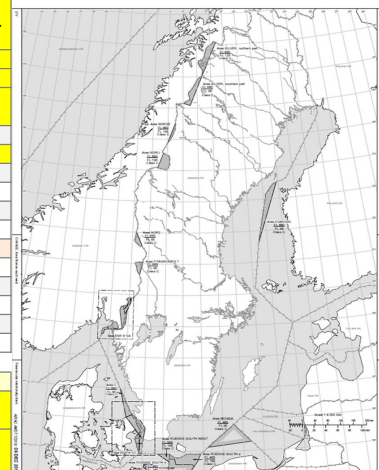
#### 4.1 - Cross-border initiatives and synergies at the level of the ANSP(s)

##### 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 km<sup>2</sup>, 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)		8				
Cross-border area(s) #1	Danish FIR, Met-cooperation area	Situated in:		Denmark FIR		
Geographical scope of the cross-border area(s)	DK FIR (not Greenland)					
Rationale for establishing the cross-border area, including performance benefits	According to regulation (EU) 2017/373 a service provider shall have contingency plans. To comply SMHI and DMI have a cooperation agreement on Contingency. SMHI and DMI provides back-up for each other and thereby reduce both providers costs related to contingency.					
Size of the cross-border area (km2)	Whole Danish FIR (not Greenland)					
Estimated annual number of flights						
Estimated annual number of SUs, if available						
Description of the services provided by the ANSP in the cross-border area						
DMI and SMHI provides back-up for each other H24						
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029	
Methodology used to estimate/establish these costs						
Cost-sharing, where both parties have equal costs for the provision. In the case of a back-up situation, extra costs are invoiced.						
Have these costs been excluded from the determined costs in the scope of the performance plan?					Yes	
Since its a service provided in both Sweden and Denmark the MET providers includes the costs in each countries cost base.						
Description of the financial arrangements in place to cover these costs						
No invoicing for the service itself since the costs are equal. Only invoiced if one provider has extra costs related to a specific back-up situation.						
Additional comment						
Agreements are in place if more details are needed.						
Cross-border area(s) #2	Finnish FIR, Met-cooperation area	Situated in:		Finland FIR		
Geographical scope of the cross-border area(s)	Finnish FIR					
Rationale for establishing the cross-border area, including performance benefits	Common provision of the Nordic Significant Weather Chart (NSWC) instead of each provider providing the same service to the Airspace users. Cuts the cost for the provision almost in half.					
Size of the cross-border area (km2)	Finnish FIR					
Estimated annual number of flights						
Estimated annual number of SUs, if available						
Description of the services provided by the ANSP in the cross-border area						
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029	
Methodology used to estimate/establish these costs						
Cost-sharing, where both parties have equal costs for the provision. Extra costs are invoiced if one party covers for another.						
Have these costs been excluded from the determined costs in the scope of the performance plan?					Yes	
Since its a service provided in both Sweden and Finland the MET providers includes the costs in each countries cost base.						
Description of the financial arrangements in place to cover these costs						
No invoicing for the service itself since the costs are equal. Only invoiced if one provider has extra costs related to a specific situation.						
Additional comment						
Agreements are in place if more details are needed.						
Cross-border area(s) #3	Kvarken	Situated in:		Finland		
Geographical scope of the cross-border area(s)	Kvarken is situated in the Baltic Sea between Finnish and Swedish territory.					
Rationale for establishing the cross-border area, including performance benefits	A technical solution to be able to provide Armed Forces with flightplans.					
Size of the cross-border area (km2)	2535 km2					
Estimated annual number of flights	12500					
Estimated annual number of SUs, if available	Not available					
Description of the services provided by the ANSP in the cross-border area						
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029	
Methodology used to estimate/establish these costs						
SEK '000. Estimated costs based on work load in the area.						
Have these costs been excluded from the determined costs in the scope of the performance plan?					Select	
Description of the financial arrangements in place to cover these costs						
Financial agreement with Fintraffic						
Additional comment						
Cross-border area(s) #4	Mid sea and Ronne south	Situated in:		Poland		
Geographical scope of the cross-border area(s)	Ronne South and Mid Sea is situated within Poland FIR between Poland and Sweden in Baltic Sea					
Rationale for establishing the cross-border area, including performance benefits	Agreement due to complex traffic situation.					
Size of the cross-border area (km2)	Ronne South - 5999km2 , MidSea 4680 km2					
Estimated annual number of flights	Ronne South approx 100.000 movements per year, MidSea approx 40.000 movements per year					
Estimated annual number of SUs, if available						
Description of the services provided by the ANSP in the cross-border area						
Air traffic service						
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029	
Methodology used to estimate/establish these costs						
Costs in SEK '000. Costs are based on flight hours in the cross border area in relation to total costs in the baltic sectors.						
Have these costs been excluded from the determined costs in the scope of the performance plan?					No	
Description of the financial arrangements in place to cover these costs						
Costs in SEK '000. Costs are based on flight hours in the cross border area in relation to total costs in the baltic sectors.						
Additional comment						

<b>Cross-border area(s) #5</b>	<b>N/A</b>	<b>Situated in:</b>	<b>Denmark</b>		
Geographical scope of the cross-border area(s)	Small area in the Øresund-region				
Rationale for establishing the cross-border area, including performance benefits	Agreement due to complex traffic situation. The rationale is both capacity, safety and ATCO workload. There are delegations both ways.				
Size of the cross-border area (km2)	very small				
Estimated annual number of flights	Appr 50% of flights into CPH				
Estimated annual number of SUs, if available	Not available				
Description of the services provided by the ANSP in the cross-border area					
<b>Air traffic service</b>					
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029
Methodology used to estimate/establish these costs					
Have these costs been excluded from the determined costs in the scope of the performance plan?					Select
Description of the financial arrangements in place to cover these costs					
Additional comment					



<b>Cross-border area(s) #6</b>	<b>N/A</b>	<b>Situated in:</b>	<b>Norway</b>		
Geographical scope of the cross-border area(s)	Small areas on the boarder between Sweden and Norway according to the map				
Rationale for establishing the cross-border area, including performance benefits	The rationale is ATCO workload but also a benefit to pilots meaning that they don't have to change frequency so often (straighten out the boarder). Goes both ways.				
Size of the cross-border area (km2)	Several small areas				
Estimated annual number of flights	Not high traffic area				
Estimated annual number of SUs, if available	Not available				
Description of the services provided by the ANSP in the cross-border area					
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029
Methodology used to estimate/establish these costs					
<b>No additional costs</b>					
Have these costs been excluded from the determined costs in the scope of the performance plan?					No
Description of the financial arrangements in place to cover these costs					
Additional comment					

<b>Cross-border area(s) #7</b>	<b>Rønne SW</b>	<b>Situated in:</b>	<b>Germany</b>		
Geographical scope of the cross-border area(s)	Rønne SW is situated in the Baltic Sea in German territory.				
Rationale for establishing the cross-border area, including performance benefits	The area has been established to enable Malmö ACC to facilitate the operational management of the traffic to/from Malmö (ESMS), Copenhagen (EKCH) and Warsaw (EPWA).				
Size of the cross-border area (km2)	518 km2				
Estimated annual number of flights	35800				
Estimated annual number of SUs, if available					
Description of the services provided by the ANSP in the cross-border area					
<b>Air traffic service</b>					
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029
Methodology used to estimate/establish these costs					
No additional costs					
Have these costs been excluded from the determined costs in the scope of the performance plan?					Select
Description of the financial arrangements in place to cover these costs					
Additional comment					

<b>Cross-border area(s) #8</b>		<b>Situated in:</b>			
Geographical scope of the cross-border area(s)					
Rationale for establishing the cross-border area, including performance benefits					
Size of the cross-border area (km2)					
Estimated annual number of flights					
Estimated annual number of SUs, if available					
Description of the services provided by the ANSP in the cross-border area					
Annual cost incurred by the ANSP for the provision of services in the cross-border area	2025	2026	2027	2028	2029
Methodology used to estimate/establish these costs					
Have these costs been excluded from the determined costs in the scope of the performance plan?					Select
Description of the financial arrangements in place to cover these costs					
Additional comment					

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

Number of cross-border initiatives	0
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#### 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  
 Sweden has a long history of cross border initiatives and early FRA establishment and have the ability to have open borders towards all neighbouring

HIR and FRA areas to enable most efficient flights. This is somehow limited by technical limitations but LFV is constantly reviewing to achieve even more than we already have in place with FRA and "open" borders. LFV is also sharing SUR infrastructure with several neighbouring ANSP that gives large benefits from a redundancy and availability point for traffic in border areas. Common procurement is so far only done in the COOPANS cooperation where ATM system is bought jointly. This is although not done on a FAB level, but the ability in the system is supporting all FAB and cross border initiatives.

#### 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	2024-12-31	2024-12-31	By extending the AMAN horizon from the airspace close to the airport to further upstream the controller receive system	B13 "Investments Topsy"	1 828 834	1 504 800	1 003 200	1 003 200	1 003 200
CP1-s-AF1.2 AMAN/DMAN Integration	2027-12-31	According to Swedavia plans	Swedavia investment	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-AF2 - Airport Integration and Throughput									
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	2022-12-31	According to Swedavia plans	Swedavia investment	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-s-AF2.2.1 Initial airport operations plan (IAOP)	2023-12-31	According to Swedavia plans	Swedavia investment	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-s-AF2.2.2 Airport operations plan (AOP)	2027-12-31	According to Swedavia plans	Swedavia investment	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-s-AF2.3 Airport safety nets	2025-12-31	According to Swedavia plans	Swedavia investment	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-AF3 - Flexible Airspace Management and Free Route Airspace									
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	2022-12-31	Implemented		Not applicable					
CP1-s-AF3.2 Free route airspace	2025-12-31	Implemented		Not applicable					
CP1-AF4 - Network Collaborative Management									
CP1-s-AF4.1 Enhanced short-term ATFCM measures	2022-12-31	Implemented		Not applicable					
CP1-s-AF4.2 Collaborative NOP	2023-12-31	mid 2025	Implement initial AOP/NOP Information Sharing to provide a rolling picture of the network and airport situation used by stakeholders to prepare and update their plans and inputs to the network CDM processes, with a focus on the availability of shared operational planning and real-time data	Swedavia investment. LFV Follows Swedavia plans and provide competence in the area. Not valid for RP4					
CP1-s-AF4.3 Automated support for traffic complexity assessment	2022-12-31	Implemented	LFV has choosen to use NM Tools free of charge	Not applicable					
CP1-s-AF4.4 AOP/NOP integration	2027-12-31	2027-12-31	Coordinate the data that need to be exchanged between AOPs and NOP with Airport's community and the	Major investment A3 "SWIM/CP1"	80 256	110 352	110 352	321 024	321 024
CP1-AF5 - SWIM									
CP1-s-AF5.1 Common infrastructure components	2024-12-31	2024-12-31	Implementation of a trust framework that includes a catalogue/portfolio of services and products	Major investment A3 "SWIM/CP1"	40 128	55 176	55 176	160 512	160 512
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	2025-12-31	2025-12-31	Implement public key infrastructure management in line with LFV Security Management System approved by National Supervisory Authority (NSA). Due to civil/military integration LFV will be an Certificate Authority by themselves	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)"	130 416	245 784	361 152	991 914	542 982
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	2025-12-31	2029-12-31 Enhanced services	SMHI Invetsetments N/A	N/A	600 000	700 000	800 000	600 000	200 000
CP1-s-AF5.3 Aeronautical information exchange	2025-12-31	Partly 2025-12-31 & fully compliant 2029	Implement functionality that enables LFV to support the Aeronautical Information Exchange as a service provider and/or service consumer	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)"	862 752	1 452 132	1 913 604	5 332 008	3 536 280
CP1-s-AF5.4 Meteorological information exchange	2025-12-31	Partly 2025-12-31 & fully compliant 2029	Implement functionality that enables LFV to to consume operational MET information in IWXXM format for visualition in LFV ATM-systems	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)"	621 984	988 152	1 218 888	3 428 436	2 530 572
CP1-s-AF5.4 Meteorological information exchange	2025-12-31	46022	Swedavia Common Proposal - 5.4.1 Meteorological Information Exchange	2023-541_AF5	1 245 000	363 000	0	0	0
CP1-s-AF5.4 Meteorological information exchange	2025-12-31	2029-12-31 Enhanced services	SMHI Investments N/A	N/A	2 500 000	3 000 000	3 000 000	2 500 000	800 000
CP1-s-AF5.5 Cooperative network information exchange	2025-12-31	2024-12-31	Implement functionality to exchange Cooperative Network Information between LFV Systems and the Network Manager by means of cooperative network information SWIM services for Air Traffic Flow and Capacity Management (ATFCM) purposes	Major investment A3 "SWIM/CP1"	80 256	110 352	110 352	321 024	321 024



CP1-s-AF5.6 Flight information exchange (yellow profile)	2025-12-31	Partly 2025-12-31 & fully compliant 2029	Implement the capability to effectively share information on individual flights and perform collaborative decision-making processes among all actors concerned with the operation of a flight	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)" & B5 "Other investments in APP"	953 040	2 645 940	4 225 980	8 169 810	5 925 150
<b>CP1-AF6 - Initial Trajectory Information Sharing</b>									
CP1-s-AF6.1 Initial air-ground trajectory information sharing	2027-12-31	Beginning of 2029	Implement an datalink for receiving, processing and displaying ADS-C/EPP data to provide warnings to the ATCO in case of discrepancies between the downlinked trajectory and the ground system trajectory are defined	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)"	561 792	1 038 312	1 499 784	4 128 168	2 332 440
CP1-s-AF6.2 Network Manager trajectory information enhancement	2027-12-31	not applicable	Network Manager responsibility	not applicable					
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	2027-12-31	Beginning of 2029	Implement Ground distribution architecture to meet the required performance levels as defined in the applicable standards	Major investment A3 "SWIM/CP1" & A1 "COOPANS ATC ONE (modernising Topsy)"	481 536	927 960	1 389 432	3 807 144	2 011 416
Total RP4 determined costs for common project related to the sub-functionalities across charging zones for the concerned entity					9 985 994	13141960	15687920	30763240	19684600

### 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

The Swedish Transport Agency has published national regulation for airspace change and design, TSFS 2018:98. This lays down the procedure for airspace change and also offers guidance on some aspects of the change. There is also internal agency processes for airspace changes (TSG 2020-1600 with associated processes) which dictate how the process should be conducted.

For ATM system changes and improvements these are assessed in accordance with the standard change process. The safety assessment conducted by the ANSP is provided to the authority who will decide on actions based on internal procedures (TSG 2016-3268). For a major change a review would most likely take place which means the authority would verify that the change process has been followed correctly and that regulatory requirements have been fulfilled. Normally this takes place via both document review and on-site audit (for very large changes several visits may take place). TSG 2022-1600 follows 373 and applies to all ATC providers (LFV, ACR, SDATS and AFAB)

#### **Report on this segment from the main ANSP LFV :**

New and expanded regulations mean both increased workload and increased costs, not only for areas in the performance plan, but it also has an impact on other parts of the business within LFV. A continuous increase in these mandatory regulations and both the practical implementation and the administrative burden of audits, among other things, is a general change that affects the entire organization.

#### **LFV project SWEA:**

In LFV the number and speed of changes has increased. The initiatives lead to changed demands and ways to work for the employees. LFV works with different ways to handle these changes in order to strengthen the ability for LFV to handle all the coming changes. The major initiative within airspace changes is Swea that is described below.

SWEA will implement changes in one stage as an independent investment project with the aim of modernising the routes to and from the Stockholm region to meet internal as well as external (customer and stakeholder) requirements for: maintained or higher flight safety, reduced costs, reduced environmental impact, increased predictability, increased flexibility and increased availability of general aviation without affecting civil commercial IFR traffic.

Aviation safety provides a framework in which any change in the project must comply with the rules applicable to airspace changes. Most of the identified and planned changes will have a favourable impact on aviation safety compared to the existing system.

A number of conflict points in the airspace will be removed. Adapting the structure with uneven undersides in Stockholm TMA can help reduce the risk of "Airspace Infringement". Methods for handling air traffic are changing, reducing the risk of congestion in the sectors. Clearer departure and arrival flows to Stockholm Arlanda contribute to fewer intersections between traffic during climb and descent, which leads to a reduced need for monitoring.

The project thus creates the conditions for scalability and gives LFV better conditions to meet any higher growth than the forecast given by LFV for traffic development until 2029. Furthermore, the PCP Regul+B5ation (EU 716/2014) imposes requirements for development and implementation PBN-based, fuel-efficient and environmentally friendly SID, STAR and approach procedures by 1 January 2024 at Stockholm Arlanda Airport.

Implementation of the Swea project will be carried out in one phase in the end of 2026. The implementation will provide streamlining for LFV from 2027 onwards. LFV Operations Management System is to be followed throughout the project together with LFV's project management process. The project will have an impact on the functional system and a change notification shall be sent to the Swedish Transport Agency early in the project. The flight safety work will be planned together with the project's aviation safety resource and documented as an annex to the project plan. The project work will be carried out as appropriate according to the LFV change management process and the flight safety assessment process. In particular, the project will take into account the LFV change management process (regarding the responsibility that falls to LFV in the event of a so-called "multiactor change").

The project will continuously engage in dialogue with the Swedish Armed Forces' various areas of activity in order to fully take their needs into account. The aim is to create a less vulnerable system through increased conditions for military and civilian air traffic to operate independently of each other. LFV will to a large extent need to cooperate with Swedavia, which has the advice over, for example, SID and STAR and the airspace adjacent to the company's airports. The division of responsibilities between these two parties will be taken care of in a specific agreement.

In autumn 2020, LFV conducted a feasibility study Modernized Infrastructure. The results of this feasibility study will be coordinated with Swea.

The steering group is manned with decision-makers to create a good foundation in the organization. The connection to the ATCC centres is important as well as to Operations ATS. This is taken care of by retrieving resources from the whole organisation. An internal advisory reference group is manned with key roles from the line organization.

External communication will be important for implementation, as the project will create new conditions for airspace users and for airports. Documented communication is also a necessary component of the approval process at the Swedish Civil Aviation Authority. An ongoing dialogue with relevant departments within the NSA as well as with Swedavia is necessary to facilitate approval processes and publication.

The project will also mean that in some cases, the air traffic controller will face major changes in the way air traffic are handled and it is therefore important that the Human Factors perspective play a central early role in the planning of future training efforts. As a result, a HR competence has been connected to the project group for the communication plan.

#### **LFV project ATC One:**

LFV will commission ATC One early 2029 and already now the dialogue is started with NM COOPANS jointly in order to plan and execute commissioning with as small impact as possible on the overall European Network. It is anticipated that there will be some kind of restrictions in connection to commissioning but LFV will together with COOPANS, NM and our supplier do the utmost to minimize it as far as possible.

## SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

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### 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

Sweden			Traffic risk-sharing parameters adapted?		yes	
	Dead band	Risk sharing band	Service units lower than plan		Service units higher than plan	
			% 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%
Adapted parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%
Justification of the defined values of the adapted parameters in accordance with Art. 27(5)			The parameters are the same as previous RPs. They are from the point of view of the NSA not necessary to change. Although ANSPs should adopt to changes in traffic the flexibility of the cost bases are limited. The proposed traffic risk sharing parameters was used when setting caps for return on equity parameters.			

### 5.1.2 Traffic risk sharing - Terminal charging zones

Sweden - TCZ			Traffic risk-sharing parameters adapted?		yes	
	Dead band	Risk sharing band	Service units lower than plan		Service units higher than plan	
			% 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%
Adapted parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%
Justification of the defined values of the adapted parameters in accordance with Art. 27(5)			The parameters are the same as previous RPs. They are from the point of view of the NSA not necessary to change. Although ANSPs should adopt to changes in traffic the flexibility of the cost bases are limited. The proposed traffic risk sharing parameters was used when setting caps for return on equity parameters.			

## 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 $\Delta$	fraction of min	$\pm 0,015$ min
Max bonus ( $\leq 2\%$ )	% of DC	1,00%
Max penalty ( $\geq$ Max bonus)	% of DC	2,00%

#### b) Pivot values - En route

Basis for the annual setting of pivot values	Modulated
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#### 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	A) Unforeseen changes in traffic
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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 <b>equal</b> to the yearly update of reference values provided by the Network Manager in the NOP	Yes
2) the pivot value for year N is <b>informed</b> by the yearly update early update of reference values by the Network Manager in the NOP	No
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

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## 5.2.2 - Capacity incentive scheme - Terminal

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

Terminal	Expressed in	Value
Dead band $\Delta$	fraction of min	0,015
Max bonus ( $\leq 2\%$ )	% of DC	1,00%
Max penalty ( $\geq$ Max bonus)	% of DC	2,00%

### b) Pivot values - Terminal

Basis for the annual setting of pivot values	Modulated
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### 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
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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	Click to select
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
Under the last 10 years weather has incurred the delays and has caused almost 90% of the delays. The pivot value will be set to 10 % of the capacity target. The pivot value is low, which will cause a short range between the deadband and alert threshold. Sweden has contemplated and can not motivate another, alternative, range as serving the purpose of incentivising providers more efficiently.

#### 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

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### 5.3 - Optional incentives

Total maximum bonus for all optional incentives (≤2%):	0,0%
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Total maximum penalty for optional incentives (≤4%):	0,0%
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Number of optional incentives	0
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## SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

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[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 Pls defined in Annex I of the Regulation and a description of the data sources

#### Implementation

The NSA has set up a reference group to work with the planning of RP4, discuss different aspects and to reach out with information during the process. The group have consisted of main providers, users and user organisations.

NSA have taken assistance by consultants in the determination of ROE.

NSA has incorporated the result of the EU Commissions studies and manuals into the audit process. Except for colleagues at the section for market oversight/performance, also ANS- and legal expertise have participated and assisted in the auditing.

After consultations, the implementation will continue with SE NSA written decisions on each providers determined costs and other targets where applicable. These decisions can be appealed.

Monitoring and oversight is performed at different occasions. Safety oversight follows by the yearly monitoring process, April to June, for level of effectiveness of safety management, aswell as the oversight according to 373 follows that regulations requirements. The other targets follows of course the yearly monitoring process, i.e. April to June, including auditing of actual performance. To that, the SE NSA arrange market consultations twice a year - May and October. In addition to that, targets are monitored on a regular basis from the SE NSA and certain areas subject to special investigations when it comes to different projects.

Sources of data ANSperformance.eu, NMIR, NOP Portal, Providers financial accounts.

### 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

SE NSA has a project group for the Performance plan with expertise covering the perspectives.

During the reference period performance is monitored, especially during the yearly monitoring report process. Where performance is not met the provider responsible is obliged to write a formal explanation to the NSA. If reported with satisfaction the NSA will use this for the monitoring report to make public.

If capacity targets for delay is not met, and outside the deadband, the penalty mechanism in the incentive scheme will trigger.

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