

# Performance Plan

# Denmark

Third Reference Period (2020-2024)

Status: Draft performance plan containing revised RP3 targets (Art. 3 of IR 2020/1627 & Art. 12 of IR

Date of issue: 16 November 2021

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

## Signatories

Performance plan details	
State name	Denmark
Status of the Performance Plan	Draft performance plan containing revised RP3 targets (Art. 3 of IR 2020/1627 & Art. 12 of IR 2019/317)
Date of issue	16 November 2021
Date of adoption of Draft Performance Plan	16 November 2021
Date of adoption of Final Performance Plan	

We hereby confirm that the present performance plan is consistent with the scope of 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	
Kåre Clemmesen  Deputy Director General Danish Civil Aviation and Railway Authority	

Additional comments	
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Document change record		
Version	Date	Reason for change
2	16-nov-21	Updated following the October 2021 STATFOR forecast and completeness check

## SECTION 1: INTRODUCTION

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**Performance plan status**

**ACCs**

	<b>Index</b>
Select performance plan status	1
Draft performance plan (Art. 12 of IR 2019/317)	2
Updated draft performance plan (Art. 13(2) of IR 2019/317)	3
Revised draft performance plan (Art. 14(3) of IR 2019/317)	4
Draft performance plan containing revised RP3 targets (Art. 15(1) of IR 2019/317)	5
Updated draft performance plan containing revised RP3 targets (Art. 15(2) of IR 2019/317)	6
Revised draft after detailed examination (Art. 15(3) of IR 2019/317)	7
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Performance plan revised during the reference period (Art. 17 of IR 2019/317)	10
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## 1 - INTRODUCTION

### 1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Trafikstyrelsen (Danish Civil Aviation and Railway Authority)
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#### 1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	2
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#	ANSP name	Services	Geographical scope
1	NAVIAIR	ATM/ANS	Copenhagen FIR and CPH TNC
2	DMI	MET services	Copenhagen FIR and CPH TNC

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

Number CB arrangements where ANSPs provide services in an other State	1
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ANSPs providing services in the FIR of another State	
ANSP Name	Description and scope of the cross-border arrangement
1 Naviair	Naviair is providing Air Traffic Services (ATS) in other national Flight Information Regions (FIR's) according to article 10.3 in the Service Provision Regulation, state to state delegation or other forms of assignments. Naviair is providing ATS in parts of the German, British (UK), Dutch and Swedish airspace.

Number CB arrangements where ANSPs from another State provide services in the State	1
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ANSPs established in another Member State providing services in one or more of the State's FIRs	
ANSP Name	Description and scope of the cross-border arrangement
1 LFV/DFS	With reference to above LFV and DFS are providing ATS in parts of the Danish airspace.

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

Number of other entities	1
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Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
Trafikstyrelsen (Danish Civil Aviation and Railway Authority)	NSA	Separate cost base

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

<b>En-route</b>	Number of en-route charging zones	1
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En-route charging zone 1	Denmark
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<b>Terminal</b>	Number of terminal charging zones	1
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Terminal charging zone 1	Denmark - TCZ
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#### 1.1.4 - Other general information relevant to the plan

It is important to note, that the shift to charging based on Actual Flown Route has severe impact on the numbers of en route service units in Copenhagen FIR, which in average is reduced by 5,7 pct. according to the forecast by Eurocontrol. This reduction has been taken into account in calculating the DUC for En route for the years 2019-24 in order to set the local performance targets for cost efficiency for RP3, but it will have an impact on the assessment of the level of the Danish en route DUC for RP3 vis-a-vis the level of the DUC's of the other states e.g. in the comparator group. Most notably it will have a significant impact on the charged user rates.

Relevant local circumstances with high significance for performance target setting and updated view on the impact of the COVID-19 crisis on the operational and financial situation of ANSPs covered in the performance plan

Like Other ANSPs Naviair was hit hard by the sharp drop in traffic as a result of the worldwide CO-VID-19 pandemic. For Naviair, this meant a decrease in revenues in 2020 of DKK 489 million and severe pressure on liquidity. The total liquidity drawdown in 2020 was DKK 374 million. At the beginning of 2020, Naviair had a total portfolio of cash and bonds of DKK 209.4 million. Due to the strong pull on our liquidity, all bonds have been sold, and the total portfolio at the end of 2020 was DKK 10.4 million in cash. In addition, Naviair have utilized part of the loan facility of DKK 500 million. DKK, of which 175 million had been deducted at the end of 2020. kr.

The state has granted a standing 10-year loan to Naviair of DKK 500 million. In addition, the existing loan facility of DKK 500 million. has been extended by 12 months so that it is valid until May 2022.

The two loans ensure that Naviair has sufficient liquidity in 2021, as projections show that by the end of 2021 Naviair is expected to need to draw on loan facilities in the order of DKK 600 million. With the existing loan facilities totaling DKK 1 billion. Naviair thus has a further approx. 400 million DKK available in relation to the expected liquidity drawdown at the end of 2021.

To ensure the recovery of Naviair's finances, in June 2020 an adjustment plan with the aim of significantly reducing annual costs was launched. The savings will be found through reductions in both Naviair's investments, salary costs and other costs. The adjustment plan is designed for step-by-step implementation, so that it can be continuously adjusted in relation to the development of the COVID-19 crisis and the consequences that the crisis is also expected to have for Naviair in the future. A significant part of the adaptation plan was implemented in the autumn of 2020.

Additional comments



## 1.2 - Traffic Forecasts

### 1.2.1 - En route

#### En route Charging zone 1

Denmark

#### En route traffic forecast

Local forecast

Local Forecast	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR
									2019-2024
IFR movements (thousands)	647	670	669	275	281	553	621	663	-0,2%
IFR movements (yearly variation in %)		3,6%	-0,1%	-59,0%					
En route service units (thousands)	1.666	1.709	1.781	717	767	1.455	1.661	1.784	0,0%
En route service units (yearly variation in %)		2,6%	4,2%	-59,7%					

Specific local factors justifying not using the STATFOR base forecasts  
(provide justification below or refer to Annex D for more detailed explanation)

The plan has been updated with the STATFOR October 2021 forecast. (Base)

*NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives and ANSPs concerned on the rationale for not using the STATFOR base forecasts.*

### 1.2.2 - Terminal

#### Terminal Charging zone 1

Denmark - TCZ

#### Terminal traffic forecast

Local forecast

Local Forecast	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR
									2019-2024
IFR movements (thousands)	129,5	133,0	131,6	49,1	51	111	122	130	-0,3%
IFR movements (yearly variation in %)		2,7%	-1,0%	-62,7%					
Terminal service units (thousands)	165,0	171,6	171,7	63,5	69,8	142,6	159,5	170,8	-0,1%
Terminal service units (yearly variation in %)		4,0%	0,1%	-63,0%					

Specific local factors justifying not using the STATFOR base forecasts  
(provide justification below or refer to Annex D for more detailed explanation)

The plan has been updated with the STATFOR October 2021 forecast. (Base)

*NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives and ANSPs concerned on the rationale for not using the STATFOR base forecasts.*

### 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>The discussion have mainly been focused on cost efficiency and investments. Users acknowledged that Naviair will meet the union wide targets for total costs in all years of the reference period but also stated that it must be a minimum requirement also to meet the targets for determined unit costs. Questions were also raised concerning Naviairs cost of capital which is perceived as too high in the current environment. Users also lacked CBAs and quantitative justification for Naviairs planned investments, especially the planned investment in a new ATM back-up system.</p> <p>Users questioned the link between the planned FTE development and costs, the FTE mix and the development in pension costs. Further information was requested and provided on these points.</p> <p>Regarding the safety, capacity and environment targets only minor issues were raised.</p> <p>On the 5 November 2021 the plan to update the draft performance plan with the STATFOR October 2021 forecast and to adjust the costbase slightly was sent in written consultation among stakeholders.</p> <p>Airspace users agreed that the draft performance plan using the STATFOR October 2021 baseline traffic forecast.</p> <p>However, the users cannot accept the limited increase in cost planned in the updated draft performance plan as a response to the significant higher traffic forecast. It is the view of the airlines that the costbase in the draft performance plan submitted on the 1 October 2021 is sufficient to cover a higher traffic level.</p> <p>After reviewing the comments received it is still the position of the Danish NSA that it is justified that Naviairs costbase is slightly increased compared to the October draft performance plan. As mentioned in the distributed note from Naviair costs and operational capacity have been closely scaled to the traffic foreseen in the May 2021 forecast which makes it difficult for Naviair to handle the significantly higher traffic as foreseen in the October forecast without the risk of consequences.</p> <p>Reference is kindly made to Annex C which contains the final minutes from the consultation, questions received after the consultation and a follow-up note with answers and clarifications. Annex C also contains the document used for the written consultation on the update of the draft performance plan following the STATFOR October 2021 forecast.</p>

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

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	
Charging policy	Yes	Carry-overs resulting from the exceptional measures (2020/1627) will be spread over 7 years from 2023. No other changes in charging policy.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	In general users prefer asymmetrical maximum advantages and disadvantages. In the Danish incentive scheme max. bonus is 0,4% and max penalty 0,5%.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	No	
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Presented and discussed. Due to the low level of delays, delays will have to come close to zero in order to release a bonus.
Establishment or modification of charging zones	No	
Establishment of determined costs included in the cost base for charges	Yes	Further information and clarifications provided on FTEs, pension costs and investments were requested and
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	
Where applicable, decision to apply the simplified charging scheme	No	
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Users lacked CBAs for Naviairs investments and especially questioned the need for a back-up ATM system. Further information and justification has been provided.

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

#1 - ANSPs	
Stakeholder group composition	Naviair, DMI

Dates of main meetings / correspondence	An overall on-line consultation with all stakeholders took place on 17 August 2021. The Danish Civil Aviation and Railway Authority had before that been in close contact with Naviair and DMI in order to prepare the consultation material including draft performance plan, reporting tables and additional information. Moreover, The NSA, Naviair and DMI were equally in close contact after the consultation meeting in order to provide answers and clarifications requested.
Main issues discussed	All aspects of the performance plan, as the service providers are responsible for delivery at the agreed costs. As a result of this, these issues have been discussed on a current basis during the entire RP3 prepararion period.
Actions agreed upon	None
Points of disagreement and reasons	None
Final outcome of the consultation	The consultation with the ANSPs did not necessitate any change to the draft plan.

Additional comments

<b>#2 - Airspace Users</b>	
Stakeholder group composition	IATA, KLM, Lufthansa, SAS
Dates of main meetings / correspondence	The on-line consultation was held on the 17 August 2021.
Main issues discussed	<p>The discussion have mainly been focused on cost efficiency and investments. Users acknowledged that Naviair will meet the union wide targets for total costs in all years of the reference period, but also stated that it must be a minimum requirement also to meet the targets for determined unit costs. Questions were also raised concerning Naviairs cost of capital which is percieved as too high in the current enviroment.</p> <p>Users also lacked CBAs and quantitative justification for Naviairs planned investments, especially the planned investment in a new ATM back-up system.</p> <p>Users questioned the link between the planned FTE development and costs, the FTE mix and the development in pension costs. Futher information was requested on these points.</p> <p>Regarding the safety, capacity and enviroment targets only minor issues were raised.</p> <p>During the consultation Naviair mentioned that the CAPEX total value has been validated and that some investments under "other-new" have been relocated to COOPANS 3.x.</p>
Actions agreed upon	<p>Further information on FTE numbers, costs and development were to be provided as well as further information on the development in pensions costs. During the consultation it was recommended that Denmark follow the German model, where the under recovery from 2020 and -21 is distributed over af 7-year period and scaled according to the expected traffic development. Danish NSA agreed to examine this proposal further.</p> <p>It was also agreed that further information on the calculation of DMIs cost of capital should be provided.</p> <p>After the consultation meeting further justification for the investment in a new back-up ATM system as well as information on Naviairs sector opening scheme was requested by one user.</p>
Points of disagreement and reasons	In the view of the airspace user it is a minimun requirement that states meet the union wide target for determined unit costs. Denmark is very close to the targets but does not meet them 100%. It is Denmarks position that this is justified by the expected below average traffic development in Danish airspace.

Final outcome of the consultation	<p>Further information on Naviairs staff composition including a break-down of FTEs per category has been provided.</p> <p>Further information was provided and clarifications have been made in the section on Pensions (3.4.3) in the draft performance plan.</p> <p>Further information and justification for the investment in the back-up ATM-system and information on Naviairs sector opening scheme have been provided to users.</p> <p>An explanation of the calculation of DMIs cost of capital was provided.</p> <p>In addition the total CAPEX value has been validated (investments made prior to 2020). During the validation some COOPANS-CAPEX were flagged as "other new" and have been re-located accordingly under COOPANS 3.x. This also goes for the re-location of depreciations. The total sum of depreciations is not changed. Furthermore, the validation shows that some CAPEX were mislabeled in the CAPEX-data but not in the depreciation-data – there are two different lists. This CAPEX has been removed from the reporting and explains the reduction from previous reporting. In the Draft Performance Plan the tables in sheet (2.1 Investments_ANSP#1) have been updated accordingly.</p> <p>A kind reference is made to Annex C where these points are further elaborated.</p> <p>No other changes have been made to the draft performance plan.</p>
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Additional comments

<b>#3 - Professional staff representative bodies</b>	
Stakeholder group composition	IFATCA, DATCA
Dates of main meetings / correspondence	The on-line consultation was held on the 17 August 2021.
Main issues discussed	The professional staff representatives did not make any comments during the consultation.
Actions agreed upon	None
Points of disagreement and reasons	None
Final outcome of the consultation	None

Additional comments

<b>#4 - Airport operators</b>	
Stakeholder group composition	Billund Airport
Dates of main meetings / correspondence	The on-line consultation was held on the 17 August 2021.
Main issues discussed	The airport operators did not make any comments during the consultation.
Actions agreed upon	None
Points of disagreement and reasons	None
Final outcome of the consultation	None

Additional comments

<b>#5 - Airport coordinator</b>	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	

Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#6 - Other (specify)	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

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

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

ICAO code	Airport name	Charging Zone	IFR air transport movements			
			2016	2017	2018	Average
1 EKCH	Copenhagen/Kastrup	Denmark - TCZ	265.768	259.310	266.207	263.762

##### 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

### 1.5 - Services under market conditions

Number of services under market conditions	0
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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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## SECTION 2: INVESTMENTS

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### 2.2 - Investments - NAVIAIR

- 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 - DMI

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

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

ANNEX E. INVESTMENTS

NOTE: The requirements as per Annex II, 2.2.(c) are addressed in item 4.1.2

## 2.2 - Investments - NAVIAIR

### 2.1.1 - Summary of investments

Number of new major investments	2
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#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	COOPANS build 3.x extension	32.611.732	15.348.596	12.811.513	13.828.630	15.817.011	19.742.209	23.478.548	15	95%	5%	01-07-2024
2	Back-up ATM	5.185.307	5.185.307	0	0	0	0	2.764.795	15	95%	5%	01-01-2024
Sub-total of <b>new major investments</b> above (1)		37.797.039	20.533.903	12.811.513	13.828.630	15.817.011	19.742.209	26.243.344				
Sub-total <b>other new investments</b> (2)		35.104.240	29.060.663	4.483.926	13.794.644	19.702.331	25.716.004	27.016.899		75%	25%	
Sub-total <b>existing investments</b> (3)				141.996.471	126.586.633	114.829.696	106.687.001	98.700.326		86%	14%	
<b>Total new and existing investments</b> (1) + (2) + (3)		72.901.278	49.594.566	159.291.909	154.209.907	150.349.038	152.145.214	151.960.568				

\* The total % enroute+terminal should be equal to 100%.

### 2.1.2 - Detail of new major investments

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



<b>Name of new major investment 1</b>	<b>COOPANS build 3.x extension</b>						Total value of the asset	<b>32.611.732 €</b>
Description of the asset	COOPANS TopSky is the ATM system operated in Copenhagen ATCC with connected ATS units.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Partly as indicated below and via the INEA2017 call "2017_066_AF5 Implementing harmonised SWIM (Y) solution in COOPANS ANSPs and general PCP compliance"						
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
	Extended AMAN	Time Based Separation even though not mandated anymore	Cross border Free Route Airspace		SWIM		ED-254 SWIM services	

Benefits for airspace users and results of the consultation of airspace users' representatives	<p>COOPANS ATM system is the main ATC production system and is upgraded once or twice per year, depending on the need from primarily safety- or regulatory demands. Naviair do upgrade the COOPANS ATM systems software, synchronized with the rest of the COOPANS Members (LFV, IAA, CCL, ACG and Nav Portugal), in order to benefit from economical of scale. An up to date COOPANS ATM System is a prerequisite for Naviair to deliver a safe ATC service and to in different traffic situation, meet the capacity demands.</p> <p>At the consultation it was questioned by users whether COOPANS investments also benefitted airports not included in the performance scheme and how come the COOPANS investments are depreciated from 2020 when the planned date of entry into operation is July 2024. Naviair explained that the COOPANS investment only covers En route and TNC and that depreciations are starting in 2020 because the investments in different COOPANS builds under 3.x has already been launched prior to the RP3 period.</p>	
Joint investment / partnership	Yes	Investment done together with the COOPANS partners: LFV (Sweden), CCL (Croatia), ACG (Austria), IAA (Ireland), Nav-Portugal
Investment in ATM systems	Yes	Upgrade of ATM system
If investment in ATM system, type?	Replacement investment	Part of the continuous investment in the ATM system to meat needs for capacity, security, compliance, safety and fulfilment of the ATM masterplan and PCP/CP1 topics
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	Difficult to select, as both drivers are addresses in integrated solutions



<b>Name of new major investment 2</b>	<b>Back-up ATM</b>	Total value of the asset	<b>5.185.307 €</b>
Description of the asset	<p>The backup ATM system is intended for use when the main ATM system (COOPANS) is Out of Service - either planned or unplanned. The primary reason for investing in a backup ATM system is flight safety: In case Naviairs main ATM system (COOPANS) experiences a catastrophic system failure, the aircraft already under Naviairs control can be handled in a safe manner. Another important consideration is overall reliability/capacity as the secondary reason is for Naviair to be able to provide continued safe and reliable air navigation services while the main ATM system is under upgrade/test. In order to achieve these objectives, the backup ATM system needs to support new functional requirements like e.g. Mode S, ADS-B etc.</p>		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network	Capacity	
	Local	Safety, Security and Capacity.	
	Non-performance	None.	
Quantitative impact per KPA	Safety	It's a principle desicion to have a backup-system in case of the major ATM-system breaks down. The quantitative effects have not	
	Environment	It's a principle desicion to have a backup-system in case of the major ATM-system breaks down. The quantitative effects have not	
	Capacity	It's a principle desicion to have a backup-system in case of the major ATM-system breaks down. The quantitative effects have not	
	Cost Efficiency	It's a principle desicion to have a backup-system in case of the major ATM-system breaks down. The quantitative effects have not	
Results of the consultation of airspace users' representatives	<p>The ATM Backup system is an important brick in the ATM System Architecture. It enables Naviair to be able to update the COOPANS ATM system software every year and also to be able to update the dataset every month (AIRAC). Furthermore, the Backup ATM system is the ultimate contingency platform in the unlikely event that the COOPANS ATM system would have a critical failure.</p> <p>After the consultation meeting Lufthansa has asked the Danish NSA to review whether it is deemed necessary for Naviair to invest in a new back-up ATM system. Lufthansa did refer to, that other COOPANS partners during their consultations have indicated that there is no need for a back-up system as the COOPANS system offers enough redundancy. The Danish NSA has reassessed this investment and it is the position of the NSA, that the investment in a new back-up ATM system is necessary to ensure that the Danish airspace always remains open as the current ATM back-up system is approaching end of life. It is also the impression that other COOPANS partners also uses back-up systems.</p>		
Joint investment / partnership	No	No joint investment nor partnership is foreseen for this investment at this time.	

Investment in ATM systems	Yes	New Backup ATM system for ACC, APP and CPH TWR
If investment in ATM system, type?	Replacement	Existing backup ATM system is a Clear the Sky system only and the system is End of Life.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	Key Performance Areas: Safety and Security

### 2.1.3 - Other new and existing investments

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

In general Naviairs investments are aimed at ensuring the continuous delivery by Naviair of high quality (zero delay; zero safety incidents & environmental impact) air navigation services to all air space users in Copenhagen Flight Information Region including delegated airspaces.

For ATM the main investments are related to the continued development of the COOPANS system and to replace Naviairs present backup ATM system as it is End of Life.

For CNS the main investments are related to a renovation and improvement of Naviairs surveillance infrastructure to support ADS-B and Mode S/DAP functionality as well as the Borealis/NEFAB Free Route Airspace concept. In addition Naviair has renovated and improved Naviair's voice and data communication infrastructure in order to support 8,33 kHz channel separation as well as Voice over Internet Protocol (VoIP) communications the latter being an enabler for a potential future Dynamic sectorisation Accross FIR Boundaries concept.

Furthermore Naviairs aim is to initiate the replacement of the ground based Naviagation DME infrastructure supporting PBN, as well as initiate the replacement of a minimised VOR infrastructure.

Finally, Naviair is continuously maintaining Naviair's building and other infrastructure in order to secure an efficient and reliable operational working environment.

It should be noted, that all amounts in table 2.1.1 are in DKK, whereas the amounts in cells L69 and L86 in section 2.1.2 are in euros.

#### 2.1.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	10
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#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	VoIP BRS incl. BU-WAN extension	15.600.000	13.550.000	0	0	1.492.602	1.975.062	1.978.631	New VoIP Backup Radio System (End of Life, PCP)
2	Radar Esbjerg	26.453.122	10.400.000	180.766	1.509.098	1.359.699	1.349.400	1.351.839	New Mode S radar (End of Life + Borealis FRA)
3	Radar Roskilde	34.117.960	0	2.994.784	2.812.503	2.534.068	2.514.874	2.519.419	New combined Mode S and primary radar (End of Life)
4	VOR replacements (phase 1)	33.900.000	13.300.000	0	0	0	0	0	Replacement of 2 C-VOR's (End of Life) with D-VOR
5	DME replacements (phase 1)	20.900.000	6.300.000	0	146.967	264.835	262.829	263.304	1-to-1 replacement of 4 DME's (End of Life)
6	NAIS	11.400.000	11.400.000	0	0	690.100	913.164	914.814	Replacement of Info05 system (End of Life)
7	TWR window replacement	15.200.000	15.200.000	0	0	0	245.153	982.383	1-1 replacement in CPH TWR cap (End of Life)
8	TWR facade renovation	7.100.000	7.100.000	0	193.276	174.142	766.066	767.450	New coating to prevent corrosion (Life Extension)
9	Physical security	6.400.000	6.400.000	0	0	0	634.172	764.975	Increase physical security level in Naviair HQ and CPH
10	DME Keep Alive	2.750.000	2.750.000	0	0	0	0	0	Replacement of KAS & BEL DME's (short term Life)

## 2.2 - Investments - DMI

### 2.2.1 - Summary of investments

Number of new major investments

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
Sub-total of <b>new major investments</b> above (1)		0	0	0	0	0	0	0				
Sub-total <b>other new investments</b> (2)		124.500.000	30.005.000		1.986.000	3.427.000	3.880.000	4.219.000		94%	6%	
Sub-total <b>existing investments</b> (3)				2.487.000	1.011.000	735.000	365.000	112.000		94%	6%	
<b>Total new and existing investments</b> (1) + (2) + (3)		124.500.000	30.005.000	2.487.000	2.997.000	4.162.000	4.245.000	4.331.000				

\* The total % enroute+terminal should be equal to 100%.

### 2.2.2 - Detail of new major investments

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

### 2.2.3 - Other new and existing investments

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

DMI has been running an extensive renewal program for its infrastructure in the previous years and will continue to do so in years to come. The modernization is including systems as lightning detection and weather radars, both extremely relevant to aviation. Due to COVID related lock downs, this program has been hampered by a number of delays and postponements, which are reflected in staff costs and other costs related to the actual work, but is also reflected in the costs for depreciation. These costs will be delayed and are expected to begin to reappear in 2021, but with the main bulk appearing in 2022-2024.

#### 2.2.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	2 weather radars	26.700.000	6.415.000	300.000	600.000	1.335.000	965.000	712.000	2 weather radars
2	Synoptic weather stations	11.000.000	2.640.000		400.000	400.000	400.000	400.000	Synoptic weather stations
3	Lightning detection network	2.800.000	660.000		100.000	100.000	100.000	100.000	Lightning detection network
4	Other	84.000.000	20.290.000	2.187.000	1.897.000	2.327.000	2.780.000	3.119.000	Building, IT, Transport

## 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](#)

### 3.4 - 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 - Pension assumptions](#)

[3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services](#)

[3.4.5 - Restructuring costs](#)

[3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets](#)

### 3.5 - Additional KPIs / Targets

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

[3.6.1 - Interdependencies and trade-offs between safety and other KPAs](#)

[3.6.2 - Interdependencies and trade-offs between capacity and environment](#)

[3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity](#)

[3.6.4 - Other interdependencies and trade-offs](#)

### Annexes of relevance to this section

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

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

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

## SECTION 3.1: SAFETY KPA

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### 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) Detailed justifications in case of inconsistency between local and Union-wide safety targets
- c) Main measures put in place to achieve the safety performance targets

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

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS



### 3 - PERFORMANCE TARGETS AT LOCAL LEVEL

#### 3.1 - Safety targets

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

###### a) Safety performance targets

Number of Air Traffic Service Providers		1					
NAVIAIR		2020A	2020	2021	2022	2023	2024
		Actual	Target	Target	Target	Target	Target
	Safety policy and objectives	B	B	C	C	C	C
	Safety risk management	B	B	B	C	D	D
	Safety assurance	B	B	B	C	C	C
	Safety promotion	B	B	B	C	C	C
	Safety culture	B	B	B	C	C	C
Additional comments							

###### b) Detailed justifications in case of inconsistency between local and Union-wide safety targets

EU-wide targets are only set for the year 2024. The Danish targets 2024 are consistent with this. The regulation (2019/317) further states (annex IV. 1.1) that consistency is met if "... for each calendar year of the reference period, the level of effectiveness of safety management is equal to, or higher than, the corresponding Union-wide performance targets". Since there are no Union-wide targets for the years 2020-2023, the local targets show the itinerary towards meeting the Union-wide targets in 2024, and are by definition considered consistent in the years prior to that year.

\* Refer to Annex O, if necessary.

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

Naviair will implement regulation 373/2017 requirements according to the established compliance process to assure compliance with Requirements, Acceptable Means and Guidance Material. Naviair will implement best practices according to ICAO, CANSO and Eurocontrol Safety Management Manuals.

Naviair will implement the identified measures to achieve the Safety Performance Target in 2024, as described in the EoSM questionnaire under the justification for not achieving the next level category.

Naviair has an overall plan reaching from 2021 to 2024, for achieving the RP3 targets.

Naviair has in 2021 improved components to the Safety Performance Targets, regarding;

- Safety Culture
- Safety Policy and Objectives

ensuring that the Naviairs RP3 targets for these components is met in 2021.

\* 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) Detailed justifications in case of inconsistency between national targets and national reference values
- 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

	2020A	2020	2021	2022	2023	2024
National reference values	1,12%	n/a	1,14%	1,14%	1,14%	1,14%
			1,21%	1,20%	1,20%	1,20%
		2020	2021	2022	2023	2024
		Target	Target	Target	Target	Target
National targets		1,21%	1,14%	1,14%	1,14%	1,14%

#### b) Detailed justifications in case of inconsistency between national targets and national reference values

The Network Manager's national reference values are chosen as national performance targets, and consistency is therefore complied with.

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

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

In the previous RPs, Naviair has put in substantial effort to improve the environmental performance and shorten the flight routes in the Danish Airspace. Both Flexible Use of Airspace and Free Route Airspace are fully implemented in Denmark.

During Reference period 3 there will be a continuous review of the route network in order to further improve it. The implementation of an interface to MUAC Free Route Airspace is seen as such. However, the already very low KEA figure indicates that further improvement is difficult to achieve.

In addition, Performance Based Navigation procedures will be implemented at Copenhagen Airport/Kastrup during the RP3 period.

The continuous review of the network together with the work that has already been done to shorten the flight routes in the airspace is seen as an indicator of the Danish contribution to the EU wide target as already fulfilled.

Naviair discusses the tactical use of military training areas with the tactical level in the Danish military. However, strategic decisions and changes are taken at level 1 where only the military and the Danish Transport Authority (NSA) participate. The Danish Transport Authority regularly discusses efficient utilization of the airspace with the military, with a view to increasing the efficient use of FUA areas.

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

## SECTION 3.3: CAPACITY KPA

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### 3.3 - Capacity targets

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

- a) Capacity national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the target for en-route ATFM delay per flight
- d) ATCO planning

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

- a) Capacity national performance targets
- b) Contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

### **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

	2020A	2020	2021	2022	2023	2024
National reference values	0,00	n/a	0,03	0,06	0,06	0,05
			0,15	0,13	0,07	0,07
		2020	2021	2022	2023	2024
		Target	Target	Target	Target	Target
National targets		0,07	0,03	0,06	0,06	0,05

##### b) Detailed justifications in case of inconsistency between national targets and national reference values

The local targets correspond to the national reference values set by the Network Manager and are thus consistent.

\* Refer to Annex Q, if necessary.

##### c) Main measures put in place to achieve the target for en-route ATFM delay per flight

Denmark faces increased uncertainty regarding regulations in the neighbouring countries which could influence the performance of Denmark if more traffic is either diverted or chooses to fly around these regulations. All in all, the En route ATFM-delay in Denmark is at an actual level where there is no more room for improvement, and the exposure to single events (system break-down for a few hours on a busy Tuesday) could tap in to several months of the yearly allowance. As such the target-level of 0,05 (reduced from previous 2019-target at 0,07) delay is considered low and in daily operations it is treated as a no-delay policy.

The target level leaves room for minor technical disruptions resulting in ATFM measures. With the high stability in Navair's ATM-systems the target is considered achievable.

A recruitment of new ATCOs is in process to cope with both the anticipated traffic growth as well as normal retirements during the reference period and onwards.

\* Refer to Annex Q, if necessary.

##### d) ATCO planning

Copenhagen (EKDK ACC)	Actual			Planning			
	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)		6	0	4	5	5	
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)		10	0	17	1	5	5
Number of ATCOs in OPS planned to be operational at year-end (FTEs)	117	113	113	100	104	104	99

##### Additional comments

The amount given is the ATCOs eligible for OPS at "year-end". The ATCOs in OPS ACE-definition is not reflective of the amount of ATCOs due to different workload in 2020 (COVID)

The numbers represent expected retirements, internal movement, return from leave and ATCO trainees.

Look in Annex for general FTE-development.

New NOP planned for fall 2021. The list below represents the "Planned capacity enhancement measures from last "regular" NOP.

##### Planned capacity enhancement measures

Summer Capacity Plan						
	2019	2020	2021	2022	2023	2024
Free Route Airspace						
Airspace Management Advanced FUA	Optimizing the use of FRA when military areas are active					
Airport & TMA Network Integration	New arrival concept for EKCH including PBN procedures, Extended AMAN, TBS (Time Based Separation)					
	Operational capacity expansion at EKDK ACC to increase ATM capacity at EKCH					
Cooperative Traffic Management	Improved ATFCM, working with occupancy counts					
Airspace	Continuous improvements on the ATS route network and FRA sectorisation					
Procedures	Establish a work group looking for possible changes to sector borders to optimise workload					
Staffing	Maintain appropriate level of staffing to open up to 8 sectors					
	Training ATCOs in using the available configurations to the full extent					
Technical	Minor updates of COOPANS					
Capacity	Sector configurations adapted to traffic demand					
Significant Events		EURO 2020 Football				

Significant Events		Competition				
Max sectors	5 (E) + 3 (W)	5 (E) + 3 (W)	5 (E) + 3 (W)	5 (E) + 3 (W)	5 (E) + 3 (W)	5 (E) + 3 (W)
Planned Annual Capacity increase	1%	2%	2%	2%	2%	2%
Reference profile Annual % Increase	1%	2%	2%	2%	2%	2%
Difference Capacity Plan v. Reference Profile	0.0%	0.8%	1.5%	1.5%	1.4%	1.4%
Annual Reference Value (min)	0.06	0.14	0.15	0.13	0.07	0.07
Annual en-route delay forecast without eNM/ANSP Measures (min)	0.06	0.05	0.03 - 0.04			
Annual en-route delay forecast with eNM/ANSP Measures (min)	0.06	0.05				
Additional information						

*The delay forecast excludes delays for disruptions such as industrial actions and technical failures*

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

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
	Actual	Target	Target	Target	Target	Target
<b>National targets</b>	0,00	0,10	0,1	0,1	0,1	0,1
Additional comments	The target represents an increased ambition compared to the RP2 target, which was already considered challenging at the time. During RP2, performance has levelled at 0,03 min/flight - 0,06 min/flight, almost entirely due to weather. The much improved RP2 performance compared to RP1 is mainly due to weather handling at the airport. However, performance is still very dependant on the future weather development.					
<b>Airport level</b>	<b>EKCH-Copenhagen/Kastrup</b>	0,00	0,10	0,10	0,10	0,10
	Airport contribution to national targets					

b) Contribution to the improvement of the European ATM network performance

The suggested local target is considered an adequate balance between on the one hand a continuously increased performance ambition and on the other hand the unpredictable exposure to bad weather. The local terminal capacity level is already considered contributing substantially to Union-wide performance in terms of punctuality.

\* Refer to Annex Q, if necessary.

c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

The target level leaves room for minor technical disruptions resulting in ATFM measures. With the high stability in Naviair's ATM-system it is considered to be achievable to meet the target. The low level of the target (in absolute terms) has the risk of having a few events with a major impact to the detriment of the goal.

In addition to the above, a recruitment of new ATCOs is in proces to cope with both the anticipated traffic growth as well as normal retirements during the reference period.

\* Refer to Annex Q, if necessary.

## SECTION 3.4: COST-EFFICIENCY KPA

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### 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) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- 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) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate
- e) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS
- f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections

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

##### Terminal Charging Zone #x

- a) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- 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) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS
- e) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections

#### 3.4.3 - Pension assumptions

##### 3.4.3.1 Total pension costs

##### 3.4.3.2 Assumptions for the "State" pension scheme

##### 3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme

##### 3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme

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

#### 3.4.5 - Restructuring costs

##### 3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

##### 3.4.5.2 Restructuring costs planned for RP3

#### 3.4.6 - 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 RP3, which induce additional costs
- b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3
- c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 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

### **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

NOTE: The following requirements as per Annex II, 3.3 are addressed in the Annexes A and B:

Point 3.3 (d) on cost-allocation;

Point 3.3 (e) on the return on equity and cost of capital;

Point 3.3 (f) on assumptions for pension costs and interest on debt for other entities, inflation forecast and adjustments beyond IFRS;

Point 3.3 (g) on adjustments to the unit rates carried over from previous reference periods;

Point 3.3 (h) on costs exempt from cost-sharing;

Point 3.3 (k) reporting tables and additional informations.



### 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 - Denmark

##### a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Denmark	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2014 B	2024 D vs. 2019 B
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D		
Total en route costs in nominal terms (in national currency)	698.953.930	726.918.302	1.409.936.552	717.666.270	730.355.628	738.450.305	5,7%	1,6%
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	<b>705.073.905</b>	<b>719.763.577</b>	<b>1.388.136.852</b>	<b>697.646.794</b>	<b>702.906.009</b>	<b>702.788.808</b>	<b>-0,3%</b>	<b>-2,4%</b>
Total en route costs in real terms (in EUR2017) <sup>1</sup>	94.807.246	96.782.482	186.654.805	93.808.565	94.515.742	94.499.982	-0,3%	-2,4%
YoY variation			92,9%	-49,7%	0,8%	0,0%		
Total en route Service Units (TSU)	1.444.679	1.679.151	1.483.960	1.455.159	1.660.614	1.784.164	23,5%	6,3%
YoY variation			-11,6%	-1,9%	14,1%	7,4%		
<b>Real en route unit costs (in national currency at 2017 prices)</b>	<b>488,05</b>	<b>428,65</b>	<b>935,43</b>	<b>479,43</b>	<b>423,28</b>	<b>393,90</b>	<b>-19,3%</b>	<b>-8,1%</b>
Real en route unit costs (in EUR2017) <sup>1</sup>	<b>65,63</b>	<b>57,64</b>	<b>125,78</b>	<b>64,47</b>	<b>56,92</b>	<b>52,97</b>	<b>-19,3%</b>	<b>-8,1%</b>
YoY variation			118,2%	-48,7%	-11,7%	-6,9%		
		Eu targets	120,1	-38,5	-13,2	-11,5		
National currency		DKK						
<sup>1</sup> Average exchange rate 2017 (1 EUR=)		7,44						

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

En route charging zone Denmark	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline adjustments	2019 Baseline adjustments
	2014 B	2019 B	2014 A	2019 A		
Total en route costs in nominal terms (in national currency)	698.953.930	726.918.302	698.953.930	701.118.720	0	25.799.583
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	<b>705.073.905</b>	<b>719.763.577</b>	<b>705.073.905</b>	<b>694.065.335</b>	<b>0</b>	<b>25.698.242</b>
Total en route costs in real terms (in EUR2017) <sup>1</sup>	94.807.246	96.782.482	94.807.246	93.326.987	0	3.455.495
Total en route Service Units (TSU)	1.444.679	1.679.151	1.532.003	1.780.648	-87.324	-101.497

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

##### c.1) Adjustments to the 2014 baseline value for the determined costs

Number of adjustments	0
-----------------------	---

##### c.2) Adjustments to the 2014 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-5,70%	CRCO correction factor May 2019 (on 12 months)	-87.324

For reference: CRCO correction factor May 2019 (on 12 months)  
-5,70%

Other adjustment to the 2014 service units	No
--	----

<b>Total adjustments to the 2014 service units</b>	<b>-87.324</b>
--	----------------

##### c.3) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	4
-----------------------	---

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #1	Naviair	ANSP	Staff	5.486.034	5.410.029	727.456
Description and justification of the adjustment						
Description provided in Draft Annex F1						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #2	Naviair	ANSP	Other operating	1.828.678	1.803.343	242.485
Description and justification of the adjustment						
Description provided in Draft Annex F1						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #3	Naviair	ANSP	Depreciation	5.386.587	5.386.587	724.303
Description and justification of the adjustment						
Description provided in Draft Annex F1						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Revised cost of capital methodology	Naviair	ANSP	Cost of capital	13.098.284	13.098.284	1.761.251
Description and justification of the adjustment						
Description provided in Draft Annex F2-4						

Total adjustments to the 2019 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2017
	25.799.583	-	-

**c.4) Adjustments to the 2019 service units**

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-5,70%	CRCO correction factor May 2019 (on 12 months)	-101.497

For reference: CRCO correction factor May 2019 (on 12 months)  
-5,70%

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

<b>Total adjustments to the 2019 service units</b>	<b>-101.497</b>
--	-----------------

**d) Description and justification of the consistency between local and Union-wide cost-efficiency targets**

After updating with the STATFOR October 2021 forecast, Denmark outperforms the union wide targets for cost efficiency in 2020/21 and 2022. In 2023 and 2024, the cost decline in Denmark is below the target at union wide level, due to a lower expected traffic growth compared to the RP3 area and the fact that traffic growth in 2022 is expected higher than the previous forecast. Measured over the entire 2020-24 period, the unit cost development in Denmark is significantly better than union wide targets and Denmark thus makes an important contribution to meeting the overall goals for cost efficiency at union level.

A significant explanation for this is that the Danish ANSP in the first draft performance plan committed itself to comply with the union targets for total determined costs in all years in RP3 and not charge users costs above targets. In connection with the update of the plan after the STATFOR October 2021 baseline forecast, a limited upward adjustment of costs has been made corresponding to 2.4%, 1.6% and 0.8% in 2022, -23 and -24 respectively. The upward adjustment of costs is significantly less than the upward adjustment of expected traffic and shows that Naviair is strongly committed to providing the necessary capacity at the lowest possible cost without compromising on safety.

\* 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 RP3	Click to select
Restructuring costs planned for RP3	Click to select

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

Reference is made to the attached reporting tables for exact figures and additional information for explanations.

\* Refer to Annex R, if necessary.

**g) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges 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 verification of the costbase did not identify any need for corrections.

\* Refer to Annex U, if necessary.

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

TCZ #VÆRDI!

Terminal Charging Zone #1 - Denmark - TCZ

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Denmark - TCZ	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	183.607.046	358.652.091	178.997.731	184.217.288	187.621.588	2,2%
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	<b>181.428.280</b>	<b>352.003.886</b>	<b>172.957.837</b>	<b>175.845.968</b>	<b>176.726.394</b>	<b>-2,6%</b>
Total terminal costs in real terms (in EUR2017) 1	24.395.621	47.331.945	23.256.649	23.644.999	23.763.385	-2,6%
YoY variation		94,0%	-50,9%	1,7%	0,5%	
Total terminal Service Units (TNSU)	172.467	133.271	142.617	159.502	170.803	-1,0%
YoY variation		-22,7%	7,0%	11,8%	7,1%	
<b>Real terminal unit costs (in national currency at 2017 prices)</b>	<b>1.051,96</b>	<b>2.641,26</b>	<b>1.212,74</b>	<b>1.102,47</b>	<b>1.034,68</b>	<b>-1,6%</b>
Real terminal unit costs (in EUR2017) 1	141,45	355,16	163,07	148,24	139,13	-1,6%
YoY variation		151,1%	-54,1%	-9,1%	-6,1%	
	Eu targets	120,1	-38,5	-13,2	-11,5	
National currency	DKK					
1 Average exchange rate 2017 (1 EUR=)	7,44					

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

Terminal charging zone Denmark - TCZ	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	183.607.046	186.527.309	-2.920.263
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	<b>181.428.280</b>	<b>184.369.253</b>	<b>-2.940.972</b>
Total terminal costs in real terms (in EUR2017) 1	24.395.621	24.791.076	-395.456
Total terminal Service Units (TNSU)	172.467	172.467	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	4
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Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #1	Naviair	ANSP	Staff	1.121.106	1.105.574	148.660
Description and justification of the adjustment						
Description provided in Draft Annex F1						
Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #1	Naviair	ANSP	Other operating	373.702	368.525	49.553
Description and justification of the adjustment						
Description provided in Draft Annex F1						
Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Netted out funding #1	Naviair	ANSP	Depreciation	520.277	520.277	69.959
Description and justification of the adjustment						
Description provided in Draft Annex F1						
Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Revised cost of capital methodology	Naviair	ANSP	Cost of capital	-4.935.348	-4.935.348	-663.628
Description and justification of the adjustment						
Description provided in Draft Annex F2-4						
<b>Total adjustments to the 2019 baseline value for the determined costs</b>				<b>Costs nominal NC</b>	<b>Costs real NC</b>	<b>Costs EUR2017</b>
				<b>-2.920.263</b>	<b>-2.940.972</b>	<b>-395.456</b>

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

Adjustment to the 2014 service units	No
--------------------------------------	----

**d) Description and justification of the contribution of the the local targets to the performance of the European ATM network**

For the combined year 2020/21, the local targets are significantly below the union wide targets. 2022 is above the union-wide targets. According to the October 2021 Statfor forecast traffic average annual growth rate for TNC Denmark for 2021-24 compared to 2019 is expected to be -0.1 pct. (Base). It should be noted that TNC growth in Denmark is expected to be exceptional low in 2021 with a growth rate of only 10 pct. compared to 2020. Considering the necessary baseline adjustments and the expected weak growth, we consider the local Danish targets for cost efficiency on TNC as justified.

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

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

Reference is made to the attached reporting tables for exact figures and additional information for explanations.

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

**f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges 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 verification of the costbase did not identify any need for corrections.

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

### 3.4.3 - Pension assumptions

#### NAVAIR

#### 3.4.3.1 Total pension costs (in nominal terms in '000 national currency)

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
<b>Total pension costs</b>	<b>113.495</b>	<b>98.818</b>	<b>212.313</b>	<b>93.577</b>	<b>96.244</b>	<b>99.217</b>
En-route activity	74.477	65.919	140.396	62.524	64.696	66.474
Terminal activity	22.447	20.312	42.759	19.530	20.340	20.974
Other activities	16.571	12.587	29.158	11.522	11.208	11.768

#### 3.4.3.2 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?	Select
--	--------

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies			-			
Employer % contribution rate to this scheme						
<b>Total pension costs in respect of this scheme</b>	<b>113.495</b>	<b>98.818</b>	<b>212.313</b>	<b>93.577</b>	<b>96.244</b>	<b>99.217</b>
Number of employees the employer contributes for in this scheme	627	617		597	593	597

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 RP3

Naviair's pension costs are a mix of government defined benefit schemes, defined contribution schemes and for many employees a combination of the two. For all schemes applies that the schemes are either completely defined by central government or by collective agreements with the central government. For that reason it is considered most appropriate to describe the situation all together under "State pension schemes".

Naviair pays an actuarially calculated percentage for defined benefits. The amount is paid to the state.

For defined contribution, Naviair pays a percentage to a private pension fund (often run by the professional organizations). The percentage is basically the result of a collective agreement. The main rule is, that the employee pays 1/3 of the pension contribution, while the employer pays 2/3. In practice, it does not matter, since it is all included in the total salary expense for each employee. So in principle, the employee's 1/3 contribution is also an expense for Naviair, because Naviair also pays for the employee's pension share of 1/3, as a result of an agreement with the trade unions. Therefore, it is now a theoretical breakdown.

Defined benefit scheme comprises approximately 64% of Naviair's employees, ie. part of their pension is covered by defined benefit, while the rest is defined contribution. 36% of employees only have a defined contribution scheme

For employees with both defined benefit scheme and defined contribution scheme: The basic salary is covered by the defined benefit scheme, while the wage supplement is pensionally regulated through the defined contribution scheme.

The breakdown of the two types of pension varies according to the group (ATCO's, ATCO assistants, Technicians, Academics etc.). For ATCOs, the distribution is approx. 50% / 50% between the two types of pensions, while for the other employees approx. 65 - 67% of salary covered by defined benefit scheme.

Defined benefit scheme is a slightly more costly pension scheme than defined contribution. However, we experience that the trade unions are working to increase the pension share for employees covered by defined contributions

The man-year adjustment of Naviair's staff as a result of COVID-19 accelerates to some extent the shift between defined benefit and contribution scheme. This will however not in particular affect RP3.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Forecast for pension is based on the salary with inflation.

The average pension share is estimated at approx. 17% of the labor cost. The amount of pensions are based on the historical share of pensions as part of the total staff costs. The exact contribution rates are available in the table below - note however that not all parts of the staff costs are pensionable.

Pensions scheme	Defined benefit		Defined contribution	
	Basic steps	Supplement	Basic steps	Supplement
ATCO	27,4%	18,0%	23,0%	18,0%
ATCO assistants	22,2%	18,0%	18,0%	18,0%
Technicians	22,2%	18,0%	15,4%	15,4%
Administration	22,2%	17,0%	17,0%	17,0%

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

Naviair has a strong focus on having the required number of air traffic controllers and other staff to meet the expected demand. This means striking a balance of not having an excessive number of employees, but at the same time also ensuring not facing a shortage situation for e.g. air traffic controllers, which can cause regulations and thereby delays for the airlines. Naviair also focuses on continuously training new air traffic controllers so that we can ensure future needs for air traffic controllers for the benefit of our customers

#### 3.4.3.3 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?	Select
--	--------

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
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 RP3

It is difficult to accurately make detailed forecasts for "defined contribution" and "defined benefits" respectively in the RP3 period. Therefore, it is difficult to specify the specific figures in the above table. RP3 is in the model at an aggregated level, which is reflected in 3.4.3.1. and 3.4.3.2.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Please look at 3.4.3.2.

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

Nothing to report

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

Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme?	Select
Is the occupational "Defined benefits" pension scheme funded?	Select

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies			-			
<b>Total pension costs in respect of this scheme</b>			-			
- in respect of regular pension costs			-			
- in respect of non-recurring deficit repair			-			
- reported as staff costs (in reporting tables)			-			
- not reported as staff costs (in reporting tables): please use comment box			-			
<b>Actuarial assumptions</b>						
% discount rate						
% projected increase in benefits						
% annual increase in salaries						
% expected return on plan assets						
Net funding surplus / deficit			-			
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 RP3

No changes

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Please look at 3.4.3.2.

Where, in the Reporting Tables, some occupational "defined benefits" costs (e.g. interest expense related to pensions) are reported in other cost item(s) than staff costs, the cost item(s) should be indicated here below along with corresponding explanations.

Nothing to report

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

Nothing to report

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

#### NAVIAR

Select number of loans	3
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#### Interest rate assumptions for loans financing the provision of air navigation services (Amounts in nominal terms in '000 national currency)

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	<p>As described in Naviar's annual report and accounts the subordinated loan capital covers a bullet loan with the Danish state represented by the Ministry of Transport. No instalments are payable on the loan for ten years from the date of inception in 2010. Instalments on the loan are payable after ten years if, based on an overall assessment of Naviar's financial position, liquidity and the extent of non-subordinated debt, Naviar's Board of Directors deems it prudent to repay the loan at that time.</p> <p>Interest is fixed at 9% p.a., and the loan ranks after Naviar's other interest-bearing debt. According to the loan agreement, the loan consequently meets the criteria for recognition as equity or capital ranking as equity.</p> <p>It is therefore recommended to consider the interest rate as not directly comparable with market rates but rather with return on equity rates in the air traffic management industry.</p> <p>During 2020/2021 and specifically after the submission of the RP3 plan, incl. consultation feedback and feedback from the EC/PRB there has been dialogue with the Ministry of Transportation about the level of the interest rate. The interest rate is expected to reach a more market conform level from year 2022 at 4,5%.</p> <p>The loan has been reduced from 536M DKK to 200M DKK since 2010.</p>					
Remaining balance	200	200		200	200	200
Interest rate %	9,00%	9,00%		4,50%	4,50%	4,50%
Interest amount	18	18	36	9	9	9
Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Loan facility in Jyske Bank has been extended (500 MDKK) and a State re-lending facility (500 MDKK) with interest of 1% to counter the liquidity need from COVID-19 - the state loan is 10 years in duration.					
Remaining balance	0	175		600	600	550
Interest rate %	1,00%	1,00%		1,00%	1,00%	1,00%
Interest amount	0	2	2	6	6	6
Loan #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description						
Remaining balance						
Interest rate %						
Interest amount			-			
Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Short-term bank corporate overdraft facility used for day-to-day operations. In the RP3-model it is used for residual purposes. The average rate on the corporate overdraft facility is 1.0%					
Remaining balance					50	
Average weighted interest rate %	-	-		-	1,00%	-
Interest amount			-		1	
Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	200	375		800	850	750
Average weighted interest rate %	9,00%	5,27%		1,88%	1,82%	1,93%
Interest amount	18	20	38	15	16	15



### 3.4.5 - Restructuring costs

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#### 3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

Restructuring costs from previous reference periods approved by the European Commission?	No
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#### 3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No
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Additional comments

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

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Additional costs of measures necessary to achieve the capacity targets for RP3?	No
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## 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

NO\_PRINT

### 3.5 - Additional KPIs / Targets

Number of additional KPIs	<a href="#">Click to select number of additional KPIs</a>
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## 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) Do the measures to reach the targets in the different KPAs require changes in the ANSP functional system that have safety implications? If yes, which mitigation measures are put in place?

No.

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs?

Safety will always have the highest priority hence other targets will need to take into account any safety implications. The biggest risk is lack of sufficient resources which could lead to lack of capacity in order to ensure safety level.

c) What metrics, other than those indicators described in the Regulation, are you monitoring during RP3 to ensure targets in the KPAs of capacity, environment, and cost-efficiency are not degrading safety?

All monitoring activities are adapted into a local dynamic safety action plan used in Naviar Operations.

d) Do targets allow trade-offs in operational decision making to managing resource shortfalls in order to preserve safety performance? Do targets restrict the release of staff for safety activities, such as training?

Training is always planned into the staffing forecasts so no need is foreseen. Should such a need occur, Naviar has a certain flexibility to perform safety activities e.g. safety briefings.

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 after changes introduced to achieve targets in other KPAs? Please, explain.

The ANSP financial and personnel resources needed to support safe ATC service provision are reviewed through the NSA continuous oversight of the ANSP's compliance with the provisions in EU regulation 1035/2011, specifically the provisions laid down in Annex 1.

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

No foreseen tradeoffs in terms of en route airspace. The introduction of Free Route Airspace has changed the traffic patterns and the ATCOs have adapted.

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

Capacity requires resources and resources are a major cost factor within the ANSP. Although recruitments are part of the planning in RP3 unforeseen factors such as retirement age plays a role in terms of potential tradeoffs. The same can be said when it comes to staff leaving to work in other ANSPs either within Europe or other parts of the world where a higher salary is a main driver. Although such is included in staffing prognoses it is difficult to predict. Having the sufficient capacity and being able to deliver services without delay is a main priority in Navair hence recruitment of new ATCOs is a tradeoff when it comes to cost efficiency.

#### 3.6.4 - Other interdependencies and trade-offs

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

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

### 4.2 - Deployment of SESAR Common Projects

### 4.3 - Change management

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

ANNEX N. CROSS-BORDER INITIATIVES



## 4.1 - Cross-border initiatives and synergies

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

Number of cross-border initiatives	5
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Initiative #1	
Name	Borealis
Description	The VISION of Borealis is to be the leading ANSP Alliance that enables its members to drive better performance for stakeholders through business collaboration.
Expected performance benefits	Free Route Airspace in the airspace covered by the partners of the Borealis partners

Initiative #2	
Name	COOPANS
Description	<p>COOPANS is an international partnership consisting of Naviair, Austro Control, Croatia Control, the Irish Aviation Authority (IAA), LFV and NAV Portugal.</p> <p>COOPANS was set up in 2006 as a cooperation between Naviair, IAA and LFV with the joint ambitions of cutting individual technical development costs and jointly harmonising and standardising technical equipment. COOPANS has been so successful that a further three European ANSPs have so far become paying partners, most recently NAV Portugal in 2018.</p> <p>NAV Portugal will be buying a new ATM system in the coming years and consequently wished to join the technical alliance, which achieved a unique result as early as 2015 when the seven control centres in Denmark, Sweden, Ireland, Austria and Croatia were able to operate as fully harmonised at the same time as implementing regular, synchronised upgrading without any inconvenience to ATM. This is a unique development in European ATM.</p>
Expected performance benefits	<p>Naviair estimates that system development costs are cut by at least 30 per cent compared with the costs each partner would incur if the technology was to be developed independently.</p> <p>To this should be added our considerable savings in operating expenses as a result of joint work concepts and exchange of experience.</p> <p>The COOPANS cooperation was extended in 2015, becoming the COOPANS Alliance, which, besides technical-operational cooperation, now also includes a common approach to and participation in SESAR 2020, SESAR Deployment Manager, EU funding projects, and the A6 Alliance in which COOPANS Alliance participates on an equal footing with the five largest ANSPs in Europe.</p>

Initiative #3	
Name	EPN
Description	<p>Since its establishment in 2006, the Air Traffic Service academy Entry Point North has developed into one of the most successful academies offering ATM training and courses.</p> <p>Entry Point North is situated at Malmö Airport and is jointly owned by Naviair, IAA and LFV. The academy provides tailored training courses to ANSPs in more than 20 countries.</p>
Expected performance benefits	In line with the ambition in the Single European Sky programme, the primary aim of Entry Point North is to provide standardised and harmonised training for ATCOs and ATCO trainees.

Initiative #4	
Name	
Description	
Expected performance benefits	

Initiative #5	
Name	
Description	
Expected performance benefits	

Additional comments	
DMI participates in the NAMCON consortium on joint and cross border meteorological service provision together with Estonia, Finland, Iceland,	

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

Details of synergies in terms of common infrastructure and common procurement
Cross border production of TAFs continue with DMI producing TAF for 5 Swedish airports. Also the joint production of Low Level Forecasts continue. From 2020 joint production of TAF is also in place with Iceland with Icelandic MET OFFICE producing TAF for EKVG airport. From 2021 a joint SIG WX low level chart is produced by Finland and Sweden resulting in Denmark having ceased production of SIG WX low level charts.

## 4.2 - Deployment of SESAR Common Projects

### 4.2.1 - Common Project One (CP1)

CP1 ATM Functionality (CP1-AF) / Sub functionality (CP1-s-AF)	Recent and expected progress
<b>CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs</b>	
CP1-s-AF1.1 AMAN extended to en-route airspace	Most elements completed. Final elements to be implemented by end 2024.
CP1-s-AF1.2 AMAN/DMAN Integration	Not planned. CPH not in CP1 scope.
<b>CP1-AF2 - Airport Integration and Throughput</b>	
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	Completed.
CP1-s-AF2.2.1 Initial airport operations plan (iAOP)	Completed.
CP1-s-AF2.2.2 Airport operations plan (AOP)	Expected completion end 2027
CP1-s-AF2.3 Airport safety nets	Ongoing. Expected completion end 2023.
<b>CP1-AF3 - Flexible Airspace Management and Free Route Airspace</b>	
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	Most elements completed. Full implementation expected by end 2022.
CP1-s-AF3.2 Free route airspace	Completed.
<b>CP1-AF4 - Network Collaborative Management</b>	
CP1-s-AF4.1 Enhanced short-term ATFCM measures	STAM Phase 2 is intended to be implemented through the NM Platform by the end of 2021.
CP1-s-AF4.2 Collaborative NOP	Ongoing. Expected completion end 2021.
CP1-s-AF4.3 Automated support for traffic complexity assessment	Traffic Complexity Tools implementation is partly implemented (conops, procedures, training), full implementation is expected by the end of 2021. Only NM tools will be used due to structure of airspace and traffic flows.
CP1-s-AF4.4 AOP/NOP integration	Expected completion end 2027
<b>CP1-AF5 - SWIM</b>	
CP1-s-AF5.1 Common infrastructure components	Completed.
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	Expected completion end 2025
CP1-s-AF5.3 Aeronautical information exchange	Expected completion end 2025
CP1-s-AF5.4 Meteorological information exchange	DMI participation in project IP 2015_025_AF5_A under SGA INEA/CEF/TRAN/M2015/1131871, Action 2015-EU-TM-0193-M SWIM compliant web service was completed in 2020.
CP1-s-AF5.5 Cooperative network information exchange	Expected completion end 2025
CP1-s-AF5.6 Flight information exchange (yellow profile)	Expected completion end 2025
<b>CP1-AF6 - Initial Trajectory Information Sharing</b>	
CP1-s-AF6.1 Initial air-ground trajectory information sharing	Expected completion end 2027

CP1-s-AF6.2 Network Manager trajectory information enhancement	NA
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	Expected completion end 2027

### 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

Main synergies, incl. transition plans for entry into service, are obtained via the COOPANS Alliance when it comes to change management of ATM system improvements.

Naviair has implemented EU regulation 2017/373 including the change management processes required. This currently includes changes to ATS, CNS, QMS and SMS system. Any change to operational procedures, Airspace changes, Training and the technical system is assessed in accordance with established, and by danish authority, approved procedures that take into account the total effect on the system when deciding on a change to the functional system.

The change management procedures are an intrgrated part of Naviair Management System ref. the requirements laid out in EU 2017/373

## 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](#)

5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

5.2.1.2 Rationale and justification - Enroute

[5.2.2 - Capacity incentive scheme - Terminal](#)

5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

5.2.2.2 Rationale and justification - Terminal

### **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

Denmark			Traffic risk-sharing parameters adapted?			
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

### 5.1.2 Traffic risk sharing - Terminal charging zones

Denmark - TCZ			Traffic risk-sharing parameters adapted?			
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

## 5.2 - Capacity incentive schemes

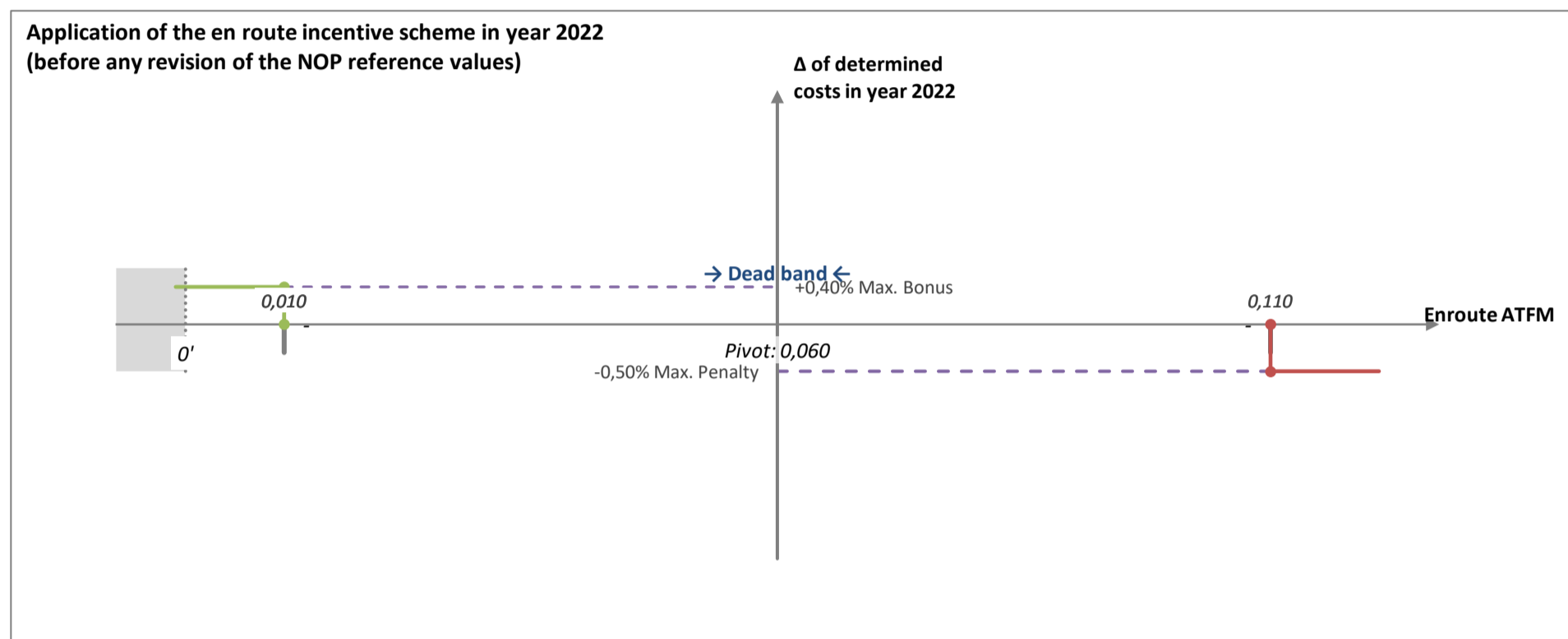
### 5.2.1 - Capacity incentive scheme - Enroute

#### 5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

Enroute	Expressed in	Value
Dead band $\Delta$	fraction of min	$\pm 0,050$ min
Max bonus ( $\leq 2\%$ )	% of DC	0,40%
Max penalty ( $\geq$ Max bonus)	% of DC	0,50%
The pivot values for RP3 are	fixed	

#### NAVAIR

	2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)			0,06	0,06	0,05
Alert threshold ( $\Delta$ Ref. value in fraction of min)			$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Performance Plan targets (mins of ATFM delay per flight)			0,06	0,06	0,05
Pivot values for RP3 (mins of ATFM delay per flight)			0,06	0,06	0,05
Financial advantages / disadvantages	Dead band range		[0,01-0,11]	[0,01-0,11]	[0-0,1]
	Bonus sliding range		[0,01-0,01]	[0,01-0,01]	n/a
	Penalty sliding range		[0,11-0,11]	[0,11-0,11]	[0,1-0,1]



#### 5.2.1.2 Rationale and justification - Enroute

If the pivot values are different that the values in the NOP, explain rationale for the difference and method of calculation\*\*

The selection of parameters in the ER incentive scheme is the result of the following considerations:

**Deadband:** In order to avoid to the extend possible the case of upward unit rate adjustments (bonuses) for performances that are actually a deterioration compared to the present performance, the deadband is set as wide as possible, i.e. at  $\pm 0,05$  min/flight implying that bonuses/penalties are first effective at the threshold levels at  $\pm 0,05$  min/flight.

**Max bonus:** The max bonus expressed as a percentage of the revenue at risk is set at 0,4 pct. The percentage reflects the fact, that delays would have to come close to zero to trigger a bonus.

**Max penalty:** The max penalty expressed as a percentage of the revenue at risk is set at 0,5 pct. This represent an asymmetry in view of the consideration that where a bonus is unlikely, the penalty will only come to effect at very poor performances given the symmetric deadband. The penalty rate is therefore higher than the bonus rate.

The capacity target set for Denmark is quite low and all though the level of delays is normally equally low in Denmark, the factors that affect capacity is usually outside the scope of the ANSP to resolve (weather and military activity). Therefor, although measures could be identified and taken, those would mostly be on the civil and military regulator to resolve, and not for the ANSP who in those cases deliver service within the frame agreed by national authorities.

Given the low target value on capacity there is little room for improvement, and higher risk of single events triggering penalties the suggested penalty is viewed as having material impact.

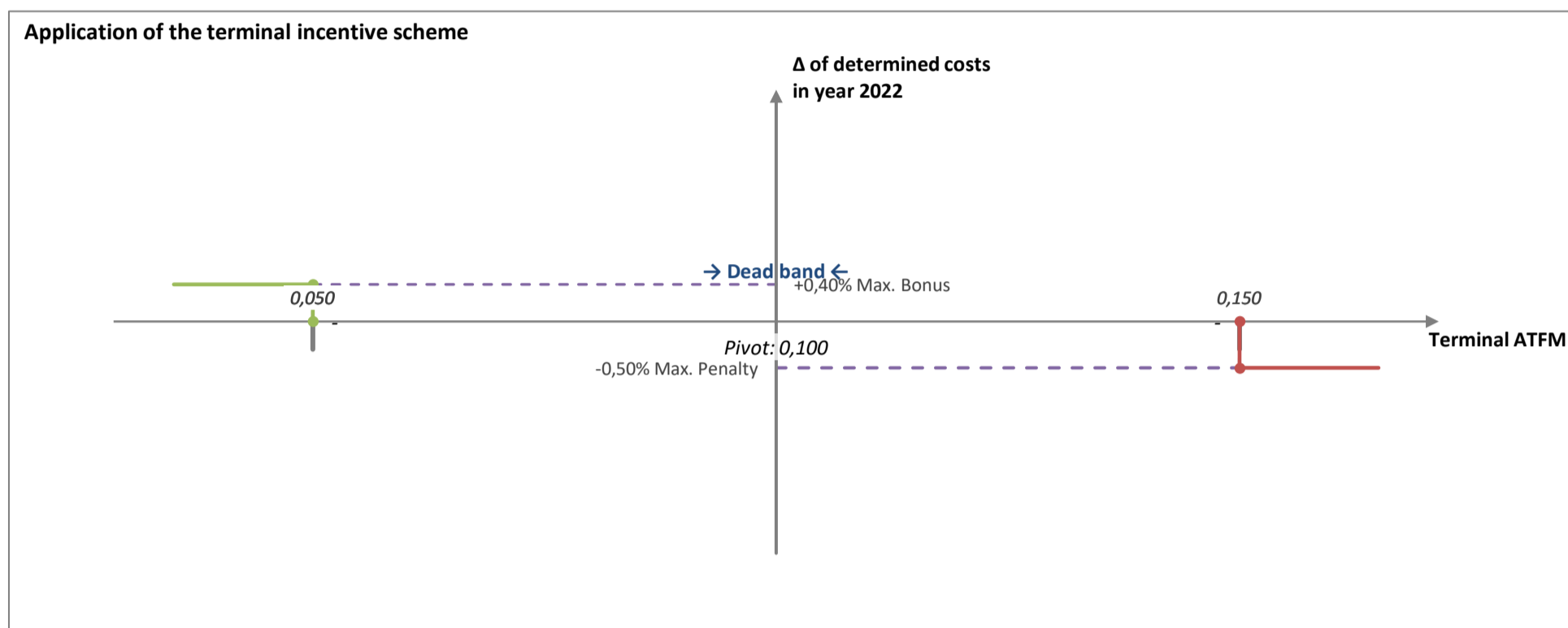
\*\* Refer to Annex I, if necessary.

## 5.2.2 - Capacity incentive scheme - Terminal

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

Terminal	Expressed in	Value
Dead band $\Delta$	fraction of min	$\pm 0,050$ min
Bonus/penalty range (% of pivot value)	%	$\pm 50\%$
Max bonus	% of DC	0,40%
Max penalty	% of DC	0,50%
The pivot values for RP3 are	fixed	

	2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)			0,1	0,1	0,1
Bonus/penalty range $\Delta$ (in fraction of min)			$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Pivot values for RP3 (mins of ATFM delay per flight)			0,10	0,10	0,10
Financial advantages / disadvantages	Dead band range		[0,05-0,15]	[0,05-0,15]	[0,05-0,15]
	Bonus sliding range		[0,05-0,05]	[0,05-0,05]	[0,05-0,05]
	Penalty sliding range		[0,15-0,15]	[0,15-0,15]	[0,15-0,15]



### 5.2.2.2 Rationale and justification - Terminal

Explain how the bonus and penalties are going to be apportioned between the different terminal charging zones and ANSPs providing services in each of them\*\*

The selection of parameters in the ER incentive scheme is the result of the following considerations:

**Deadband:** In order to avoid to the extent possible the case of upward unit rate adjustments (bonuses) for performances that are actually a deterioration compared to the present performance, the deadband is set as wide as possible, i.e. at  $\pm 0,05$  min/flight implying that bonuses/penalties are first effective at the threshold levels at  $\pm 0,05$  min/flight.

**Max bonus:** The max bonus expressed as a percentage of the revenue at risk is set at 0,4 pct. The percentage reflects the fact, that delays would have to come close to zero to trigger a bonus.

**Max penalty:** The max penalty expressed as a percentage of the revenue at risk is set at 0,5 pct. This represent an asymmetry in view of the consideration that where a bonus is unlikely, the penalty will only come to effect at very poor performances given the symmetric deadband. The penalty rate is therefore higher than the bonus rate.

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



NO\_PRINT

### 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

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### 6.1 Monitoring of the implementation plan

Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources
<p>The NSA monitors the performance of the entities through the yearly monitoring report process, through a regular consultation of the performance data provided by Eurocontrol and through regular bilateral oversight processes with the service providers. In general, there are very good professional relations between the NSA and the service providers and the cooperation takes place in an atmosphere of confidence and transparency.</p> <p>In addition Naviair's and the Danish Civil Aviation and Railway Authority managements meet 4 times a year. The status of Naviair's plan to reduce costs as a result of the covid-19 crisis is a fixed item on the agenda and progress is monitored from meeting to meeting. There is a special focus on Naviair's liquidity and the measures Naviair has taken to strengthen it.</p>

### 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
<p>In the case that targets are not met, the NSA will contact the service provider in question and demand explanations and analyses as to how the situation arrived. Based on these findings, other stakeholders will be consulted if relevant and proportionate and appropriate actions will be put in place. The Commission and the PRB will be kept informed as required.</p>

## 7 - ANNEXES

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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 INITIATIVES

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 Z. CORRECTIVE MEASURES\*

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

**Table 1 - Total Costs and Unit Costs**

Denmark  
Currency: DKK  
All Entities

Cost details	Actual costs 2012-2019							Determined costs - Performance Plan - RP3							Actual costs - Reference Period 3					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																				
1.1 Staff	416.555	416.200	397.541	410.284	414.431	412.565	411.192	414.457	456.367	387.873	844.240	379.900	390.690	398.665	456.367					
of which, pension costs									78.963	68.465	147.428	65.170	67.384	69.203	78.963					
1.2 Other operating costs	171.995	169.704	179.919	190.148	183.363	193.937	195.700	208.196	200.222	208.980	409.202	216.458	216.966	212.855	200.222					
1.3 Depreciation	88.713	93.310	83.894	84.149	77.322	75.003	79.461	82.668	89.941	92.386	182.327	101.886	104.492	103.943	89.941					
1.4 Cost of capital	60.143	62.406	61.537	57.245	45.197	29.401	25.623	29.990	48.731	47.096	95.828	43.272	44.134	43.869	48.731					
1.5 Exceptional items	-15.295	-17.013	-16.538	-13.907	-15.755	-16.210	-16.226	-15.310	-74.355	-9.705	-84.060	-5.050	-7.126	-2.083	-74.355					
<b>1.6 Total costs</b>	<b>722.110</b>	<b>724.607</b>	<b>706.353</b>	<b>727.919</b>	<b>704.558</b>	<b>694.696</b>	<b>695.749</b>	<b>720.002</b>	<b>720.906</b>	<b>726.631</b>	<b>1.447.537</b>	<b>736.466</b>	<b>749.156</b>	<b>757.250</b>	<b>720.906</b>					
Total % n/n-1		0,3%	-2,5%	3,1%	-3,2%	-1,4%	0,2%	3,5%	0,1%	0,8%	1,4%	1,7%	1,7%	1,1%	0,1%					
<b>2. Detail by service (in nominal terms)</b>																				
2.1 Air Traffic Management	564.615	565.815	550.645	567.747	552.643	542.120	553.044	572.318	580.285	582.477	1.162.762	587.572	599.250	606.893	580.285					
2.2 Communication	15.789	15.715	15.301	16.024	15.494	15.120	15.347	15.871	16.097	16.229	32.326	16.295	16.683	16.898	16.097					
2.3 Navigation	6.247	6.218	6.054	6.336	6.127	5.979	6.069	6.276	6.365	6.417	12.783	6.444	6.597	6.682	6.365					
2.4 Surveillance	13.432	13.369	13.016	13.587	13.137	12.820	13.013	13.457	13.649	13.760	27.409	13.817	14.145	14.328	13.649					
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
2.6 Aeronautical Information	5.415	6.403	7.674	11.904	7.132	6.930	7.799	8.695	7.100	7.158	14.258	7.187	7.358	7.453	7.100					
2.7 Meteorological services	34.340	34.096	34.580	39.045	33.457	33.504	33.926	37.205	34.408	35.115	69.523	39.220	39.843	40.447	34.408					
2.8 Supervision costs	24.457	27.591	24.675	20.822	24.590	27.207	16.804	15.416	16.999	16.958	33.957	16.897	15.991	15.128	16.999					
2.9 Other State costs	57.815	55.401	54.408	52.454	51.978	51.016	49.748	50.763	46.003	48.516	94.519	49.034	49.289	49.421	46.003					
<b>2.10 Total costs</b>	<b>722.110</b>	<b>724.607</b>	<b>706.353</b>	<b>727.919</b>	<b>704.558</b>	<b>694.696</b>	<b>695.749</b>	<b>720.002</b>	<b>720.906</b>	<b>726.631</b>	<b>1.447.537</b>	<b>736.466</b>	<b>749.156</b>	<b>757.250</b>	<b>720.906</b>					
Total % n/n-1		0,3%	-2,5%	3,1%	-3,2%	-1,4%	0,2%	3,5%	0,1%	0,8%	1,4%	1,7%	1,7%	1,1%	0,1%					
<b>3. Complementary information (in nominal terms)</b>																				
<b>Average asset base</b>																				
3.1 Net book val. fixed assets	978.261	968.383	952.720	919.767	922.537	953.691	975.286	966.559	849.661	822.194		845.572	846.416	817.713	849.661					
3.2 Adjustments total assets	0	0	0	0	6.919	350	471	0	4.708	-17.046		-28.358	-27.979	-28.175	4.708					
3.3 Net current assets	432.876	439.358	427.770	307.555	295.977	365.293	443.423	481.364	92.382	230.020		500.676	544.837	512.117	92.382					
3.4 Total asset base	1.411.137	1.407.742	1.380.489	1.227.322	1.225.433	1.319.334	1.419.180	1.447.923	946.751	1.035.169		1.317.890	1.363.275	1.301.655	946.751					
<b>Cost of capital %</b>																				
3.5 Cost of capital pre tax rate																				
3.6 Return on equity																				
3.7 Average interest on debts																				
3.8 Share of financing through equity																				
<b>Costs of common projects</b>																				
3.9 Common projects	0	0	0	1.078	4.351	3.244	8.594	7.444	10.046	13.129	23.175	15.776	16.937	16.870	10.046					
<b>Costs of new and existing investments</b>																				
3.10 Depreciation									89.941	92.386	182.327	101.886	104.492	103.943	89.941					
3.11 Cost of capital									43.692	37.733	81.425	27.581	27.219	27.367	43.692					
3.12 Cost of leasing									0	0	0	0	0	0	0					
<b>Eurocontrol costs</b>																				
3.13 Eurocontrol costs (Euro)																				
3.14 Exchange rate (if applicable)																				
3.15 Eurocontrol costs (national currency)	56.572	54.349	53.168	52.454	51.978	51.016	49.748	50.763	46.003	48.516	94.519	49.034	49.289	49.421	46.003					
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																				
4.1 Costs for exempted VFR flights	7.775	8.200	7.399	8.373	9.239	8.276	8.700	18.883	18.800	18.800	37.600	18.800	18.800	18.800	18.800					
<b>4.2 Total determined/actual costs</b>	<b>714.335</b>	<b>716.407</b>	<b>698.954</b>	<b>719.546</b>	<b>695.319</b>	<b>686.420</b>	<b>687.049</b>	<b>701.119</b>	<b>702.106</b>	<b>707.831</b>	<b>1.409.937</b>	<b>717.666</b>	<b>730.356</b>	<b>738.450</b>	<b>702.106</b>					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																				
5.1 Inflation %	2,40%	0,50%	0,30%	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	97,9	98,4	98,7	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
5.3 Total costs real terms (2)	724.581	724.025	705.074	725.030	700.718	686.420	683.548	694.065	693.889	694.248	1.388.137	697.647	702.906	702.789	693.889					
Total % n/n-1		-0,1%	-2,6%	2,8%	-3,4%	-2,0%	-0,4%	1,5%	0,0%	0,1%		0,5%	0,8%	0,0%	0,0%					
5.4 Total Service Units	1.428,7	1.523,7	1.532,0	1.583,4	1.621,1	1.665,7	1.709,1	1.780,6	716,8	767,2	1.484,0	1.455,2	1.660,6	1.784,2	716,8					
Total % n/n-1		6,6%	0,5%	3,4%	2,4%	2,7%	2,6%	4,2%	-59,7%	7,0%		89,7%	14,1%	7,4%	-59,7%					
5.5 Unit cost in real terms prices (3)	507,15	475,17	460,23	457,88	432,24	412,10	399,95	389,78	968,07	904,93	935,43	479,43	423,28	393,90	968,07					
Total % n/n-1		-6,3%	-3,1%	-0,5%	-5,6%	-4,7%	-2,9%	-2,5%	148,4%	-6,5%		-47,0%	-11,7%	-6,9%	148,4%					

IMF April 2021

TSU

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017  
(2) Determined costs (performance plan) and actual costs in real terms  
(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Cost details		Actual costs 2012-2019								Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																					
1.1 Staff		377.474	380.212	366.233	375.395	384.906	382.684	384.080	384.314	423.265	361.705	784.970	355.324	365.830	374.480	423.265					
	of which, pension costs									74.477	65.919	140.396	62.524	64.696	66.474	74.477					
1.2 Other operating costs		98.946	88.233	94.228	107.819	99.371	107.491	112.963	124.610	126.951	128.291	255.242	128.326	131.227	126.636	126.951					
1.3 Depreciation		85.286	89.685	81.975	82.856	75.808	72.017	77.560	80.323	87.845	89.974	177.819	98.251	100.785	100.161	87.845					
1.4 Cost of capital		59.548	62.004	61.324	57.101	44.778	28.923	25.149	29.509	48.344	46.797	95.141	42.742	43.600	43.320	48.344					
1.5 Exceptional items		-15.295	-17.013	-16.538	-13.907	-15.755	-16.210	-16.226	-15.310	-74.355	-9.705	-84.060	-5.050	-7.126	-2.083	-74.355					
1.6 Total costs		605.959	603.121	587.222	609.264	589.108	574.905	583.526	603.445	612.050	617.062	1.229.112	619.593	634.316	642.514	612.050					
	Total % n/n-1		-0,5%	-2,6%	3,8%	-3,3%	-2,4%	1,5%	3,4%	1,4%	0,8%		0,4%	2,4%	1,3%	1,4%					
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management		558.953	556.334	541.669	566.250	547.517	534.317	542.329	560.842	568.839	573.497	1.142.337	575.849	589.534	597.152	568.839					
2.2 Communication		15.789	15.715	15.301	16.024	15.494	15.120	15.347	15.871	16.097	16.229	32.326	16.295	16.683	16.898	16.097					
2.3 Navigation		6.247	6.218	6.054	6.336	6.127	5.979	6.069	6.276	6.365	6.417	12.783	6.444	6.597	6.682	6.365					
2.4 Surveillance		13.432	13.369	13.016	13.587	13.137	12.820	13.013	13.457	13.649	13.760	27.409	13.817	14.145	14.328	13.649					
2.5 Search and rescue												0									
2.6 Aeronautical Information		3.404	3.388	3.298	7.067	6.834	6.669	6.769	7.000	7.100	7.158	14.258	7.187	7.358	7.453	7.100					
2.7 Meteorological services												0									
2.8 Supervision costs		8.135	8.097	7.883																	
2.9 Other State costs																					
2.10 Total costs		605.959	603.121	587.222	609.264	589.108	574.905	583.526	603.445	612.050	617.062	1.229.112	619.593	634.316	642.514	612.050					
	Total % n/n-1		-0,5%	-2,6%	3,8%	-3,3%	-2,4%	1,5%	3,4%	1,4%	0,8%		0,4%	2,4%	1,3%	1,4%					
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets		970.661	960.783	944.461	909.811	912.581	936.816	957.940	950.679	833.781	806.167		814.299	815.326	786.426	833.781					
3.2 Adjustments total assets								0	0	4.561	-32.292		-28.175	-28.175	-28.175	4.561					
3.3 Net current assets		432.876	439.358	427.770	307.555	295.977	365.293	443.423	481.364	92.382	230.020		500.676	544.837	512.117	92.382					
3.4 Total asset base		1.403.537	1.400.142	1.372.230	1.217.366	1.208.558	1.302.109	1.401.363	1.432.043	930.724	1.003.896		1.286.800	1.331.989	1.270.368	930.724					
Cost of capital %																					
3.5 Cost of capital pre tax rate		4,24%	4,43%	4,47%	4,69%	3,71%	2,22%	1,79%	2,06%	5,19%	4,66%		3,32%	3,27%	3,41%	5,19%					
3.6 Return on equity		5,00%	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%		5,00%	5,00%	5,00%	5,00%					
3.7 Average interest on debts		3,71%	4,14%	4,20%	4,50%	2,90%	0,61%	0,12%	0,57%	9,00%	5,27%		1,88%	1,82%	1,93%	9,00%					
3.8 Share of financing through equity		41,17%	33,50%	33,62%	38,11%	38,34%	36,70%	34,27%	33,63%	95,14%	226,93%		46,29%	45,64%	48,15%	95,14%					
Costs of common projects																					
3.9 Common projects					1.078	4.351	3.244	8.594	7.444	10.046	13.129	23.175	15.776	16.937	16.870	10.046					
Costs of new and existing investments																					
3.10 Depreciation										87.845	89.974	177.819	98.251	100.785	100.161	87.845					
3.11 Cost of capital										43.309	37.580	80.888	27.048	26.688	26.818	43.309					
3.12 Cost of leasing												0									
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights		7.775	8.200	7.399	8.373	9.239	8.276	8.700	18.883	18.800	18.800	37.600	18.800	18.800	18.800	18.800					
4.2 Total determined/actual costs		598.184	594.921	579.823	600.891	579.869	566.629	574.826	584.562	593.250	598.262	1.191.512	600.793	615.516	623.714	593.250					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %		2,40%	0,50%	0,30%	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)		97,9	98,4	98,7	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
5.3 Total costs real terms (2)		607.769	602.040	585.507	605.961	584.921	566.629	571.544	577.985	585.570	585.570	1.171.140	582.191	589.995	590.547	585.570					
	Total % n/n-1		-0,9%	-2,7%	3,5%	-3,5%	-3,1%	0,9%	1,1%	0,0%			-0,6%	1,3%	0,1%	1,3%					
5.4 Total Service Units		1.428,7	1.523,7	1.532,0	1.583,4	1.621,1	1.665,7	1.709,1	1.780,6	716,8	767,2	1.484,0	1.455,2	1.660,6	1.784,2	716,8					
	Total % n/n-1		6,6%	0,5%	3,4%	2,4%	2,7%	2,6%	4,2%	-59,7%	7,0%		89,7%	14,1%	7,4%	-59,7%					
5.5 Unit cost in real terms prices (3)		425,39	395,11	382,18	382,69	360,81	340,18	334,42	324,59	816,95	763,27	789,20	400,09	355,29	330,99	816,95					
	Total % n/n-1		-7,1%	-3,3%	0,1%	-5,7%	-5,7%	-1,7%	-2,9%	151,7%	-6,6%		-47,6%	-11,2%	-6,8%	151,7%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

567.460	579.530	585.560
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2,5	1,8	0,8
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Table 1 - Total Costs and Unit Costs

Denmark  
Currency: DKK  
DMI

Cost details	Actual costs 2012-2019									Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																				
1.1 Staff	25.388	20.130	19.067	20.591	13.752	12.833	12.445	16.204	16.678	16.928	33.606	14.949	15.189	15.418	16.678					
of which, pension costs									2.508	2.546	5.054	2.646	2.688	2.729	2.508					
1.2 Other operating costs	5.931	10.938	14.381	17.018	17.772	17.207	19.106	18.175	15.247	15.475	30.722	20.106	20.412	20.698	15.247					
1.3 Depreciation	3.426	3.625	1.919	1.293	1.514	2.986	1.901	2.345	2.096	2.412	4.508	3.635	3.707	3.782	2.096					
1.4 Cost of capital	595	403	213	144	419	478	474	481	387	300	687	530	535	549	387					
1.5 Exceptional items							0	0	0	0	0	0	0	0	0					
1.6 Total costs	35.340	35.096	35.580	39.045	33.457	33.504	33.926	37.205	34.408	35.115	69.523	39.220	39.843	40.447	34.408					
Total % n/n-1		-0,7%	1,4%	9,7%	-14,3%	0,1%	1,3%	9,7%	-7,5%	2,1%		11,7%	1,6%	1,5%	-7,5%					
<b>2. Detail by service (in nominal terms)</b>																				
2.1 Air Traffic Management																				
2.2 Communication																				
2.3 Navigation																				
2.4 Surveillance																				
2.5 Search and rescue																				
2.6 Aeronautical Information																				
2.7 Meteorological services	34.340	34.096	34.580	39.045	33.457	33.504	33.926	37.205	34.408	35.115	69.523	39.220	39.843	40.447	34.408					
2.8 Supervision costs																				
2.9 Other State costs	1.000	1.000	1.000																	
2.10 Total costs	35.340	35.096	35.580	39.045	33.457	33.504	33.926	37.205	34.408	35.115	69.523	39.220	39.843	40.447	34.408					
Total % n/n-1		-0,7%	1,4%	9,7%	-14,3%	0,1%	1,3%	9,7%	-7,5%	2,1%		11,7%	1,6%	1,5%	-7,5%					
<b>3. Complementary information (in nominal terms)</b>																				
<b>Average asset base</b>																				
3.1 Net book val. fixed assets	7.600	7.600	8.259	9.956	9.956	16.875	17.346	15.880	15.880	16.027		31.273	31.090	31.287	15.880					
3.2 Adjustments total assets					6.919	350	471	0	147	15.246		-183	196	0	147					
3.3 Net current assets							0	0	0	0		0	0	0	0					
3.4 Total asset base	7.600	7.600	8.259	9.956	16.875	17.225	17.817	15.880	16.027	31.273		31.090	31.286	31.287	16.027					
<b>Cost of capital %</b>																				
3.5 Cost of capital pre tax rate	7,83%	5,30%	2,58%	1,44%	2,48%	2,78%	2,66%	3,03%	2,42%	0,96%		1,71%	1,71%	1,75%	2,42%					
3.6 Return on equity																				
3.7 Average interest on debts	5,00%	5,00%	5,00%	5,00%	4,50%	5,00%	5,00%	5,00%	2,42%	0,96%		1,71%	1,71%	1,75%	2,42%					
3.8 Share of financing through equity	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
<b>Costs of common projects</b>																				
3.9 Common projects											0									
<b>Costs of new and existing investments</b>																				
3.10 Depreciation									2.096	2.412	4.508	3.635	3.707	3.782	2.096					
3.11 Cost of capital									384	153	537	533	531	549	384					
3.12 Cost of leasing									0	0	0	0	0	0	0					
<b>Eurocontrol costs</b>																				
3.13 Eurocontrol costs (Euro)																				
3.14 Exchange rate (if applicable)																				
3.15 Eurocontrol costs (national currency)																				
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																				
4.1 Costs for exempted VFR flights											0									
4.2 Total determined/actual costs	35.340	35.096	35.580	39.045	33.457	33.504	33.926	37.205	34.408	35.115	69.523	39.220	39.843	40.447	34.408					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																				
5.1 Inflation %	2,40%	0,50%	0,30%	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	97,9	98,4	98,7	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
5.3 Total costs real terms (2)	36.002	35.595	36.016	39.459	33.804	33.504	33.707	36.729	33.872	34.224	68.096	37.802	37.914	37.953	33.872					
Total % n/n-1		-1,1%	1,2%	9,6%	-14,3%	-0,9%	0,6%	9,0%	-7,8%	1,0%		10,5%	0,3%	0,1%	-7,8%					
5.4 Total Service Units	1.428,7	1.523,7	1.532,0	1.583,4	1.621,1	1.665,7	1.709,1	1.780,6	716,8	767,2	1.484,0	1.455,2	1.660,6	1.784,2	716,8					
Total % n/n-1		6,6%	0,5%	3,4%	2,4%	2,7%	2,6%	4,2%	-59,7%	7,0%		89,7%	14,1%	7,4%	-59,7%					
5.5 Unit cost in real terms prices (3)	25,20	23,36	23,51	24,92	20,85	20,11	19,72	20,63	47,26	44,61	45,89	25,98	22,83	21,27	47,26					
Total % n/n-1		-7,3%	0,6%	6,0%	-16,3%	-3,5%	-1,9%	4,6%	129,1%	-5,6%		-41,8%	-12,1%	-6,8%	129,1%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Denmark  
Currency: DKK  
Trafikstyrelsen

Cost details	Actual costs 2012-2019									Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																				
1.1 Staff	13.693	15.859	12.241	14.298	15.773	17.048	14.666	13.940	16.423	9.240	25.663	9.628	9.670	8.768	16.423					
of which, pension costs									1.978	0	1.978	0	0	0	1.978					
1.2 Other operating costs	67.118	70.532	71.310	65.311	66.220	69.239	63.631	65.412	58.004	65.214	123.398	68.026	65.376	65.522	58.004					
1.3 Depreciation									0	0	0	0	0	0	0					
1.4 Cost of capital									0	0	0	0	0	0	0					
1.5 Exceptional items									0	0	0	0	0	0	0					
1.6 Total costs	80.810	86.391	83.551	79.610	81.993	86.287	78.297	79.351	74.448	74.454	148.901	77.654	74.997	74.289	74.448					
Total % n/n-1		6,9%	-3,3%	-4,7%	3,0%	5,2%	-9,3%	1,3%	-6,2%	0,0%	100,34	4,3%	-3,4%	-0,9%	-6,2%					0
<b>2. Detail by service (in nominal terms)</b>																				
2.1 Air Traffic Management	5.663	9.481	8.977	1.497	5.126	7.803	10.715	11.477	11.446	8.979	20.425	11.722	9.716	9.740	11.446					
2.2 Communication																				
2.3 Navigation																				
2.4 Surveillance																				
2.5 Search and rescue																				
2.6 Aeronautical information	2.011	3.015	4.375	4.836	299	261	1.030	1.695	0	0	0	0	0	0						
2.7 Meteorological services																				
2.8 Supervision costs	16.322	19.494	16.791	20.822	24.590	27.207	16.804	15.416	16.999	16.958	33.957	16.897	15.991	15.128	16.999					
2.9 Other State costs	56.815	54.401	53.408	52.454	51.978	51.016	49.748	50.763	46.003	48.516	94.519	49.034	49.289	49.421	46.003					
2.10 Total costs	80.810	86.391	83.551	79.610	81.993	86.287	78.297	79.351	74.448	74.454	148.901	77.654	74.997	74.289	74.448					
Total % n/n-1		6,9%	-3,3%	-4,7%	3,0%	5,2%	-9,3%	1,3%	-6,2%	0,0%	100,34	4,3%	-3,4%	-0,9%	-6,2%					
<b>3. Complementary information (in nominal terms)</b>																				
<b>Average asset base</b>																				
3.1 Net book val. fixed assets									0	0	0	0	0	0	0					
3.2 Adjustments total assets									0	0	0	0	0	0	0					
3.3 Net current assets									0	0	0	0	0	0	0					
3.4 Total asset base									0	0	0	0	0	0	0					
<b>Cost of capital %</b>																				
3.5 Cost of capital pre tax rate									0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%					
3.6 Return on equity									0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%					
3.7 Average interest on debts									0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity									0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%					
<b>Costs of common projects</b>																				
<b>Costs of new and existing investments</b>																				
3.10 Depreciation																				
3.11 Cost of capital																				
3.12 Cost of leasing																				
<b>Eurocontrol costs</b>																				
3.13 Eurocontrol costs (Euro)	7.602	7.290	7.134	7.003	6.965	6.816	6.744	6.735	6.173	6.526		6.596	6.630	6.648	6.173					
3.14 Exchange rate (if applicable)	7.44164	7.45584	7.45318	7.49056	7.46295	7.48521	7.37696	7.53770	7.43253	7.43447		7.43447	7.43447	7.43447	7					
3.15 Eurocontrol costs (national currency)	56.572	54.349	53.168	52.454	51.978	51.016	49.748	50.763	46.003	48.516	94.519	49.034	49.289	49.421	46.003					
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																				
4.1 Costs for exempted VFR flights											0									
4.2 Total determined/actual costs	80.810	86.391	83.551	79.610	81.993	86.287	78.297	79.351	74.448	74.454	148.901	77.654	74.997	74.289	74.448					
<b>5. Cost efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																				
5.1 Inflation %																				
5.2 Inflation index (1)																				
5.3 Total costs real terms (2)	80.810	86.391	83.551	79.610	81.993	86.287	78.297	79.351	74.448	74.454	148.901	77.654	74.997	74.289	74.448					
Total % n/n-1		6,9%	-3,3%	-4,7%	3,0%	5,2%	-9,3%	1,3%	-6,2%	0,0%	100,34	4,3%	-3,4%	-0,9%	-6,2%					
5.4 Total Service Units	1.428,7	1.523,7	1.532,0	1.583,4	1.621,1	1.665,7	1.709,1	1.780,6	716,8	767,2	1.484,0	1.455,2	1.460,6	1.786,2	716,8					
Total % n/n-1		6,6%	0,5%	3,4%	2,4%	2,7%	2,8%	4,2%	-39,7%	7,0%	100,34	89,7%	14,1%	7,4%	-59,7%					
5.5 Unit cost in real terms prices (3)	56,56	56,70	54,54	50,28	50,58	51,80	45,81	44,56	103,86	97,05	100,34	53,36	45,16	41,64	103,86					
Total % n/n-1		0,2%	-3,8%	-7,8%	0,6%	2,4%	-11,6%	-2,7%	133,1%	-6,6%	100,34	45,0%	-15,4%	-7,8%	133,1%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms



Table 2 - Unit rate calculation

Denmark  
Currency: DKK  
All Entities

Reference period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>					
<b>Determined costs</b>					
<b>1.1</b>	<b>Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)</b>	<b>1.409.936,6</b>	<b>717.666,3</b>	<b>730.355,6</b>	<b>738.450,3</b>
<b>Inflation adjustment calculation</b>					
2.1	Determined costs subject to inflation adjustment	982.880,3	494.854,4	506.732,7	516.348,5
2.2	Forecast inflation index - Table 1		104,22	105,73	107,42
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
<b>2.5</b>	<b>Inflation adjustment relating to year n (Art. 26)</b>				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
<b>3.8</b>	<b>Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))</b>				
<b>B. Traffic risk sharing</b>					
<b>Traffic risk sharing adjustment</b>					
4.1	Determined costs subject to traffic risk sharing	1.191.512,0	600.792,5	615.516,3	623.713,9
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	1.484,0	1.455,2	1.660,6	1.784,2
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
<b>4.9</b>	<b>Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))</b>				
<b>Traffic adjustments</b>					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
<b>5.3</b>	<b>Traffic adjustments relating to year n (Art. 27(8) and 27(9))</b>				
<b>C. Financial incentive schemes on capacity and environment</b>					
<b>Adjustments relating to financial incentives</b>					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
<b>6.4</b>	<b>Financial incentives relating to year n (Art. 11(3) and 11(4))</b>				
<b>D. Other adjustments</b>					
<b>Modulation of charges</b>					
<b>7.1</b>	<b>Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))</b>				
<b>Revision of the unit rate</b>					
8.1	Temporary unit rate applied in year n	Footnote 2			
<b>8.2</b>	<b>Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))</b>	<b>704.881,7</b>			
<b>Cross-financing between charging zones</b>					
<b>9.1</b>	<b>Cross-financing to (-) / from (+) other charging zone(s) relating to year n</b>				
<b>Other revenues</b>					
10.1	Union assistance programmes (Art. 25(3)(a))	-9.895,0	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))				
<b>10.5</b>	<b>Total other revenues relating to year n (Art. 25(3))</b>	<b>-9.895,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
<b>Application of a lower unit rate</b>					
<b>11.1</b>	<b>Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
<b>12</b>	<b>Total adjustments relating to year n</b>	<b>694.986,7</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>

704.882 704.882

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	1.409.936,55	717.666,27	730.355,63	738.450,31
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 118.684,27	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 50.733,16	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	- 10.296,90	-	-	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 12.691,78	- 28.067,78	- 60.020,48	- 23.784,04
13.8	Other revenues (Art. 25(2)(i))	- 7.173,00	-	- 9.895,00	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	100.697,39	100.697,39
<b>13.11</b>	<b>Grand total for the calculation of year n unit rate</b>	<b>1.210.357,4</b>	<b>689.598,5</b>	<b>761.137,5</b>	<b>815.363,7</b>
<b>13.12</b>	<b>Forecast total service units for year n (performance plan)</b>	<b>1.484,0</b>	<b>1.455,2</b>	<b>1.660,6</b>	<b>1.784,2</b>
<b>13.13</b>	<b>Unit rate for year n as per Art. 25(2) (in national currency)</b>	<b>815,63</b>	<b>473,90</b>	<b>458,35</b>	<b>457,00</b>
<b>13.14</b>	<b>Reduction as per Art. 29(6), where applicable (in national currency)</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>
<b>14</b>	<b>Applicable unit rate for year n</b>	<b>815,63</b>	<b>473,90</b>	<b>458,35</b>	<b>457,00</b>

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

4) Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2020

Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2021

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

429,26

403,63

-

-

1.680,27

1.711,33

Table 2 - Unit rate calculation

Denmark  
Currency: DKK  
Naviair

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>				
<b>Determined costs</b>				
<b>1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)</b>	<b>1.191.512,0</b>	<b>600.792,5</b>	<b>615.516,3</b>	<b>623.713,9</b>
<b>Inflation adjustment calculation</b>				
2.1 Determined costs subject to inflation adjustment	918.552,0	459.799,4	471.131,7	480.232,5
2.2 Forecast inflation index - Table 1		104,2	105,7	107,4
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
<b>2.5 Inflation adjustment relating to year n (Art. 26)</b>				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
<b>3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))</b>				
<b>B. Traffic risk sharing</b>				
<b>Traffic risk sharing adjustment</b>				
4.1 Determined costs subject to traffic risk sharing	1.191.512,0	600.792,5	615.516,3	623.713,9
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	1.484,0	1.455,2	1.660,6	1.784,2
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
<b>4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))</b>				
<b>Traffic adjustments</b>				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
<b>5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))</b>				
<b>C. Financial incentive schemes on capacity and environment</b>				
<b>Adjustments relating to financial incentives</b>				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
<b>6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))</b>				
<b>D. Other adjustments</b>				
<b>Modulation of charges</b>				
<b>7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))</b>				
<b>Revision of the unit rate</b>				
8.1 Temporary unit rate applied in year n	Footnote 2			
<b>8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))</b>	<b>591.414,4</b>			
<b>Cross-financing between charging zones</b>				
<b>9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n</b>				
<b>Other revenues</b>				
10.1 Union assistance programmes (Art. 25(3)(a))	-9.895,0			
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
<b>10.5 Total other revenues relating to year n (Art. 25(3))</b>	<b>-9.895,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
<b>Application of a lower unit rate</b>				
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
<b>12 Total adjustments relating to year n</b>	<b>581.519,4</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>

591.414 591.414

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	1.191.511,98	600.792,51	615.516,32	623.713,87
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 98.387,75	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 50.733,16	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	5.511,13	- 18.510,60	- 42.294,64	- 23.784,04
13.8 Other revenues (Art. 25(2)(i))	- 7.173,00	-	- 9.895,00	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	84.487,77	84.487,77
<b>13.11 Grand total for the calculation of year n unit rate</b>	<b>1.040.729,2</b>	<b>582.281,9</b>	<b>647.814,4</b>	<b>684.417,6</b>
<b>13.12 Forecast total service units for year n (performance plan)</b>	<b>1.484,0</b>	<b>1.455,2</b>	<b>1.660,6</b>	<b>1.784,2</b>
<b>13.13 Unit rate for year n as per Art. 25(2) (in national currency)</b>	<b>701,32</b>	<b>400,15</b>	<b>390,11</b>	<b>383,61</b>
<b>13.14 Reduction as per Art. 29(6), where applicable (in national currency)</b>	<b>0,00</b>	<b>0,00</b>		
<b>14 Applicable unit rate for year n</b>	<b>701,32</b>	<b>400,15</b>	<b>390,11</b>	<b>383,61</b>

Fordeles på 2 år

Costs, revenues and other amounts in '000 - Service units in '000

- (1) Including adjustments relating to previous reference periods (Art. 25(2)(l))  
(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)  
Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)  
3) Reduction as per Art. 29(6) applied in 2020 (in national currency)  
Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Denmark  
Currency: DKK  
DMI

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>				
<b>Determined costs</b>				
<b>1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)</b>	<b>69.523,4</b>	<b>39.220,1</b>	<b>39.842,6</b>	<b>40.447,0</b>
<b>Inflation adjustment calculation</b>				
2.1 Determined costs subject to inflation adjustment	64.328,3	35.055,0	35.601,0	36.116,0
2.2 Forecast inflation index - Table 1		104,2	105,7	107,4
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
<b>2.5 Inflation adjustment relating to year n (Art. 26)</b>				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
<b>3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))</b>				
<b>B. Traffic risk sharing</b>				
<b>Traffic risk sharing adjustment</b>				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	1.484,0	1.455,2	1.660,6	1.784,2
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
<b>4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))</b>				
<b>Traffic adjustments</b>				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
<b>5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))</b>				
<b>C. Financial incentive schemes on capacity and environment</b>				
<b>Adjustments relating to financial incentives</b>				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
<b>6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))</b>				
<b>D. Other adjustments</b>				
<b>Modulation of charges</b>				
<b>7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))</b>				
<b>Revision of the unit rate</b>				
8.1 Temporary unit rate applied in year n	Footnote 2			
<b>8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))</b>	<b>36.067,0</b>			
<b>Cross-financing between charging zones</b>				
<b>9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n</b>				
<b>Other revenues</b>				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
<b>10.5 Total other revenues relating to year n (Art. 25(3))</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
<b>Application of a lower unit rate</b>				
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
<b>12 Total adjustments relating to year n</b>	<b>36.067,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>

36.067 36.067

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	69.523,38	39.220,10	39.842,63	40.447,00
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 5.312,02	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 4.755,51	- 2.500,89	- 3.148,10	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	5.152,42	5.152,42
<b>13.11 Grand total for the calculation of year n unit rate</b>	<b>59.455,9</b>	<b>36.719,2</b>	<b>41.847,0</b>	<b>45.599,4</b>
<b>13.12 Forecast total service units for year n (performance plan)</b>	<b>1.484,0</b>	<b>1.455,2</b>	<b>1.660,6</b>	<b>1.784,2</b>
<b>13.13 Unit rate for year n as per Art. 25(2) (in national currency)</b>	<b>40,07</b>	<b>25,23</b>	<b>25,20</b>	<b>25,56</b>
<b>13.14 Reduction as per Art. 29(6), where applicable (in national currency)</b>	<b>0,00</b>	<b>0,00</b>		
<b>14 Applicable unit rate for year n</b>	<b>40,07</b>	<b>25,23</b>	<b>25,20</b>	<b>25,56</b>

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Denmark  
Currency: DKK  
Trafikstyrelsen

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>				
<b>Determined costs</b>				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	148.901,2	77.653,7	74.996,7	74.289,4
<b>Inflation adjustment calculation</b>				
2.1 Determined costs subject to inflation adjustment				
2.2 Forecast inflation index - Table 1				
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
<b>B. Traffic risk sharing</b>				
<b>Traffic risk sharing adjustment</b>				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	1.484,0	1.455,2	1.660,6	1.784,2
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
<b>Traffic adjustments</b>				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
<b>C. Financial incentive schemes on capacity and environment</b>				
<b>Adjustments relating to financial incentives</b>				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				
<b>D. Other adjustments</b>				
<b>Modulation of charges</b>				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
<b>Revision of the unit rate</b>				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	77.400,4			
<b>Cross-financing between charging zones</b>				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
<b>Other revenues</b>				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
<b>Application of a lower unit rate</b>				
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
12 Total adjustments relating to year n	77.400,4	0,0	0,0	0,0

77.400 77.400

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	148.901,19	77.653,66	74.996,68	74.289,44
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 14.984,50	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	- 10.296,90	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 13.447,40	- 7.056,29	- 14.577,74	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	11.057,20	11.057,20
13.11 Grand total for the calculation of year n unit rate	110.172,4	70.597,4	71.476,1	85.346,6
13.12 Forecast total service units for year n (performance plan)	1.484,0	1.455,2	1.660,6	1.784,2
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	74,24	48,52	43,04	47,84
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	74,24	48,52	43,04	47,84

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Denmark Currency: DKK All Entities								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2.024	After RP
2018	Inflation adjustment 2018	-54.195	-54.195	0	0	0	0	0
2019	Inflation adjustment 2019	-64.490	0	-64.490	0	0	0	0
RP2	Total inflation adjustment up to 2019	-118.684	-54.195	-64.490	0	0	0	0
DELETED								
2020-2021	Inflation adjustment 2020-2021	0	0	0	0	0	0	0
2022	Inflation adjustment 2022	0	0	0	0	0	0	0
2023	Inflation adjustment 2023	0	0	0	0	0	0	0
2024	Inflation adjustment 2024	0	0	0	0	0	0	0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-118.684</b>	<b>-54.195</b>	<b>-64.490</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017	0	0	0	0	0	0	0
2018	Traffic risk sharing 2018	-18.630	-18.630	0	0	0	0	0
2019	Traffic risk sharing 2019	-32.103	0	-32.103	0	0	0	0
RP2	Total traffic risk sharing adjustments up to 2019	-50.733	-18.630	-32.103	0	0	0	0
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Traffic risk sharing 2022	0	0	0	0	0	0	0
2023	Traffic risk sharing 2023	0	0	0	0	0	0	0
2024	Traffic risk sharing 2024	0	0	0	0	0	0	0
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>	<b>-50.733</b>	<b>-18.630</b>	<b>-32.103</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in investment costs 2022	0	0	0	0	0	0	0
2023	Difference in investment costs 2023	0	0	0	0	0	0	0
2024	Difference in investment costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0	0	0	0	0	0	0
2022	Difference in competent authorities and QEs costs 2022	0	0	0	0	0	0	0
2023	Difference in competent authorities and QEs costs 2023	0	0	0	0	0	0	0
2024	Difference in competent authorities and QEs costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in Eurocontrol costs 2022	0	0	0	0	0	0	0
2023	Difference in Eurocontrol costs 2023	0	0	0	0	0	0	0
2024	Difference in Eurocontrol costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in pension costs 2022	0	0	0	0	0	0	0
2023	Difference in pension costs 2023	0	0	0	0	0	0	0
2024	Difference in pension costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in interest on loans 2022	0	0	0	0	0	0	0
2023	Difference in interest on loans 2023	0	0	0	0	0	0	0
2024	Difference in interest on loans 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Costs relating to change in law 2022	0	0	0	0	0	0	0
2023	Costs relating to change in law 2023	0	0	0	0	0	0	0
2024	Costs relating to change in law 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	-1.381	0	-1.381	0	0	0	0
2018	Cost exempt from cost sharing 2018	-4.248	0	-4.248	0	0	0	0
2019	Cost exempt from cost sharing 2019	-4.668	0	-4.668	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>-10.297</b>	<b>0</b>	<b>-10.297</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017	0	0	0	0	0	0	0
2018	Financial incentives year 2018	0	0	0	0	0	0	0
2019	Financial incentives year 2019	0	0	0	0	0	0	0
RP2	Total financial incentives up to 2019	0	0	0	0	0	0	0
DELETED								
DELETED								
2022	Financial incentives year 2022	0	0	0	0	0	0	0
2023	Financial incentives year 2023	0	0	0	0	0	0	0
2024	Financial incentives year 2024	0	0	0	0	0	0	0
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Modulation of charges up to 2017	0	0	0	0	0	0	0
2018	Modulation of charges year 2018	0	0	0	0	0	0	0
2019	Modulation of charges year 2019	0	0	0	0	0	0	0
RP2	Total modulation of charges up 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Modulation of charges 2020-2021	0	0	0	0	0	0	0
2022	Modulation of charges 2022	0	0	0	0	0	0	0
2023	Modulation of charges 2023	0	0	0	0	0	0	0
2024	Modulation of charges 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	-5.811	-5.811	0	0	0	0	0
2019	Traffic adjustment 2019	-6.881	0	-6.881	0	0	0	0
RP2	Total traffic adjustments up to 2019	-12.692	-5.811	-6.881	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-46.578	0	0	-28.068	-18.511	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-65.294	0	0	0	-41.510	-23.784	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0	0	0	0	0	0	0
2023	Traffic adjustment on adjustments from previous RPs 2023	0	0	0	0	0	0	0
2024	Traffic adjustment on adjustments from previous RPs 2024	0	0	0	0	0	0	0

RP2	Total traffic adjustment on adjustments from previous reference periods	-111.872	0	0	-28.068	-60.020	-23.784	0
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Traffic adjustment 2022	0	0	0	0	0	0	0
2023	Traffic adjustment 2023	0	0	0	0	0	0	0
2024	Traffic adjustment 2024	0	0	0	0	0	0	0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-124.564</b>	<b>-5.811</b>	<b>-6.881</b>	<b>-28.068</b>	<b>-60.020</b>	<b>-23.784</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	-2.594	-2.594	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	-4.579	0	-4.579	0	0	0	0
RP2	Total revenues received from Union assistance programmes up to 2019	-7.173	-2.594	-4.579	0	0	0	0
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	-9.895	0	0	0	-9.895	0	0
2022	Revenues received from Union assistance programmes in 2022	0	0	0	0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0	0	0	0	0	0	0
2024	Revenues received from Union assistance programmes in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>-17.068</b>	<b>-2.594</b>	<b>-4.579</b>	<b>0</b>	<b>-9.895</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0	0	0	0	0	0	0
2023	Revenues received from national public funding in 2023	0	0	0	0	0	0	0
2024	Revenues received from national public funding in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from commercial activities in 2022	0	0	0	0	0	0	0
2023	Revenues from commercial activities in 2023	0	0	0	0	0	0	0
2024	Revenues from commercial activities in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
2018	Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
2019	Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
RP2	Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from contracts with airport operators in 2022	0	0	0	0	0	0	0
2023	Revenues from contracts with airport operators in 2023	0	0	0	0	0	0	0
2024	Revenues from contracts with airport operators in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	704.882	0	0	0	100.697	100.697	503.487
2022	Revenue difference - revision of UR 2022	0	0	0	0	0	0	0
2023	Revenue difference - revision of UR 2023	0	0	0	0	0	0	0
2024	Revenue difference - revision of UR 2024	0	0	0	0	0	0	0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>704.882</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100.697</b>	<b>100.697</b>	<b>503.487</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021	0	0	0	0	0	0	0
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022	0	0	0	0	0	0	0
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023	0	0	0	0	0	0	0
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024	0	0	0	0	0	0	0
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total adjustments</b>		<b>383.535</b>	<b>-81.230</b>	<b>-118.349</b>	<b>-28.068</b>	<b>30.782</b>	<b>76.913</b>	<b>503.487</b>

Amounts in '000 (national currency)

\* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Adjustments from previous RPs	-311.451	-81.230	-118.349	-28.068	-60.020	-23.784	0
RP3 adjustments	694.987	0	0	0	90.802	100.697	503.487
<b>Total adjustments</b>	<b>383.535</b>	<b>-81.230</b>	<b>-118.349</b>	<b>-28.068</b>	<b>30.782</b>	<b>76.913</b>	<b>503.487</b>

Table 3 - Complementary information on adjustments

Denmark Currency: DKK Naviar								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
2018	Inflation adjustment 2018	-44.939	-44.939					
2019	Inflation adjustment 2019	-53.449		-53.449				
RP2	Total inflation adjustment up to 2019	-98.388	-44.939	-53.449				
DELETED								
2020-2021	Inflation adjustment 2020-2021	0				0		
2022	Inflation adjustment 2022	0					0	
2023	Inflation adjustment 2023	0						0
2024	Inflation adjustment 2024	0						0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-98.388</b>	<b>-44.939</b>	<b>-53.449</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017	0	0	0	0	0	0	0
2018	Traffic risk sharing 2018	-18.630	-18.630	0	0	0	0	0
2019	Traffic risk sharing 2019	-32.103		-32.103	0	0	0	0
RP2	Total traffic risk sharing adjustments up to 2019	-50.733	-18.630	-32.103	0	0	0	0
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic risk sharing 2022	0					0	
2023	Traffic risk sharing 2023	0						0
2024	Traffic risk sharing 2024	0						0
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>	<b>-50.733</b>	<b>-18.630</b>	<b>-32.103</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in investment costs 2022	0					0	0
2023	Difference in investment costs 2023	0						0
2024	Difference in investment costs 2024	0						0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
2022	Difference in competent authorities and QEs costs 2022							
2023	Difference in competent authorities and QEs costs 2023							
2024	Difference in competent authorities and QEs costs 2024							
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
2022	Difference in Eurocontrol costs 2022							
2023	Difference in Eurocontrol costs 2023							
2024	Difference in Eurocontrol costs 2024							
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in pension costs 2022	0					0	0
2023	Difference in pension costs 2023	0						0
2024	Difference in pension costs 2024	0						0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
2022	Difference in interest on loans 2022	0					0	0
2023	Difference in interest on loans 2023	0						0
2024	Difference in interest on loans 2024	0						0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
2022	Costs relating to change in law 2022	0					0	0
2023	Costs relating to change in law 2023	0						0
2024	Costs relating to change in law 2024	0						0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
2018	Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
2019	Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017	0	0	0	0	0	0	0
2018	Financial incentives year 2018	0	0					
2019	Financial incentives year 2019	0		0				
RP2	Total financial incentives up to 2019	0	0	0	0	0	0	0
DELETED								
2022	Financial incentives year 2022	0					0	
2023	Financial incentives year 2023	0						0
2024	Financial incentives year 2024	0						0
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Modulation of charges up to 2017	0	0	0	0	0	0	
2018	Modulation of charges year 2018	0	0	0	0	0	0	
2019	Modulation of charges year 2019	0		0	0	0	0	
RP2	Total modulation of charges up to 2019	0	0	0	0	0	0	
DELETED								
2020-2021	Modulation of charges 2020-2021	0				0		
2022	Modulation of charges 2022	0					0	
2023	Modulation of charges 2023	0						0
2024	Modulation of charges 2024	0						0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	1.600	1.600	0	0	0	0	0
2019	Traffic adjustment 2019	3.911		3.911	0	0	0	0
RP2	Total traffic adjustments up to 2019	5.511	1.600	3.911	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-37.021			-18.511	-18.511	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-47.568				-23.784	-23.784	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0					0	0
2023	Traffic adjustment on adjustments from previous RPs 2023	0						0
2024	Traffic adjustment on adjustments from previous RPs 2024	0						0

RP2	Total traffic adjustment on adjustments from previous reference periods	-84.589	0	0	-18.511	-42.295	-23.784	0
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic adjustment 2022	0					0	
2023	Traffic adjustment 2023	0						0
2024	Traffic adjustment 2024	0						0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-79.078</b>	<b>1.600</b>	<b>3.911</b>	<b>-18.511</b>	<b>-42.295</b>	<b>-23.784</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	-2.594	-2.594	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	-4.579	0	-4.579	0	0	0	0
RP2	Total revenues received from Union assistance programmes up to 2019	-7.173	-2.594	-4.579	0	0	0	0
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	-9.895	0	0	0	-9.895	0	0
2022	Revenues received from Union assistance programmes in 2022	0			0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0				0	0	0
2024	Revenues received from Union assistance programmes in 2024	0					0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>-17.068</b>	<b>-2.594</b>	<b>-4.579</b>	<b>0</b>	<b>-9.895</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0			0	0	0	0
2023	Revenues received from national public funding in 2023	0				0	0	0
2024	Revenues received from national public funding in 2024	0					0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0		
2022	Revenues from commercial activities in 2022	0			0	0	0	
2023	Revenues from commercial activities in 2023	0				0	0	0
2024	Revenues from commercial activities in 2024	0					0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017							
2018	Revenues from contracts with airport operators in 2018							
2019	Revenues from contracts with airport operators in 2019							
RP2	Total revenues from contracts with airport operators up to 2019							
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021							
2022	Revenues from contracts with airport operators in 2022							
2023	Revenues from contracts with airport operators in 2023							
2024	Revenues from contracts with airport operators in 2024							
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>							
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	591.414				84.488	84.488	422.439
2022	Revenue difference - revision of UR 2022	0				0	0	0
2023	Revenue difference - revision of UR 2023	0					0	0
2024	Revenue difference - revision of UR 2024	0						0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>591.414</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>84.488</b>	<b>84.488</b>	<b>422.439</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>							
	<b>Total adjustments</b>	<b>346.147</b>	<b>-64.563</b>	<b>-86.220</b>	<b>-18.511</b>	<b>32.298</b>	<b>60.704</b>	<b>422.439</b>

Amounts in '000 (national currency)

\* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Adjustments from previous RPs	-235.372	-64.563	-86.220	-18.511	-42.295	-23.784	0
RP3 adjustments	581.519	0	0	0	74.593	84.488	422.439
<b>Total adjustments</b>	<b>346.147</b>	<b>-64.563</b>	<b>-86.220</b>	<b>-18.511</b>	<b>32.298</b>	<b>60.704</b>	<b>422.439</b>



Table 3 - Complementary information on adjustments

Denmark Currency: DKK DMI								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
2018	Inflation adjustment 2018	-2.425	-2.425					
2019	Inflation adjustment 2019	-2.887		-2.887				
RP2	Total inflation adjustment up to 2019	-5.312	-2.425	-2.887				
DELETED								
2020-2021	Inflation adjustment 2020-2021	0				0		
2022	Inflation adjustment 2022	0					0	
2023	Inflation adjustment 2023	0						0
2024	Inflation adjustment 2024	0						0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-5.312</b>	<b>-2.425</b>	<b>-2.887</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017							
2018	Traffic risk sharing 2018							
2019	Traffic risk sharing 2019							
RP2	Total traffic risk sharing adjustments up to 2019							
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)							
2022	Traffic risk sharing 2022							
2023	Traffic risk sharing 2023							
2024	Traffic risk sharing 2024							
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>							
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in investment costs 2022	0					0	0
2023	Difference in investment costs 2023	0						0
2024	Difference in investment costs 2024	0						0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
2022	Difference in competent authorities and QEs costs 2022							
2023	Difference in competent authorities and QEs costs 2023							
2024	Difference in competent authorities and QEs costs 2024							
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
2022	Difference in Eurocontrol costs 2022							
2023	Difference in Eurocontrol costs 2023							
2024	Difference in Eurocontrol costs 2024							
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in pension costs 2022	0					0	0
2023	Difference in pension costs 2023	0						0
2024	Difference in pension costs 2024	0						0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
2022	Difference in interest on loans 2022	0					0	0
2023	Difference in interest on loans 2023	0						0
2024	Difference in interest on loans 2024	0						0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
2022	Costs relating to change in law 2022	0					0	0
2023	Costs relating to change in law 2023	0						0
2024	Costs relating to change in law 2024	0						0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
2018	Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
2019	Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017							
2018	Financial incentives year 2018							
2019	Financial incentives year 2019							
RP2	Total financial incentives up to 2019							
DELETED								
DELETED								
2022	Financial incentives year 2022							
2023	Financial incentives year 2023							
2024	Financial incentives year 2024							
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>							
2017	Modulation of charges up to 2017	0	0	0	0	0	0	
2018	Modulation of charges year 2018	0	0	0	0	0	0	
2019	Modulation of charges year 2019	0		0	0	0	0	
RP2	Total modulation of charges up 2019	0	0	0	0	0	0	
DELETED								
2020-2021	Modulation of charges 2020-2021	0				0		
2022	Modulation of charges 2022	0					0	
2023	Modulation of charges 2023	0						0
2024	Modulation of charges 2024	0						0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	-1.936	-1.936	0	0	0	0	0
2019	Traffic adjustment 2019	-2.820		-2.820	0	0	0	0
RP2	Total traffic adjustments up to 2019	-4.756	-1.936	-2.820	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-2.501			-2.501	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-3.148				-3.148	0	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0					0	0
2023	Traffic adjustment on adjustments from previous RPs 2023	0						0
2024	Traffic adjustment on adjustments from previous RPs 2024	0						0

RP2	Total traffic adjustment on adjustments from previous reference periods	-5.649	0	0	-2.501	-3.148	0	0
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic adjustment 2022	0					0	
2023	Traffic adjustment 2023	0						0
2024	Traffic adjustment 2024	0						0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-10.404</b>	<b>-1.936</b>	<b>-2.820</b>	<b>-2.501</b>	<b>-3.148</b>	<b>0</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from Union assistance programmes in 2022	0			0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0				0	0	0
2024	Revenues received from Union assistance programmes in 2024	0					0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0			0	0	0	0
2023	Revenues received from national public funding in 2023	0				0	0	0
2024	Revenues received from national public funding in 2024	0					0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0		
2022	Revenues from commercial activities in 2022	0			0	0	0	
2023	Revenues from commercial activities in 2023	0				0	0	0
2024	Revenues from commercial activities in 2024	0					0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017							
2018	Revenues from contracts with airport operators in 2018							
2019	Revenues from contracts with airport operators in 2019							
RP2	Total revenues from contracts with airport operators up to 2019							
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021							
2022	Revenues from contracts with airport operators in 2022							
2023	Revenues from contracts with airport operators in 2023							
2024	Revenues from contracts with airport operators in 2024							
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>							
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	36.067				5.152	5.152	25.762
2022	Revenue difference - revision of UR 2022	0				0	0	0
2023	Revenue difference - revision of UR 2023	0					0	0
2024	Revenue difference - revision of UR 2024	0						0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>36.067</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5.152</b>	<b>5.152</b>	<b>25.762</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>							
<b>Total adjustments</b>		<b>20.350</b>	<b>-4.361</b>	<b>-5.706</b>	<b>-2.501</b>	<b>2.004</b>	<b>5.152</b>	<b>25.762</b>
Amounts in '000 (national currency)		Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022						
* Including carry-overs relating to the previous reference period(s)								
Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)								

Adjustments from previous RPs	-15.717	-4.361	-5.706	-2.501	-3.148	0	0
RP3 adjustments	36.067	0	0	0	5.152	5.152	25.762
<b>Total adjustments</b>	<b>20.350</b>	<b>-4.361</b>	<b>-5.706</b>	<b>-2.501</b>	<b>2.004</b>	<b>5.152</b>	<b>25.762</b>

Table 3 - Complementary information on adjustments

Denmark  
Currency: DKK  
Trafikstyrelsen

FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
2018	Inflation adjustment 2018	-6.831	-6.831					
2019	Inflation adjustment 2019	-8.154		-8.154				
RP2	Total inflation adjustment up to 2019	-14.984	-6.831	-8.154				
DELETED								
2020-2021	Inflation adjustment 2020-2021							
2022	Inflation adjustment 2022							
2023	Inflation adjustment 2023							
2024	Inflation adjustment 2024							
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-14.984</b>	<b>-6.831</b>	<b>-8.154</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017							
2018	Traffic risk sharing 2018							
2019	Traffic risk sharing 2019							
RP2	Total traffic risk sharing adjustments up to 2019							
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)							
2022	Traffic risk sharing 2022							
2023	Traffic risk sharing 2023							
2024	Traffic risk sharing 2024							
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>							
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)							
2022	Difference in investment costs 2022							
2023	Difference in investment costs 2023							
2024	Difference in investment costs 2024							
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>							
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0				0		
2022	Difference in competent authorities and QEs costs 2022	0					0	
2023	Difference in competent authorities and QEs costs 2023	0						0
2024	Difference in competent authorities and QEs costs 2024	0						0
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0				0		
2022	Difference in Eurocontrol costs 2022	0					0	
2023	Difference in Eurocontrol costs 2023	0						0
2024	Difference in Eurocontrol costs 2024	0						0
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)							
2022	Difference in pension costs 2022							
2023	Difference in pension costs 2023							
2024	Difference in pension costs 2024							
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>							
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)							
2022	Difference in interest on loans 2022							
2023	Difference in interest on loans 2023							
2024	Difference in interest on loans 2024							
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>							
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)							
2022	Costs relating to change in law 2022							
2023	Costs relating to change in law 2023							
2024	Costs relating to change in law 2024							
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>							
2017	Cost exempt from cost sharing up to 2017	-1.381	0	-1.381	0	0	0	0
2018	Cost exempt from cost sharing 2018	-4.248	0	-4.248	0	0	0	0
2019	Cost exempt from cost sharing 2019	-4.668		-4.668	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>-10.297</b>	<b>0</b>	<b>-10.297</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017							
2018	Financial incentives year 2018							
2019	Financial incentives year 2019							
RP2	Total financial incentives up to 2019							
DELETED								
2022	Financial incentives year 2022							
2023	Financial incentives year 2023							
2024	Financial incentives year 2024							
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>							
2017	Modulation of charges up to 2017	0	0	0	0	0	0	
2018	Modulation of charges year 2018	0	0	0	0	0	0	
2019	Modulation of charges year 2019	0		0	0	0	0	
RP2	Total modulation of charges up to 2019	0	0	0	0	0	0	
DELETED								
2020-2021	Modulation of charges 2020-2021	0				0		
2022	Modulation of charges 2022	0					0	
2023	Modulation of charges 2023	0						0
2024	Modulation of charges 2024	0						0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	-5.475	-5.475	0	0	0	0	0
2019	Traffic adjustment 2019	-7.972		-7.972	0	0	0	0
RP2	Total traffic adjustments up to 2019	-13.447	-5.475	-7.972	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-7.056			-7.056	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-14.578				-14.578	0	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0					0	0
2023	Traffic adjustment on adjustments from previous RPs 2023	0						0
2024	Traffic adjustment on adjustments from previous RPs 2024	0						0

RP2	Total traffic adjustment on adjustments from previous reference periods	-21.634	0	0	-7.056	-14.578	0	0
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic adjustment 2022	0				0	0	
2023	Traffic adjustment 2023	0						0
2024	Traffic adjustment 2024	0						0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-35.081</b>	<b>-5.475</b>	<b>-7.972</b>	<b>-7.056</b>	<b>-14.578</b>	<b>0</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from Union assistance programmes in 2022	0			0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0				0	0	0
2024	Revenues received from Union assistance programmes in 2024	0					0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0			0	0	0	0
2023	Revenues received from national public funding in 2023	0				0	0	0
2024	Revenues received from national public funding in 2024	0					0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0		
2022	Revenues from commercial activities in 2022	0			0	0	0	
2023	Revenues from commercial activities in 2023	0				0	0	0
2024	Revenues from commercial activities in 2024	0					0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017							
2018	Revenues from contracts with airport operators in 2018							
2019	Revenues from contracts with airport operators in 2019							
RP2	Total revenues from contracts with airport operators up to 2019							
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021							
2022	Revenues from contracts with airport operators in 2022							
2023	Revenues from contracts with airport operators in 2023							
2024	Revenues from contracts with airport operators in 2024							
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>							
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	77.400				11.057	11.057	55.286
2022	Revenue difference - revision of UR 2022	0				0	0	0
2023	Revenue difference - revision of UR 2023	0					0	0
2024	Revenue difference - revision of UR 2024	0						0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>77.400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11.057</b>	<b>11.057</b>	<b>55.286</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>							
	<b>Total adjustments</b>	<b>17.038</b>	<b>-12.306</b>	<b>-26.423</b>	<b>-7.056</b>	<b>-3.521</b>	<b>11.057</b>	<b>55.286</b>

Amounts in '000 (national currency)

\* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Adjustments from previous RPs	-60.363	-12.306	-26.423	-7.056	-14.578	0	0
RP3 adjustments	77.400	0	0	0	11.057	11.057	55.286
<b>Total adjustments</b>	<b>17.038</b>	<b>-12.306</b>	<b>-26.423</b>	<b>-7.056</b>	<b>-3.521</b>	<b>11.057</b>	<b>55.286</b>

Table 4 - Complementary information on common projects and on revenues from Union assistance programmes allocated to the charging zone

Denmark

Amounts received

Project reference (as per Grant Agreement)	Project title	Value of funded project in '000 Euro		Amounts granted (as per GA) in '000 Euro		Common project y/n	Actual amounts received (charging zone) in '000 Euro										
		Total	For the charging zone	Total	For the charging zone		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2014-EU-TM-0136-M	CANDI-IP preparation project	248	210	124	105	Y	0	29,50	24,26	40,30	0	20	0				
2014-EU-TM-0136-M	Standardization of A-SMGCS A3000	214	0	107	0	Y	0	0,00	0,00	0,00	0	0	0				
2014-EU-TM-0136-M	Borealis Free Route Airspace Programme Step 1	583	583	291	291	Y	0	32,59	26,80	44,52	0	23	0				
2014-EU-TM-0375-M	COOPANS B2.6/B3.2/B3.2	6.312	5.996	3.156	2.998	N	0	783,65	1.465,61	0,00	0	468	0				
2015-EU-TM-0193-M	Implementation of initial DMAN and AOP at Copenhagen Airport (CPH)	135	0	68	0	Y	0	0,00	0,00	0,00	0	0	0				
2015-EU-TM-0193-M	VoIP Programme	5.417	4.604	1.485	1.263	Y	0	0,00	437,33	0,00	0	474	0				
2015-EU-TM-0193-M	DK-SE FAB Aeronautical Data Quality, ADQ	139	118	70	59	Y	0	0,00	20,49	0,00	0	22	0				
2015-EU-TM-0193-M	CANDI-IP execution phase	4.530	3.851	2.265	1.925	Y	0	0,00	666,89	0,00	0	723	0				
2015-EU-TM-0196-M	A-SMGCS Routing & Planning	1.564	0	429	0	Y	0	0,00	0,00	0,00	0	0	0				
2015-EU-TM-0196-M	A-SMGCS Safety Nets	1.825	0	500	0	Y	0	0,00	0,00	0,00	0	0	0				
2015-EU-TM-0196-M	Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP prog	12.530	11.904	6.265	5.952	Y	0	0,00	1.396,56	0,00	0	0	0				
2015-EU-TM-0196-M	Borealis Free Route Airspace Implementation (Part 2)	7.645	7.645	3.823	3.823	Y	0	0,00	896,96	0,00	0	2	0				
2015-EU-TM-0196-M	NewPENS Stakeholders contribution for the procurement and deployment of NewPENS	247	247	124	124	Y	0	0,00	29,01	0,00	0	0	0				
2015-EU-TM-0103-W	JPO	1.133	849	566	425	N	0	0,00	130,54	0,00	460	60	24				
2015-EU-TM-0387-S	CODACAS phase 1B	808	768	404	384	N	0	0,00	153,23	0,00	0	0	0				
2016-EU-TM-0117-M	Synchronised PBN Implementation	2.069	1.034	889	445	Y	0	0,00	0,00	78,15	0	0	100				
2016-EU-TM-0117-M	European Deployment Roadmap for Flight Object Interoperability	50	48	22	20	Y	0	0,00	0,00	4,17	0	2					
2017-EU-TM-0076-M	ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport	702	597	351	299	Y	0	0,00	0,00	0,00	0	34	0				
2017-EU-TM-0076-M	Implementing harmonised SWIM (Y) solution in COOPANS ANSPs and general PCP compliance	11.710	11.124	5.855	5.562	Y	0	0,00	0,00	0,00	0	685	0				
INEA/CEF/TRAN/M2015/1131871	Sub-regional SWIM MET deployment to support NEFRA (part A)	154	0	154	0	n	0	0	33	0	0	0	0				
<b>Total in '000 Euro</b>		<b>58.014</b>	<b>49579,03855</b>	<b>26.947</b>	<b>23.674</b>		<b>0</b>	<b>846</b>	<b>5.281</b>	<b>167</b>	<b>460</b>	<b>2.510</b>	<b>126</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total in '000 national currency</b>		<b>0</b>	<b>0</b>	<b>200.758</b>	<b>176.372</b>	<b>0</b>	<b>0</b>	<b>6.301</b>	<b>39.341</b>	<b>1.245</b>	<b>3.431</b>	<b>18.702</b>	<b>941</b>				

Amounts reimbursed to airspace users through other revenues

Project reference (as per Grant Agreement)	Project title	Amounts retained in respect of administrative costs for the charging zone in '000 Euro	Total to be reimbursed for the charging zone in '000 Euro	Amounts reimbursed to users (charging zone) in '000 national currency														
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	After RP			
2014-EU-TM-0376-M	COOPANS B2.6/B3.2/B3.2	88,7	2.998,2															
2015-EU-TM-0196-M	Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP prog	57,4	5.951,8															
2015-EU-TM-0193-M	CANDI-IP execution phase	36,5	1.925,3															
2015-EU-TM-0193-M	VoIP Programme	25,5	1.262,5															
2015-EU-TM-0196-M	Borealis Free Route Airspace Implementation (Part 2)		3.822,6															
2015-EU-TM-0193-M	DK-SE FAB Aeronautical Data Quality, ADQ		59,1															
2017-EU-TM-0076-M	ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport		298,5															
2016-EU-TM-0117-M	Synchronised PBN Implementation		444,7															
2015-EU-TM-0196-M	NewPENS Stakeholders contribution for the procurement and deployment of NewPENS		123,6															
2017-EU-TM-0076-M	Implementing harmonised SWIM (Y) solution in COOPANS ANSPs and general PCP compliance		5.562,0															
2015-EU-TM-0103-W	JPO		383,8															
	SESAR 2020																	
	Other projects with funding covering depreciation in RP2 DC	48,9	325,7															
<b>Total in '000 Euro</b>		<b>257,0</b>	<b>23.158,0</b>	<b>0,0</b>	<b>121,0</b>	<b>173,8</b>	<b>203,3</b>	<b>348,2</b>	<b>614,6</b>	<b>1.328,1</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	
<b>Total in '000 national currency</b>		<b>1.914,3</b>	<b>172.527,2</b>	<b>0,0</b>	<b>901,4</b>	<b>1.295,0</b>	<b>1.514,4</b>	<b>2.594,4</b>	<b>4.578,6</b>	<b>9.895</b>								

RP3 Cost-efficiency targets

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Denmark	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2014 B	2024 D vs. 2019 B
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D		
Total en route costs in nominal terms (in national currency)	698.953.930	726.918.302	1.409.936.552	717.666.270	730.355.628	738.450.305	5,7%	1,6%
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	<b>705.073.905</b>	<b>719.763.577</b>	<b>1.388.136.852</b>	<b>697.646.794</b>	<b>702.906.009</b>	<b>702.788.808</b>	-0,3%	-2,4%
Total en route costs in real terms (in EUR2017) <sup>1</sup>	94.807.246	96.782.482	186.654.805	93.808.565	94.515.742	94.499.982	-0,3%	-2,4%
YoY variation			92,9%	-49,7%	0,8%	0,0%		
Total en route Service Units (TSU)	1.444.679	1.679.151	1.483.960	1.455.159	1.660.614	1.784.164	23,5%	6,3%
YoY variation			-11,6%	-1,9%	14,1%	7,4%		
<b>Real en route unit costs (in national currency at 2017 prices)</b>	<b>488,05</b>	<b>428,65</b>	<b>935,43</b>	<b>479,43</b>	<b>423,28</b>	<b>393,90</b>	-19,3%	-8,1%
Real en route unit costs (in EUR2017) <sup>1</sup>	65,63	57,64	125,78	64,47	56,92	52,97	-19,3%	-8,1%
YoY variation			118,2%	-48,7%	-11,7%	-6,9%		
		Eu targets	120,1	-38,5	-13,2	-11,5		
National currency		DKK						
<sup>1</sup> Average exchange rate 2017 (1 EUR=)		7,43692						

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

En route charging zone Denmark	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline adjustments	2019 Baseline adjustments
	2014 B	2019 B	2014 A	2019 A		
Total en route costs in nominal terms (in national currency)	698.953.930	726.918.302	698.953.930	701.118.720	0	25.799.583
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	<b>705.073.905</b>	<b>719.763.577</b>	<b>705.073.905</b>	<b>694.065.335</b>	<b>0</b>	<b>25.698.242</b>
Total en route costs in real terms (in EUR2017) <sup>1</sup>	94.807.246	96.782.482	94.807.246	93.326.987	0	3.455.495
Total en route Service Units (TSU)	1.444.679	1.679.151	1.532.003	1.780.648	-87.324	-101.497

Baseline	25.698.242	DKK 2017
Cost of capital	13.098.284	DKK 2017
Netted funding	12.599.958	DKK 2017
Netted funding	12.701.299	DKK 2019

Baseline	603.683.162	
2020	585.569.774	-3,00%
2022	582.191.193	-3,56%
2023	589.995.198	-2,27%
2024	590.546.712	-2,18%

CRCO correction factors M2/M3	
Denmark	-5,70%

	2020/2021 D	2022 D	2023 D	2024 D
Union wide targets	97	94	96	97
PP	96,4	96,9	97,7	97,6
Naviair	97,0	96,4	97,7	97,8
DMI	92,7	102,9	103,2	103,3
TS	93,8	97,9	94,5	93,6



Table 1 - Total Costs and Unit Costs

Denmark - TCZ  
Currency: DKK  
All Entities

Cost details	Actual costs 2015-2019					Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																	
1.1 Staff	117.958	124.457	119.099	121.980	121.633	129.374	115.000	244.373	113.156	119.177	124.190	129.374					
of which, pension costs						22.623	20.491	43.114	19.704	20.517	21.154	22.623					
1.2 Other operating costs	31.023	30.882	32.731	37.290	38.798	35.034	36.728	71.762	34.768	33.518	32.670	35.034					
1.3 Depreciation	14.344	11.324	10.685	11.562	13.142	15.367	15.558	30.925	17.038	16.772	17.041	15.367					
1.4 Cost of capital	22.027	19.803	17.505	17.275	17.618	14.256	13.820	28.076	12.662	12.907	12.827	14.256					
1.5 Exceptional items	-3.929	-4.599	-4.696	-4.648	-4.664	-15.530	-955	-16.485	1.374	1.844	893	-15.530					
<b>1.6 Total costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
Total % n/n-1		0,2%	-3,6%	4,6%	1,7%	-4,3%	0,9%		-0,6%	2,9%	1,8%	-4,3%					
<b>2. Detail by service (in nominal terms)</b>																	
2.1 Air Traffic Management	168.566	168.987	162.835	170.243	172.935	165.454	166.975	332.429	165.970	170.827	173.989	165.454					
2.2 Communication	4.372	4.383	4.223	4.415	4.485	4.291	4.331	8.622	4.305	4.431	4.513	4.291					
2.3 Navigation	1.731	1.736	1.673	1.749	1.776	1.699	1.715	3.414	1.705	1.755	1.787	1.699					
2.4 Surveillance	3.705	3.714	3.579	3.742	3.801	3.637	3.670	7.307	3.648	3.755	3.824	3.637					
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0	0					
2.6 Aeronautical Information	1.925	1.929	1.859	1.944	1.974	1.889	1.906	3.795	1.895	1.950	1.986	1.889					
2.7 Meteorological services	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
2.8 Supervision costs	0	0	0	0	0	0	0	0	0	0	0	0					
2.9 Other State costs	0	0	0	0	0	0	0	0	0	0	0	0					
<b>2.10 Total costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
Total % n/n-1		0,2%	-3,6%	4,6%	1,7%	-4,3%	0,9%		-0,6%	2,9%	1,8%	-4,3%					
<b>3. Complementary information (in nominal terms)</b>																	
<b>Average asset base</b>																	
3.1 Net book val. fixed assets	157.506	136.319	136.820	140.996	151.536	238.223	230.333		232.657	232.950	224.693	238.223					
3.2 Adjustments total assets	0	0	0	0	0	1.303	-9.226		-8.050	-8.050	-8.050	1.303					
3.3 Net current assets	53.244	44.212	53.350	65.266	76.728	26.395	65.720		143.050	155.668	146.319	26.395					
<b>3.4 Total asset base</b>	<b>210.750</b>	<b>180.531</b>	<b>190.170</b>	<b>206.262</b>	<b>228.265</b>	<b>265.921</b>	<b>286.827</b>		<b>367.657</b>	<b>380.568</b>	<b>362.962</b>	<b>265.921</b>					
<b>Cost of capital %</b>																	
3.5 Cost of capital pre tax rate																	
3.6 Return on equity																	
3.7 Average interest on debts																	
3.8 Share of financing through equity																	
<b>Costs of common projects</b>																	
3.9 Common projects	201	691	1.907	4.158	2.098	1.517	1.436	2.953	3.095	2.830	1.416	1.517					
<b>Costs of new and existing investments</b>																	
3.10 Depreciation						15.367	15.558	30.925	17.038	16.772	17.041	15.367					
3.11 Cost of capital						12.771	11.098	23.869	8.013	7.901	7.941	12.771					
3.12 Cost of leasing						0	0	0	0	0	0	0					
<b>Eurocontrol costs</b>																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																	
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0					
<b>4.2 Total determined/actual costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																	
5.1 Inflation %	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
<b>5.3 Total costs real terms (2)</b>	<b>183.018</b>	<b>183.525</b>	<b>175.324</b>	<b>182.384</b>	<b>184.369</b>	<b>175.999</b>	<b>176.005</b>	<b>352.004</b>	<b>172.958</b>	<b>175.846</b>	<b>176.726</b>	<b>175.999</b>					
Total % n/n-1		0,3%	-4,5%	4,0%	1,1%	-4,5%	0,0%		-1,7%	1,7%	0,5%	-4,5%					
<b>5.4 Total Service Units</b>	<b>158,8</b>	<b>169,6</b>	<b>165,7</b>	<b>172,3</b>	<b>172,5</b>	<b>63,5</b>	<b>69,8</b>	<b>133,3</b>	<b>142,6</b>	<b>159,5</b>	<b>170,8</b>	<b>63,5</b>					
Total % n/n-1		6,8%	-2,3%	4,0%	0,1%	-63,2%	10,0%		104,3%	11,8%	7,1%	-63,2%					
<b>5.5 Unit cost in real terms prices (3)</b>	<b>1.152,50</b>	<b>1.082,35</b>	<b>1.057,89</b>	<b>1.058,48</b>	<b>1.069,01</b>	<b>2.773,16</b>	<b>2.521,34</b>	<b>2.641,26</b>	<b>1.212,74</b>	<b>1.102,47</b>	<b>1.034,68</b>	<b>2.773,16</b>					
Total % n/n-1		-6,1%	-2,3%	0,1%	1,0%	159,4%	-9,1%		-51,9%	-9,1%	-6,1%	159,4%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms



Table 1 - Total Costs and Unit Costs

Denmark - TCZ  
Currency: DKK  
Naviair

Cost details	Actual costs 2015-2019					Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																	
1.1 Staff	116.876	123.632	118.219	121.108	120.498	128.205	113.813	242.018	112.171	118.176	123.174	128.205					
of which, pension costs						22.447	20.312	42.759	19.530	20.340	20.974	22.447					
1.2 Other operating costs	30.982	30.589	32.456	36.796	38.379	34.672	36.361	71.033	34.277	33.019	32.164	34.672					
1.3 Depreciation	14.344	11.324	10.685	11.562	13.142	15.367	15.558	30.925	17.038	16.772	17.041	15.367					
1.4 Cost of capital	22.027	19.803	17.505	17.275	17.618	14.256	13.820	28.076	12.662	12.907	12.827	14.256					
1.5 Exceptional items	-3.929	-4.599	-4.696	-4.648	-4.664	-15.530	-955	-16.485	1.374	1.844	893	-15.530					
<b>1.6 Total costs</b>	<b>180.299</b>	<b>180.749</b>	<b>174.169</b>	<b>182.092</b>	<b>184.972</b>	<b>176.970</b>	<b>178.597</b>	<b>355.567</b>	<b>177.522</b>	<b>182.717</b>	<b>186.100</b>	<b>176.970</b>					
Total % n/n-1		0,2%	-3,6%	4,5%	1,6%	-4,3%	0,9%		-0,6%	2,9%	1,9%	-4,3%					
<b>2. Detail by service (in nominal terms)</b>																	
2.1 Air Traffic Management	168.566	168.987	162.835	170.243	172.935	165.454	166.975	332.429	165.970	170.827	173.989	165.454					
2.2 Communication	4.372	4.383	4.223	4.415	4.485	4.291	4.331	8.622	4.305	4.431	4.513	4.291					
2.3 Navigation	1.731	1.736	1.673	1.749	1.776	1.699	1.715	3.414	1.705	1.755	1.787	1.699					
2.4 Surveillance	3.705	3.714	3.579	3.742	3.801	3.637	3.670	7.307	3.648	3.755	3.824	3.637					
2.5 Search and rescue								0									
2.6 Aeronautical Information	1.925	1.929	1.859	1.944	1.974	1.889	1.906	3.795	1.895	1.950	1.986	1.889					
2.7 Meteorological services								0									
2.8 Supervision costs																	
2.9 Other State costs																	
<b>2.10 Total costs</b>	<b>180.299</b>	<b>180.749</b>	<b>174.169</b>	<b>182.092</b>	<b>184.972</b>	<b>176.970</b>	<b>178.597</b>	<b>355.567</b>	<b>177.522</b>	<b>182.717</b>	<b>186.100</b>	<b>176.970</b>					
Total % n/n-1		0,2%	-3,6%	4,5%	1,6%	-4,3%	0,9%		-0,6%	2,9%	1,9%	-4,3%					
<b>3. Complementary information (in nominal terms)</b>																	
<b>Average asset base</b>																	
3.1 Net book val. fixed assets	157.506	136.319	136.820	140.996	151.536	238.223	230.333		232.657	232.950	224.693	238.223					
3.2 Adjustments total assets						1.303	-9.226		-8.050	-8.050	-8.050	1.303					
3.3 Net current assets	53.244	44.212	53.350	65.266	76.728	26.395	65.720		143.050	155.668	146.319	26.395					
<b>3.4 Total asset base</b>	<b>210.750</b>	<b>180.531</b>	<b>190.170</b>	<b>206.262</b>	<b>228.265</b>	<b>265.921</b>	<b>286.827</b>		<b>367.657</b>	<b>380.568</b>	<b>362.962</b>	<b>265.921</b>					
<b>Cost of capital %</b>																	
3.5 Cost of capital pre tax rate	10,45%	10,97%	9,20%	8,38%	7,72%	5,36%	4,82%		3,44%	3,39%	3,53%	5,36%					
3.6 Return on equity	12,65%	12,65%	12,65%	12,65%	12,65%	5,00%	5,00%		5,00%	5,00%	5,00%	5,00%					
3.7 Average interest on debts	7,10%	6,74%	3,11%	2,53%	2,46%	9,00%	5,27%		1,88%	1,82%	1,93%	9,00%					
3.8 Share of financing through equity	60,40%	71,56%	63,91%	57,75%	51,63%	90,97%	168,12%		50,21%	49,36%	52,20%	90,97%					
<b>Costs of common projects</b>																	
3.9 Common projects	201	691	1.907	4.158	2.098	1.517	1.436	2.953	3.095	2.830	1.416	1.517					
<b>Costs of new and existing investments</b>																	
3.10 Depreciation						15.367	15.558	30.925	17.038	16.772	17.041	15.367					
3.11 Cost of capital						12.771	11.098	23.869	8.013	7.901	7.941	12.771					
3.12 Cost of leasing								0									
<b>Eurocontrol costs</b>																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																	
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0					
<b>4.2 Total determined/actual costs</b>	<b>180.299</b>	<b>180.749</b>	<b>174.169</b>	<b>182.092</b>	<b>184.972</b>	<b>176.970</b>	<b>178.597</b>	<b>355.567</b>	<b>177.522</b>	<b>182.717</b>	<b>186.100</b>	<b>176.970</b>					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																	
5.1 Inflation %	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
<b>5.3 Total costs real terms (2)</b>	<b>181.882</b>	<b>182.395</b>	<b>174.169</b>	<b>181.027</b>	<b>182.835</b>	<b>174.494</b>	<b>174.494</b>	<b>348.988</b>	<b>171.542</b>	<b>174.427</b>	<b>175.310</b>	<b>174.494</b>					
Total % n/n-1		0,3%	-4,5%	3,9%	1,0%	-4,6%	0,0%		-1,7%	1,7%	0,5%	-4,6%					
<b>5.4 Total Service Units</b>	<b>158,8</b>	<b>169,6</b>	<b>165,7</b>	<b>172,3</b>	<b>172,5</b>	<b>63,5</b>	<b>69,8</b>	<b>133,3</b>	<b>142,6</b>	<b>159,5</b>	<b>170,8</b>	<b>63,5</b>					
Total % n/n-1		6,8%	-2,3%	4,0%	0,1%	-63,2%	10,0%		104,3%	11,8%	7,1%	-63,2%					
<b>5.5 Unit cost in real terms prices (3)</b>	<b>1.145,35</b>	<b>1.075,69</b>	<b>1.050,92</b>	<b>1.050,60</b>	<b>1.060,12</b>	<b>2.749,45</b>	<b>2.499,70</b>	<b>2.618,63</b>	<b>1.202,81</b>	<b>1.093,57</b>	<b>1.026,38</b>	<b>2.749,45</b>					
Total % n/n-1		-6,1%	-2,3%	0,0%	0,9%	159,4%	-9,1%		-51,9%	-9,1%	-6,1%	159,4%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

169.086 | 172.683 | 174.478

1,4 | 1,0 | 0,5

Table 1 - Total Costs and Unit Costs

Denmark - TCZ  
Currency: DKK  
MET

Cost details	Actual costs 2015-2019					Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																	
1.1 Staff	1.082	825	880	872	1.136	1.169	1.187	2.355	985	1.001	1.016	1.169					
of which, pension costs						176	178	354	174	177	180	176					
1.2 Other operating costs	41	293	275	494	420	362	367	729	491	499	506	362					
1.3 Depreciation						0	0	0	0	0	0	0					
1.4 Cost of capital						0	0	0	0	0	0	0					
1.5 Exceptional items						0	0	0	0	0	0	0					
1.6 Total costs	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
Total % n/n-1		-0,4%	3,3%	18,3%	13,9%	-1,6%	1,5%		-5,0%	1,6%	1,5%	-1,6%					
<b>2. Detail by service (in nominal terms)</b>																	
2.1 Air Traffic Management																	
2.2 Communication																	
2.3 Navigation																	
2.4 Surveillance																	
2.5 Search and rescue																	
2.6 Aeronautical Information																	
2.7 Meteorological services	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
2.8 Supervision costs																	
2.9 Other State costs																	
2.10 Total costs	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
Total % n/n-1		-0,4%	3,3%	18,3%	13,9%	-1,6%	1,5%		-5,0%	1,6%	1,5%	-1,6%					
<b>3. Complementary information (in nominal terms)</b>																	
<b>Average asset base</b>																	
3.1 Net book val. fixed assets						0	0		0	0	0	0					
3.2 Adjustments total assets						0	0		0	0	0	0					
3.3 Net current assets						0	0		0	0	0	0					
3.4 Total asset base	0	0	0	0	0	0	0		0	0	0	0					
<b>Cost of capital %</b>																	
3.5 Cost of capital pre tax rate						#####	#####		#####	#####	#####	#####					
3.6 Return on equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.7 Average interest on debts						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
<b>Costs of common projects</b>																	
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0	0					
<b>Costs of new and existing investments</b>																	
3.10 Depreciation						0	0	0	0	0	0	0					
3.11 Cost of capital						0	0	0	0	0	0	0					
3.12 Cost of leasing						0	0	0	0	0	0	0					
<b>Eurocontrol costs</b>																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																	
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0					
4.2 Total determined/actual costs	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																	
5.1 Inflation %	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
5.3 Total costs real terms (2)	1.135	1.130	1.155	1.357	1.534	1.505	1.511	3.016	1.416	1.419	1.417	1.505					
Total % n/n-1		-0,4%	2,2%	17,4%	13,1%	-1,9%	0,4%		-6,3%	0,2%	-0,1%	-1,9%					
5.4 Total Service Units	158,8	169,6	165,7	172,3	172,5	63,5	69,8	133,3	142,6	159,5	170,8	63,5					
Total % n/n-1		6,8%	-2,3%	4,0%	0,1%	-63,2%	10,0%		104,3%	11,8%	7,1%	-63,2%					
5.5 Unit cost in real terms prices (3)	7,15	6,67	6,97	7,87	8,89	23,72	21,65	22,63	9,93	8,89	8,30	23,72					
Total % n/n-1		-6,8%	4,5%	13,0%	13,0%	166,7%	-8,7%		-54,1%	-10,4%	-6,7%	166,7%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Denmark - TCZ  
 Currency: DKK  
 KOEBENHAVN / KASTRUP

Cost details	Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
<b>1. Detail by nature (in nominal terms)</b>																	
1.1 Staff	117.958	124.457	119.099	121.980	121.633	129.374	115.000	244.373	113.156	119.177	124.190	129.374					
of which, pension costs						22.623	20.491	43.114	19.704	20.517	21.154	22.623					
1.2 Other operating costs	31.023	30.882	32.731	37.290	38.798	35.034	36.728	71.762	34.768	33.518	32.670	35.034					
1.3 Depreciation	14.344	11.324	10.685	11.562	13.142	15.367	15.558	30.925	17.038	16.772	17.041	15.367					
1.4 Cost of capital	22.027	19.803	17.505	17.275	17.618	14.256	13.820	28.076	12.662	12.907	12.827	14.256					
1.5 Exceptional items	-3.929	-4.599	-4.696	-4.648	-4.664	-15.530	-955	-16.485	1.374	1.844	893	-15.530					
<b>1.6 Total costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
Total % n/n-1		0,2%	-3,6%	4,6%	1,7%	-4,3%	0,9%		-0,6%	2,9%	1,8%	-4,3%					
<b>2. Detail by service (in nominal terms)</b>																	
2.1 Air Traffic Management	168.566	168.987	162.835	170.243	172.935	165.454	166.975	332.429	165.970	170.827	173.989	165.454					
2.2 Communication	4.372	4.383	4.223	4.415	4.485	4.291	4.331	8.622	4.305	4.431	4.513	4.291					
2.3 Navigation	1.731	1.736	1.673	1.749	1.776	1.699	1.715	3.414	1.705	1.755	1.787	1.699					
2.4 Surveillance	3.705	3.714	3.579	3.742	3.801	3.637	3.670	7.307	3.648	3.755	3.824	3.637					
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0	0					
2.6 Aeronautical Information	1.925	1.929	1.859	1.944	1.974	1.889	1.906	3.795	1.895	1.950	1.986	1.889					
2.7 Meteorological services	1.123	1.118	1.155	1.366	1.555	1.531	1.554	3.085	1.476	1.500	1.522	1.531					
2.8 Supervision costs	0	0	0	0	0	0	0	0	0	0	0	0					
2.9 Other State costs	0	0	0	0	0	0	0	0	0	0	0	0					
<b>2.10 Total costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
Total % n/n-1		0,2%	-3,6%	4,6%	1,7%	-4,3%	0,9%		-0,6%	2,9%	1,8%	-4,3%					
<b>3. Complementary information (in nominal terms)</b>																	
<b>Average asset base</b>																	
3.1 Net book val. fixed assets	157.506	136.319	136.820	140.996	151.536	238.223	230.333		232.657	232.950	224.693	238.223					
3.2 Adjustments total assets	0	0	0	0	0	1.303	-9.226		-8.050	-8.050	-8.050	1.303					
3.3 Net current assets	53.244	44.212	53.350	65.266	76.728	26.395	65.720		143.050	155.668	146.319	26.395					
<b>3.4 Total asset base</b>	<b>210.750</b>	<b>180.531</b>	<b>190.170</b>	<b>206.262</b>	<b>228.265</b>	<b>265.921</b>	<b>286.827</b>		<b>367.657</b>	<b>380.568</b>	<b>362.962</b>	<b>265.921</b>					
<b>Cost of capital %</b>																	
3.5 Cost of capital pre tax rate	10,45%	10,97%	9,20%	8,38%	7,72%	5,36%	4,82%		3,44%	3,39%	3,53%	5,36%					
3.6 Return on equity																	
3.7 Average interest on debts																	
3.8 Share of financing through equity																	
<b>Costs of common projects</b>																	
3.9 Common projects	201	691	1.907	4.158	2.098	1.517	1.436	2.953	3.095	2.830	1.416	1.517					
<b>Costs of new and existing investments</b>																	
3.10 Depreciation						15.367	15.558	30.925	17.038	16.772	17.041	15.367					
3.11 Cost of capital						12.771	11.098	23.869	8.013	7.901	7.941	12.771					
3.12 Cost of leasing						0	0	0	0	0	0	0					
<b>Eurocontrol costs</b>																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
<b>4. Total costs after deduction of costs for services to exempted flights (in nominal terms)</b>																	
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0					
<b>4.2 Total determined/actual costs</b>	<b>181.422</b>	<b>181.867</b>	<b>175.324</b>	<b>183.458</b>	<b>186.527</b>	<b>178.501</b>	<b>180.151</b>	<b>358.652</b>	<b>178.998</b>	<b>184.217</b>	<b>187.622</b>	<b>178.501</b>					
<b>5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)</b>																	
5.1 Inflation %	0,20%	0,00%	1,10%	0,70%	0,70%	0,30%	1,10%		1,35%	1,45%	1,60%	0,30%					
5.2 Inflation index (1)	98,9	98,9	100,0	100,7	101,4	101,7	102,8		104,2	105,7	107,4	101,7					
<b>5.3 Total costs real terms (2)</b>	<b>183.018</b>	<b>183.525</b>	<b>175.324</b>	<b>182.384</b>	<b>184.369</b>	<b>175.999</b>	<b>176.005</b>	<b>352.004</b>	<b>172.958</b>	<b>175.846</b>	<b>176.726</b>	<b>175.999</b>					
Total % n/n-1		0,3%	-4,5%	4,0%	1,1%	-4,5%	0,0%		-1,7%	1,7%	0,5%	-4,5%					
<b>5.4 Total Service Units</b>	<b>158,8</b>	<b>169,6</b>	<b>165,7</b>	<b>172,3</b>	<b>172,5</b>	<b>63,5</b>	<b>69,8</b>	<b>133,3</b>	<b>142,6</b>	<b>159,5</b>	<b>170,8</b>	<b>63,5</b>					
Total % n/n-1		6,8%	-2,3%	4,0%	0,1%	-63,2%	10,0%		104,3%	11,8%	7,1%	-63,2%					
<b>5.5 Unit cost in real terms prices (3)</b>	<b>1.152,50</b>	<b>1.082,35</b>	<b>1.057,89</b>	<b>1.058,48</b>	<b>1.069,01</b>	<b>2.773,16</b>	<b>2.521,34</b>	<b>2.641,26</b>	<b>1.212,74</b>	<b>1.102,47</b>	<b>1.034,68</b>	<b>2.773,16</b>					
Total % n/n-1		-6,1%	-2,3%	0,1%	1,0%	159,4%	-9,1%		-51,9%	-9,1%	-6,1%	159,4%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 2 - Unit rate calculation

Denmark - TCZ  
Currency: DKK  
All Entities

Reference Period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>					
<b>Determined costs</b>					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	358.652,1	178.997,7	184.217,3	187.621,6
<b>Inflation adjustment calculation</b>					
2.1	Determined costs subject to inflation adjustment	299.650,7	149.298,0	154.538,4	157.753,2
2.2	Forecast inflation index - Table 1		104,22	105,73	107,42
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
<b>B. Traffic risk sharing</b>					
<b>Traffic risk sharing adjustment</b>					
4.1	Determined costs subject to traffic risk sharing	355.567,4	177.521,7	182.717,3	186.099,6
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	133,3	142,6	159,5	170,8
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
<b>Traffic adjustments</b>					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
<b>C. Financial incentive schemes on capacity and environment</b>					
<b>Adjustments relating to financial incentives</b>					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				
<b>D. Other adjustments</b>					
<b>Modulation of charges</b>					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
<b>Revision of the unit rate</b>					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	210.209,4			
<b>Cross-financing between charging zones</b>					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
<b>Other revenues</b>					
10.1	Union assistance programmes (Art. 25(3)(a))	-926,0	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5	Total other revenues relating to year n (Art. 25(3))	-926,0	0,0	0,0	0,0
<b>Application of a lower unit rate</b>					
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	0,0	0,0	0,0	0,0
12	Total adjustments relating to year n	209.283,4	0,0	0,0	0,0

210.209 210.209

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	358.652,09	178.997,73	184.217,29	187.621,59
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 29.312,06	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 21.198,59	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	7.804,01	- 6.021,63	- 13.787,54	- 7.449,56
13.8	Other revenues (Art. 25(2)(i))	- 700,00	-	- 926,00	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	30.029,92	30.029,92
13.11	Grand total for the calculation of year n unit rate	315.245,5	172.976,1	199.533,7	210.201,9
13.12	Forecast total service units for year n (performance plan)	133,3	142,6	159,5	170,8
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	2.365,45	1.212,87	1.250,98	1.230,67
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00	0,00	0,00
14	Applicable unit rate for year n	2.365,45	1.212,87	1.250,98	1.230,67

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

4) Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2020

Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2021

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

1.012,70

974,47

-

-

178,37

181,64

Table 2 - Unit rate calculation

Denmark - TCZ  
Currency: DKK  
Naviair

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>				
<b>Determined costs</b>				
<b>1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)</b>	<b>355.567,4</b>	<b>177.521,7</b>	<b>182.717,3</b>	<b>186.099,6</b>
<b>Inflation adjustment calculation</b>				
2.1 Determined costs subject to inflation adjustment	296.566,0	147.822,0	153.038,4	156.231,2
2.2 Forecast inflation index - Table 1		104,2	105,7	107,4
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
<b>2.5 Inflation adjustment relating to year n (Art. 26)</b>				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
<b>3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))</b>				
<b>B. Traffic risk sharing</b>				
<b>Traffic risk sharing adjustment</b>				
4.1 Determined costs subject to traffic risk sharing	355.567,4	177.521,7	182.717,3	186.099,6
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	133,3	142,6	159,5	170,8
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
<b>4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))</b>				
<b>Traffic adjustments</b>				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
<b>5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))</b>				
<b>C. Financial incentive schemes on capacity and environment</b>				
<b>Adjustments relating to financial incentives</b>				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
<b>6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))</b>				
<b>D. Other adjustments</b>				
<b>Modulation of charges</b>				
<b>7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))</b>				
<b>Revision of the unit rate</b>				
8.1 Temporary unit rate applied in year n	Footnote 2			
<b>8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))</b>	<b>208.190,4</b>			
<b>Cross-financing between charging zones</b>				
<b>9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n</b>				
<b>Other revenues</b>				
10.1 Union assistance programmes (Art. 25(3)(a))	-926,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
<b>10.5 Total other revenues relating to year n (Art. 25(3))</b>	<b>-926,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>
<b>Application of a lower unit rate</b>				
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
<b>12 Total adjustments relating to year n</b>	<b>207.264,4</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>

208.190 208.190

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	355.567,42	177.521,73	182.717,29	186.099,59
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 29.107,98	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 21.198,59	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	8.049,03	- 6.042,01	- 13.491,57	- 7.449,56
13.8 Other revenues (Art. 25(2)(i))	- 700,00	-	- 926,00	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	29.741,49	29.741,49
<b>13.11 Grand total for the calculation of year n unit rate</b>	<b>312.609,9</b>	<b>171.479,7</b>	<b>198.041,2</b>	<b>208.391,5</b>
<b>13.12 Forecast total service units for year n (performance plan)</b>	<b>133,3</b>	<b>142,6</b>	<b>159,5</b>	<b>170,8</b>
<b>13.13 Unit rate for year n as per Art. 25(2) (in national currency)</b>	<b>2.345,67</b>	<b>1.202,38</b>	<b>1.241,62</b>	<b>1.220,07</b>
<b>13.14 Reduction as per Art. 29(6), where applicable (in national currency)</b>	<b>0,00</b>	<b>0,00</b>		
<b>14 Applicable unit rate for year n</b>	<b>2.345,67</b>	<b>1.202,38</b>	<b>1.241,62</b>	<b>1.220,07</b>

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

1.004,50

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

969,14

(3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

-

Reduction as per Art. 29(6) applied in 2021 (in national currency)

-

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Denmark - TCZ  
Currency: DKK  
MET

Reference Period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
<b>A. Cost-sharing</b>					
<b>Determined costs</b>					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	3.084,7	1.476,0	1.500,0	1.522,0
<b>Inflation adjustment calculation</b>					
2.1	Determined costs subject to inflation adjustment	3.084,7	1.476,0	1.500,0	1.522,0
2.2	Forecast inflation index - Table 1		104,2	105,7	107,4
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
<b>Differences between determined and actual costs referred to in Article 28(4) to 28(6)</b>					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
<b>B. Traffic risk sharing</b>					
<b>Traffic risk sharing adjustment</b>					
4.1	Determined costs subject to traffic risk sharing				
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	133,3	142,6	159,5	170,8
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
<b>Traffic adjustments</b>					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
<b>C. Financial incentive schemes on capacity and environment</b>					
<b>Adjustments relating to financial incentives</b>					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				
<b>D. Other adjustments</b>					
<b>Modulation of charges</b>					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
<b>Revision of the unit rate</b>					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	2.019,0			
<b>Cross-financing between charging zones</b>					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
<b>Other revenues</b>					
10.1	Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5	Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
<b>Application of a lower unit rate</b>					
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
12	Total adjustments relating to year n	2.019,0	0,0	0,0	0,0

2.019 2.019

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	3.084,67	1.476,00	1.500,00	1.522,00
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 204,08	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 245,02	20,38	- 295,98	-
13.8	Other revenues (Art. 25(2)(i))	-	-	-	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	288,43	288,43
13.11	Grand total for the calculation of year n unit rate	2.635,6	1.496,4	1.492,5	1.810,4
13.12	Forecast total service units for year n (performance plan)	133,3	142,6	159,5	170,8
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	19,78	10,49	9,36	10,60
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14	Applicable unit rate for year n	19,78	10,49	9,36	10,60

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption  
that actual TSUs 2021 are equal to  
forecast and that the  
revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Denmark - TCZ Currency: DKK All Entities								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2.024	After RP
2018	Inflation adjustment 2018	-13.257	-13.257	0	0	0	0	0
2019	Inflation adjustment 2019	-16.055	0	-16.055	0	0	0	0
RP2	Total inflation adjustment up to 2019	-29.312	-13.257	-16.055	0	0	0	0
DELETED								
2020-2021	Inflation adjustment 2020-2021	0	0	0	0	0	0	0
2022	Inflation adjustment 2022	0	0	0	0	0	0	0
2023	Inflation adjustment 2023	0	0	0	0	0	0	0
2024	Inflation adjustment 2024	0	0	0	0	0	0	0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-29.312</b>	<b>-13.257</b>	<b>-16.055</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017	0	0	0	0	0	0	0
2018	Traffic risk sharing 2018	-9.392	-9.392	0	0	0	0	0
2019	Traffic risk sharing 2019	-11.806	0	-11.806	0	0	0	0
RP2	Total traffic risk sharing adjustments up to 2019	-21.199	-9.392	-11.806	0	0	0	0
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Traffic risk sharing 2022	0	0	0	0	0	0	0
2023	Traffic risk sharing 2023	0	0	0	0	0	0	0
2024	Traffic risk sharing 2024	0	0	0	0	0	0	0
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>	<b>-21.199</b>	<b>-9.392</b>	<b>-11.806</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in investment costs 2022	0	0	0	0	0	0	0
2023	Difference in investment costs 2023	0	0	0	0	0	0	0
2024	Difference in investment costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0	0	0	0	0	0	0
2022	Difference in competent authorities and QEs costs 2022	0	0	0	0	0	0	0
2023	Difference in competent authorities and QEs costs 2023	0	0	0	0	0	0	0
2024	Difference in competent authorities and QEs costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in Eurocontrol costs 2022	0	0	0	0	0	0	0
2023	Difference in Eurocontrol costs 2023	0	0	0	0	0	0	0
2024	Difference in Eurocontrol costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in pension costs 2022	0	0	0	0	0	0	0
2023	Difference in pension costs 2023	0	0	0	0	0	0	0
2024	Difference in pension costs 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Difference in interest on loans 2022	0	0	0	0	0	0	0
2023	Difference in interest on loans 2023	0	0	0	0	0	0	0
2024	Difference in interest on loans 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Costs relating to change in law 2022	0	0	0	0	0	0	0
2023	Costs relating to change in law 2023	0	0	0	0	0	0	0
2024	Costs relating to change in law 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
2018	Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
2019	Cost exempt from cost sharing 2019	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017	0	0	0	0	0	0	0
2018	Financial incentives year 2018	0	0	0	0	0	0	0
2019	Financial incentives year 2019	0	0	0	0	0	0	0
RP2	Total financial incentives up to 2019	0	0	0	0	0	0	0
DELETED								
2022	Financial incentives year 2022	0	0	0	0	0	0	0
2023	Financial incentives year 2023	0	0	0	0	0	0	0
2024	Financial incentives year 2024	0	0	0	0	0	0	0
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Modulation of charges up to 2017	0	0	0	0	0	0	0
2018	Modulation of charges year 2018	0	0	0	0	0	0	0
2019	Modulation of charges year 2019	0	0	0	0	0	0	0
RP2	Total modulation of charges up to 2019	0	0	0	0	0	0	0
DELETED								
2020-2021	Modulation of charges 2020-2021	0	0	0	0	0	0	0
2022	Modulation of charges 2022	0	0	0	0	0	0	0
2023	Modulation of charges 2023	0	0	0	0	0	0	0
2024	Modulation of charges 2024	0	0	0	0	0	0	0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	3.931	4.181	-250	0	0	0	0
2019	Traffic adjustment 2019	3.873	0	3.873	0	0	0	0
RP2	Total traffic adjustments up to 2019	7.804	4.181	3.623	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-12.064	0	0	-6.022	-6.042	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-15.195	0	0	0	-7.746	-7.450	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0	0	0	0	0	0	0

2023	Traffic adjustment on adjustments from previous RPs 2023	0	0	0	0	0	0	0
2024	Traffic adjustment on adjustments from previous RPs 2024	0	0	0	0	0	0	0
RP2	<b>Total traffic adjustment on adjustments from previous reference periods</b>	<b>-27.259</b>	<b>0</b>	<b>0</b>	<b>-6.022</b>	<b>-13.788</b>	<b>-7.450</b>	<b>0</b>
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
2022	Traffic adjustment 2022	0	0	0	0	0	0	0
2023	Traffic adjustment 2023	0	0	0	0	0	0	0
2024	Traffic adjustment 2024	0	0	0	0	0	0	0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-19.455</b>	<b>4.181</b>	<b>3.623</b>	<b>-6.022</b>	<b>-13.788</b>	<b>-7.450</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	-258	-258	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	-442	0	-442	0	0	0	0
RP2	<b>Total revenues received from Union assistance programmes up to 2019</b>	<b>-700</b>	<b>-258</b>	<b>-442</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	-926	0	0	0	-926	0	0
2022	Revenues received from Union assistance programmes in 2022	0	0	0	0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0	0	0	0	0	0	0
2024	Revenues received from Union assistance programmes in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>-1.626</b>	<b>-258</b>	<b>-442</b>	<b>0</b>	<b>-926</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues received from national public funding up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0	0	0	0	0	0	0
2023	Revenues received from national public funding in 2023	0	0	0	0	0	0	0
2024	Revenues received from national public funding in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from commercial activities up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from commercial activities in 2022	0	0	0	0	0	0	0
2023	Revenues from commercial activities in 2023	0	0	0	0	0	0	0
2024	Revenues from commercial activities in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
2018	Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
2019	Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from contracts with airport operators up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from contracts with airport operators in 2022	0	0	0	0	0	0	0
2023	Revenues from contracts with airport operators in 2023	0	0	0	0	0	0	0
2024	Revenues from contracts with airport operators in 2024	0	0	0	0	0	0	0
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	210.209	0	0	0	30.030	30.030	150.150
2022	Revenue difference - revision of UR 2022	0	0	0	0	0	0	0
2023	Revenue difference - revision of UR 2023	0	0	0	0	0	0	0
2024	Revenue difference - revision of UR 2024	0	0	0	0	0	0	0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>210.209</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30.030</b>	<b>30.030</b>	<b>150.150</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021	0	0	0	0	0	0	0
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022	0	0	0	0	0	0	0
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023	0	0	0	0	0	0	0
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024	0	0	0	0	0	0	0
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total adjustments</b>		<b>138.618</b>	<b>-18.727</b>	<b>-24.680</b>	<b>-6.022</b>	<b>15.316</b>	<b>22.580</b>	<b>150.150</b>

Amounts in '000 (national currency)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

\* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Adjustments from previous RPs	-70.665	-18.727	-24.680	-6.022	-13.788	-7.450	0
RP3 adjustments	209.283	0	0	0	29.104	30.030	150.150
<b>Total adjustments</b>	<b>138.618</b>	<b>-18.727</b>	<b>-24.680</b>	<b>-6.022</b>	<b>15.316</b>	<b>22.580</b>	<b>150.150</b>



Table 3 - Complementary information on adjustments

Denmark - TCZ Currency: DKK Navair								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
2018	Inflation adjustment 2018	-13.164	-13.164					
2019	Inflation adjustment 2019	-15.944		-15.944				
RP2	Total inflation adjustment up to 2019	-29.108	-13.164	-15.944				
DELETED								
2020-2021	Inflation adjustment 2020-2021	0				0		
2022	Inflation adjustment 2022	0					0	
2023	Inflation adjustment 2023	0						0
2024	Inflation adjustment 2024	0						0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-29.108</b>	<b>-13.164</b>	<b>-15.944</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017	0	0	0	0	0	0	0
2018	Traffic risk sharing 2018	-9.392	-9.392	0	0	0	0	0
2019	Traffic risk sharing 2019	-11.806		-11.806	0	0	0	0
RP2	Total traffic risk sharing adjustments up to 2019	-21.199	-9.392	-11.806	0	0	0	0
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic risk sharing 2022	0					0	
2023	Traffic risk sharing 2023	0						0
2024	Traffic risk sharing 2024	0						0
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>	<b>-21.199</b>	<b>-9.392</b>	<b>-11.806</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in investment costs 2022	0					0	0
2023	Difference in investment costs 2023	0						0
2024	Difference in investment costs 2024	0						0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
2022	Difference in competent authorities and QEs costs 2022							
2023	Difference in competent authorities and QEs costs 2023							
2024	Difference in competent authorities and QEs costs 2024							
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
2022	Difference in Eurocontrol costs 2022							
2023	Difference in Eurocontrol costs 2023							
2024	Difference in Eurocontrol costs 2024							
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in pension costs 2022	0					0	0
2023	Difference in pension costs 2023	0						0
2024	Difference in pension costs 2024	0						0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
2022	Difference in interest on loans 2022	0					0	0
2023	Difference in interest on loans 2023	0						0
2024	Difference in interest on loans 2024	0						0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
2022	Costs relating to change in law 2022	0					0	0
2023	Costs relating to change in law 2023	0						0
2024	Costs relating to change in law 2024	0						0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
2018	Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
2019	Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017	0	0	0	0	0	0	0
2018	Financial incentives year 2018	0	0					
2019	Financial incentives year 2019	0		0				
RP2	Total financial incentives up to 2019	0	0	0	0	0	0	0
DELETED								
DELETED								
2022	Financial incentives year 2022	0					0	
2023	Financial incentives year 2023	0						0
2024	Financial incentives year 2024	0						0
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Modulation of charges up to 2017	0	0	0	0	0	0	
2018	Modulation of charges year 2018	0	0	0	0	0	0	
2019	Modulation of charges year 2019	0		0	0	0	0	
RP2	Total modulation of charges up to 2019	0	0	0	0	0	0	
DELETED								
2020-2021	Modulation of charges 2020-2021	0				0		
2022	Modulation of charges 2022	0					0	
2023	Modulation of charges 2023	0						0
2024	Modulation of charges 2024	0						0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017		0	0	0	0	0	0
2018	Traffic adjustment 2018	4.056	4.056	0	0	0	0	0
2019	Traffic adjustment 2019	3.993		3.993	0	0	0	0
RP2	Total traffic adjustments up to 2019	8.049	4.056	3.993	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	-12.084			-6.042	-6.042	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-14.899				-7.450	-7.450	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0					0	0

2023	Traffic adjustment on adjustments from previous RPs 2023	0						0
2024	Traffic adjustment on adjustments from previous RPs 2024	0						0
RP2	<b>Total traffic adjustment on adjustments from previous reference periods</b>	<b>-26.983</b>	<b>0</b>	<b>0</b>	<b>-6.042</b>	<b>-13.492</b>	<b>-7.450</b>	<b>0</b>
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic adjustment 2022	0					0	
2023	Traffic adjustment 2023	0						0
2024	Traffic adjustment 2024	0						0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-18.934</b>	<b>4.056</b>	<b>3.993</b>	<b>-6.042</b>	<b>-13.492</b>	<b>-7.450</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	-258	-258	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	-442	0	-442	0	0	0	0
RP2	<b>Total revenues received from Union assistance programmes up to 2019</b>	<b>-700</b>	<b>-258</b>	<b>-442</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	-926	0	0	0	-926	0	0
2022	Revenues received from Union assistance programmes in 2022	0			0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0				0	0	0
2024	Revenues received from Union assistance programmes in 2024	0					0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>-1.626</b>	<b>-258</b>	<b>-442</b>	<b>0</b>	<b>-926</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues received from national public funding up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0			0	0	0	0
2023	Revenues received from national public funding in 2023	0				0	0	0
2024	Revenues received from national public funding in 2024	0					0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from commercial activities up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0		
2022	Revenues from commercial activities in 2022	0			0	0	0	
2023	Revenues from commercial activities in 2023	0				0	0	0
2024	Revenues from commercial activities in 2024	0					0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
2018	Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
2019	Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from contracts with airport operators up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
2022	Revenues from contracts with airport operators in 2022	0			0	0	0	
2023	Revenues from contracts with airport operators in 2023	0				0	0	0
2024	Revenues from contracts with airport operators in 2024	0					0	0
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	208.190				29.741	29.741	148.707
2022	Revenue difference - revision of UR 2022	0				0	0	0
2023	Revenue difference - revision of UR 2023	0					0	0
2024	Revenue difference - revision of UR 2024	0						0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>208.190</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29.741</b>	<b>29.741</b>	<b>148.707</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>							
	<b>Total adjustments</b>	<b>137.324</b>	<b>-18.758</b>	<b>-24.199</b>	<b>-6.042</b>	<b>15.324</b>	<b>22.292</b>	<b>148.707</b>

Amounts in '000 (national currency)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

\* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Adjustments from previous RPs	-69.941	-18.758	-24.199	-6.042	-13.492	-7.450	0
RP3 adjustments	207.264	0	0	0	28.815	29.741	148.707
<b>Total adjustments</b>	<b>137.324</b>	<b>-18.758</b>	<b>-24.199</b>	<b>-6.042</b>	<b>15.324</b>	<b>22.292</b>	<b>148.707</b>

Table 3 - Complementary information on adjustments

Denmark - TCZ Currency: DKK MET								
FILTER	Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
2018	Inflation adjustment 2018	-93	-93					
2019	Inflation adjustment 2019	-111		-111				
RP2	Total inflation adjustment up to 2019	-204	-93	-111				
DELETED								
2020-2021	Inflation adjustment 2020-2021	0				0		
2022	Inflation adjustment 2022	0					0	
2023	Inflation adjustment 2023	0						0
2024	Inflation adjustment 2024	0						0
Total	<b>Total inflation Adjustment (Art. 26)*</b>	<b>-204</b>	<b>-93</b>	<b>-111</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic risk sharing up to 2017							
2018	Traffic risk sharing 2018							
2019	Traffic risk sharing 2019							
RP2	Total traffic risk sharing adjustments up to 2019							
DELETED								
2020-2021	Traffic risk sharing 2020-2021 (exceptional measures)							
2022	Traffic risk sharing 2022							
2023	Traffic risk sharing 2023							
2024	Traffic risk sharing 2024							
Total	<b>Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*</b>							
DELETED								
2020-2021	Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in investment costs 2022	0					0	0
2023	Difference in investment costs 2023	0						0
2024	Difference in investment costs 2024	0						0
Total	<b>Total adjustment relating to investment costs (Art. 28(4))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
2022	Difference in competent authorities and QEs costs 2022							
2023	Difference in competent authorities and QEs costs 2023							
2024	Difference in competent authorities and QEs costs 2024							
Total	<b>Total adjustment relating to competent authorities and QEs costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
2022	Difference in Eurocontrol costs 2022							
2023	Difference in Eurocontrol costs 2023							
2024	Difference in Eurocontrol costs 2024							
Total	<b>Total adjustment relating to Eurocontrol costs (Art. 28(5))</b>							
DELETED								
2020-2021	Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
2022	Difference in pension costs 2022	0					0	0
2023	Difference in pension costs 2023	0						0
2024	Difference in pension costs 2024	0						0
Total	<b>Total adjustment relating to pension costs (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
2022	Difference in interest on loans 2022	0					0	0
2023	Difference in interest on loans 2023	0						0
2024	Difference in interest on loans 2024	0						0
Total	<b>Total adjustment relating to interest on loans (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
2022	Costs relating to change in law 2022	0					0	0
2023	Costs relating to change in law 2023	0						0
2024	Costs relating to change in law 2024	0						0
Total	<b>Total adjustment relating to change in law (Art. 28(6))</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>
2017	Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
2018	Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
2019	Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total	<b>Total adjustment relating to cost exempt from previous RPs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Financial incentives year up to 2017							
2018	Financial incentives year 2018							
2019	Financial incentives year 2019							
RP2	Total financial incentives up to 2019							
DELETED								
2022	Financial incentives year 2022							
2023	Financial incentives year 2023							
2024	Financial incentives year 2024							
Total	<b>Total financial incentives (Art. 11(3) and 11(4))*</b>							
2017	Modulation of charges up to 2017	0	0	0	0	0	0	
2018	Modulation of charges year 2018	0	0	0	0	0	0	
2019	Modulation of charges year 2019	0		0	0	0	0	
RP2	Total modulation of charges up to 2019	0	0	0	0	0	0	
DELETED								
2020-2021	Modulation of charges 2020-2021	0				0		
2022	Modulation of charges 2022	0					0	
2023	Modulation of charges 2023	0						0
2024	Modulation of charges 2024	0						0
Total	<b>Total adjustment relating to modulation of charges (Art. 32(1))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Traffic adjustment up to 2017	0	0	0	0	0	0	0
2018	Traffic adjustment 2018	-125	125	-250	0	0	0	0
2019	Traffic adjustment 2019	-120		-120	0	0	0	0
RP2	Total traffic adjustments up to 2019	-245	125	-370	0	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2020	20			20	0	0	0
2020-2021	Traffic adjustment on adjustments from previous RPs 2021	-296				-296	0	0
2022	Traffic adjustment on adjustments from previous RPs 2022	0					0	0

2023	Traffic adjustment on adjustments from previous RPs 2023	0						0
2024	Traffic adjustment on adjustments from previous RPs 2024	0						0
RP2	<b>Total traffic adjustment on adjustments from previous reference periods</b>	<b>-276</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>-296</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
2022	Traffic adjustment 2022	0					0	
2023	Traffic adjustment 2023	0						0
2024	Traffic adjustment 2024	0						0
Total	<b>Total traffic adjustment (Art. 27(8) and 27(9))*</b>	<b>-521</b>	<b>125</b>	<b>-370</b>	<b>20</b>	<b>-296</b>	<b>0</b>	<b>0</b>
2017	Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
2018	Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
2019	Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues received from Union assistance programmes up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from Union assistance programmes in 2022	0			0	0	0	0
2023	Revenues received from Union assistance programmes in 2023	0				0	0	0
2024	Revenues received from Union assistance programmes in 2024	0					0	0
Total	<b>Total revenues received from Union assistance programmes (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
2018	Revenues received from national public funding in 2018	0	0	0	0	0	0	0
2019	Revenues received from national public funding in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues received from national public funding up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
2022	Revenues received from national public funding in 2022	0			0	0	0	0
2023	Revenues received from national public funding in 2023	0				0	0	0
2024	Revenues received from national public funding in 2024	0					0	0
Total	<b>Total revenues received from national public funding (Art. 25(3)(a))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
2018	Revenues from commercial activities in 2018	0	0	0	0	0	0	0
2019	Revenues from commercial activities in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from commercial activities up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from commercial activities in 2022	0			0	0	0	0
2023	Revenues from commercial activities in 2023	0				0	0	0
2024	Revenues from commercial activities in 2024	0					0	0
Total	<b>Total revenues from commercial activities (Art. 25(3)(b))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2017	Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
2018	Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
2019	Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
RP2	<b>Total revenues from contracts with airport operators up to 2019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
2022	Revenues from contracts with airport operators in 2022	0			0	0	0	0
2023	Revenues from contracts with airport operators in 2023	0				0	0	0
2024	Revenues from contracts with airport operators in 2024	0					0	0
Total	<b>Total revenues from contracts with airport operators (Art. 25(3)(c))*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
DELETED								
2020-2021	Revenue difference - revision of UR 2020-2021	2.019				288	288	1.442
2022	Revenue difference - revision of UR 2022	0				0	0	0
2023	Revenue difference - revision of UR 2023	0					0	0
2024	Revenue difference - revision of UR 2024	0						0
Total	<b>Total revenue differences from temporary application of UR (Art. 29(5))</b>	<b>2.019</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>288</b>	<b>288</b>	<b>1.442</b>
DELETED								
2020-2021	Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
2022	Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
2023	Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
2024	Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total	<b>Total cross-financing to (-) / from (+) other charging zone(s)</b>							
	<b>Total adjustments</b>	<b>1.294</b>	<b>32</b>	<b>-481</b>	<b>20</b>	<b>-8</b>	<b>288</b>	<b>1.442</b>

Amounts in '000 (national currency)

\* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Adjustments from previous RPs	-725	32	-481	20	-296	0	0
RP3 adjustments	2.019	0	0	0	288	288	1.442
<b>Total adjustments</b>	<b>1.294</b>	<b>32</b>	<b>-481</b>	<b>20</b>	<b>-8</b>	<b>288</b>	<b>1.442</b>

Table 4 - Complementary information on common projects and on revenues from Union assistance programmes allocated to the charging zone

Denmark - TCZ		Amounts received															
Project reference (as per Grant Agreement)	Project title	Value of funded project		Amounts granted (as per GA)		Common project y/n	Actual amounts received (charging zone) in '000 Euro										
		Total	For the charging zone	Total	For the charging zone		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2014-EU-TM-0136-M	CANDI-IP preparation project	245	37	124	19	Y	0	5	4	7	0	3	0				
2014-EU-TM-0136-M	Standardization of A-SMGCS A3000	214	214	107	107	Y	0	28	23	39	0	19	0				
2014-EU-TM-0136-M	Borealis Free Route Airspace Programme Step 1	583	0	291	0	Y	0	0	0	0	0	0	0				
2014-EU-TM-0376-M	COOPANS B2.6/B3.2/B3.2	6.312	316	3.156	158	N	0	41	77	0	0	25	0				
2015-EU-TM-0193-M	Implementation of initial DDMAN and AOP at Copenhagen Airport (CPH)	135	135	68	68	Y	0	0	23	0	0	25	0				
2015-EU-TM-0193-M	VoIP Programme	5.417	813	1.485	223	Y	0	0	72	0	0	84	0				
2015-EU-TM-0193-M	DK-SE FAB Aeronautical Data Quality, ADQ	139	21	70	10	Y	0	0	4	0	0	4	0				
2015-EU-TM-0193-M	CANDI-IP execution phase	4.530	680	2.265	340	Y	0	0	118	0	0	128	0				
2015-EU-TM-0196-M	A-SMGCS Routing & Planning	1.564	1.564	429	429	Y	0	0	101	0	0	0	0				
2015-EU-TM-0196-M	A-SMGCS Safety Nets	1.825	1.825	500	500	Y	0	0	117	0	0	0	0				
2015-EU-TM-0196-M	Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program, COOPANS B3.3/3.4/4.1	12.530	627	6.265	313	Y	0	0	74	0	0	0	0				
2015-EU-TM-0196-M	Borealis Free Route Airspace Implementation (Part 2)	7.645	0	3.823	0	Y	0	0	0	0	0	0	0				
2015-EU-TM-0196-M	NewPENS Stakeholders contribution for the procurement and deployment of NewPENS	247	0	124	0	Y	0	0	0	0	0	0	0				
2015-EU-TM-0103-W	JPO	1.133	283	566	142	N	0	0	44	0	153	20	0				
2015-EU-TM-0387-S	CODACAS phase 1B	808	40	404	20	N	0	0	8	0	0	0	0				
2016-EU-TM-0117-M	Synchronised PBN Implementation	2.069	1.034	889	445	Y	0	0	0	78	0	0	0				
2016-EU-TM-0117-M	European Deployment Roadmap for Flight Object Interoperability	50	3	22	1	Y	0	0	0	0	0	0	0				
2017-EU-TM-0076-M	ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport	702	105	351	53	Y	0	0	0	0	0	6	0				
2017-EU-TM-0076-M	Implementing harmonised SWIM (Y) solution in COOPANS ANSPs and general PCP compliance	11.710	585	5.855	293	Y	0	0	0	0	0	36	0				
<b>Total in '000 Euro</b>		<b>57.860</b>	<b>8.281</b>	<b>26.793</b>	<b>3.119</b>		<b>0</b>	<b>75</b>	<b>670</b>	<b>124</b>	<b>153</b>	<b>350</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Total in '000 national currency</b>		<b>431.057</b>	<b>61.693</b>	<b>199.611</b>	<b>23.238</b>		<b>0</b>	<b>556</b>	<b>4.988</b>	<b>924</b>	<b>1.144</b>	<b>2.604</b>	<b>0</b>				

Denmark - TCZ		Amounts reimbursed to airspace users through other revenues															
Project reference (as per Grant Agreement)	Project title	Amounts retained in respect of administrative costs for the	Total to be reimbursed for the charging zone in '000 Euro	Amounts reimbursed to users (charging zone) in '000 national currency													
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	After RP		
2014-EU-TM-0376-M	COOPANS B2.6/B3.2/B3.2	4,7	153,1		0,8	4,4	7,0	7,2	7	8	0	0					
2015-EU-TM-0196-M	Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program, COOPANS B3.3/3.4/4.1	3,0	310,3					3,7	13	18	0	0					
2015-EU-TM-0193-M	CANDI-IP execution phase	6,4	333,3					12,2	24	29	0	0					
2015-EU-TM-0193-M	VoIP Programme	4,5	218,3					11,2	14	17	0	0					
2015-EU-TM-0193-M	DK-SE FAB Aeronautical Data Quality, ADQ		10,4									-1					
2017-EU-TM-0076-M	ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport		52,7									27					
2016-EU-TM-0117-M	Synchronised PBN Implementation		444,7									4					
2015-EU-TM-0196-M	NewPENS Stakeholders contribution for the procurement and deployment of NewPENS		292,7									6					
2017-EU-TM-0076-M	Implementing harmonised SWIM (Y) solution in COOPANS ANSPs and general PCP compliance		141,6									15					
2015-EU-TM-0103-W	JPO																
Other projects with funding covering depreciation in RP2 DC		1,5	10,4			4,6	3,6	0,3	0	1	0	0					
<b>Total in '000 Euro</b>		<b>20,1</b>	<b>1.967,6</b>		<b>0,0</b>	<b>0,8</b>	<b>9,0</b>	<b>10,6</b>	<b>34,6</b>	<b>59</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Total in '000 national currency</b>		<b>149,7</b>	<b>14.658,7</b>		<b>5,6</b>	<b>67,1</b>	<b>78,6</b>	<b>257,4</b>	<b>442,2</b>	<b>926</b>	<b>0</b>	<b>0</b>	<b>0</b>				

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Denmark - TCZ	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	183.607.046	358.652.091	178.997.731	184.217.288	187.621.588	2,2%
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	<b>181.428.280</b>	<b>352.003.886</b>	<b>172.957.837</b>	<b>175.845.968</b>	<b>176.726.394</b>	-2,6%
Total terminal costs in real terms (in EUR2017) <sup>1</sup>	24.395.621	47.331.945	23.256.649	23.644.999	23.763.385	-2,6%
YoY variation		94,0%	-50,9%	1,7%	0,5%	
Total terminal Service Units (TNSU)	172.467	133.271	142.617	159.502	170.803	-1,0%
YoY variation		-22,7%	7,0%	11,8%	7,1%	
<b>Real terminal unit costs (in national currency at 2017 prices)</b>	<b>1.051,96</b>	<b>2.641,26</b>	<b>1.212,74</b>	<b>1.102,47</b>	<b>1.034,68</b>	-1,6%
Real terminal unit costs (in EUR2017) <sup>1</sup>	141,45	355,16	163,07	148,24	139,13	-1,6%
YoY variation		151,1%	-54,1%	-9,1%	-6,1%	
	Eu targets	120,1	-38,5	-13,2	-11,5	
National currency	DKK					
<sup>1</sup> Average exchange rate 2017 (1 EUR=)	7,44					

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

Terminal charging zone Denmark - TCZ	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	183.607.046	186.527.309	-2.920.263
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	<b>181.428.280</b>	<b>184.369.253</b>	<b>-2.940.972</b>
Total terminal costs in real terms (in EUR2017) <sup>1</sup>	24.395.621	24.791.076	-395.456
Total terminal Service Units (TNSU)	172.467	172.467	0

Baseline	-2.940.972	DKK 2017
Cost of capital	-4.935.348	DKK 2017
Netted funding	1.994.375	DKK 2017
Netted funding	2.015.085	DKK 2019

Baseline	179.894.519	
2020	174.494.047	-3,00%
2022	171.541.549	-4,64%
2023	174.427.223	-3,04%
2024	175.309.510	-2,55%

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

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

#### 1. Determined costs and unit costs

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

##### **ANSP (Naviair):**

Allocation of costs is based on time recordings, and allocation based on specific activities. The allocation keys have been prepared based on activity measurements/resource consumption, number of positions, areas of work and an assessment of the interrelationships of the activities. The principles and actual allocation keys are maintained in a memo describing all costbases of Naviair. The memo (and changes to the principles) are subject to approval in a forum of directors responsible for cost areas. The memo is shared with the NSA yearly.

From 2010, costs for ATS related to approach services are being allocated 100 per cent to the en route charging zone. The costs of all eligible services, facilities and activities have been allocated in a transparent manner to the charging zones, in respect of which they are actually incurred.

Cost of Roskilde Airport, Billund Airport and Aarhus Airport is allocated 50 per cent to en route. Cost of Aalborg Airport is allocated 40 per cent to en route.

Operational training and education costs are allocated to the relevant cost base reflecting the demand from the operational site.

The distribution in "Detail by service" has been revisited and is unchanged compared to that of RP2.

No changes foreseen for RP3.

##### **MET (DMI):**

Allocation of costs is based on time recordings.

Cost for MET services related to the functions as MWO for København FIR and as MO for Danish civil airports, including aviation specific R&D, are allocated 100% to the charging zone, Other MET services are not allocated. Core costs are allocated in proportion to the relative use of facilities by MET services for aviation, based on time recordings from the time managements systems.

##### **NSA (Trafikstyrelsen):**

Allocation of costs is based on time recordings. A new budget system has been implemented, which means that the allocation of overhead on staff costs and on other operating costs has changed. Previously overhead on staff cost was included in staff costs. Whereas the new system includes both types of overhead in the overhead costs for other operating costs. This change implies that the staff costs in 2021 and onwards are reduced approximately by 6 mil. DKK compared to earlier years.

**b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5);**

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

### **ANSP (Naviair):**

The Government finances VFR and other exempted flights. Cost for the specific activity is allocated based on time recordings. During 2019 the allocation of costs of air navigation services provided to VFR flights was revisited and estimated at a higher level than previous years – primarily due to increased workload related to VFR-flights. This is reflected in the actual costs of 2019 and the same level of costs are expected in the RP3-period.

**c) Criteria used to allocate costs between terminal and en route services, in accordance with Article 22(5);**

### **ANSP (Naviair):**

From 2010, costs for ATS related to approach services are being allocated 100 per cent to the en route charging zone. The costs of all eligible services, facilities and activities, have been allocated in a transparent manner to the charging zones, in respect of where they are actually incurred.

### **MET (DMI):**

Costs for meteorological services are allocated to the ENR and TNC cost base using man-hours as the cost driver. By this mechanism 93 % of the total costs for providing meteorological services to civil aviation are allocated to en route corresponding to the relative workload on the aviation shifts

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

### **MET (DMI):**

Breakdown of the MET costs in direct costs and MET core costs (1,000 DKK) excl. VAT.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Direct costs	14,911	12,044	10,430	11,197	13,540	12,225	12,695	12,941	13,149	13,347
Core costs	24,134	21,413	23,074	22,729	23,666	22.187	25,776	26,276	26,697	27,100

Direct and Core costs including overhead. Overhead related to general management and administration is allocated to direct costs as the share of man hours used for services to aviation relative to all man hours.

Overhead related to operational management and administration of operational services allocated as the share of man hours used by services to aviation in relation to all operational services.

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

### **MET (DMI):**

The methodology used for allocating total MET costs and MET core costs to civil aviation.

The direct costs for providing MET services is allocated to civil aviation based on time recordings. This includes development exclusively for aviation.

The core costs are allocated to civil aviation using the following cost pools:

- General management and administration



## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

- Buildings
- Commonly used telecommunication and data processing
- Core research and development
- In situ observation systems
- Remote sensing systems

The costs are allocated to civil aviation in proportion to the relative aeronautical and non-aeronautical use made of the facility based on time recordings. This calculation is done on a yearly basis, to ensure the most accurate reflection of the actual status and to ensure a fair allocation of costs to aviation. This however results in the costs shifting somewhat from year to year, due to changes in allocation.

The allocation has been assumed constant over RP3.

For facilities serving meteorological services e.g. weather radar the proportion of costs allocated to civil aviation is the ratio of recorded man hours on aviation services to the recorded total man hours for meteorological services e.g. meteorological services to the public, defense and Greenland.

For facilities serving all services, e.g. supercomputer installation, the proportion of costs allocated to civil aviation is the ratio of recorded man hours for aviation services to the recorded total man hours spent on ice services, oceanographical, climatological and meteorological services.

By this mechanism:

6.3% of all general management costs

13,6% of core costs of facilities used by all services

24.1% of core cost of facilities used by meteorological services

are allocated to civil aviation.

More detailed examples of allocation can be seen below.

<i>Core activities</i>	<i>Civil aviation Share of costs</i>
<i>Surface observation stations</i>	<i>24,1%</i>
<i>Weather radar</i>	<i>24,1%</i>
<i>Satellite reception</i>	<i>24,1%</i>
<i>Lighting detection</i>	<i>24,1%</i>
<i>Development, meteorological workstations</i>	<i>24,1%</i>
<i>Numerical Weather Prediction</i>	<i>13,6%</i>
<i>Telecommunication/IT production</i>	<i>13,6%</i>
<i>Supercomputer facilities</i>	<i>13,6%</i>
<i>Training</i>	<i>13,6%</i>
<i>Contribution to WMO</i>	<i>13,6%</i>
<i>Contribution to ECMWF</i>	<i>13,6%</i>
<i>Contribution to EUMETSAT</i>	<i>13,6%</i>

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

### *Determined costs by nature and by service*

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

Entity: ANSP (Naviair)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	<p>Wages and salaries, employers' contributions to social security, etc.</p> <p>The primary changes in RP3 will be methodology changes when comparing RP2 year 2019 and 2020 DC, which results in an increase compared to year 2019:</p> <ul style="list-style-type: none"> <li>• Reported costs of year 2019 was including netted funding. This method has been discontinued in the determined costs for RP3.</li> <li>• Increases due to Collective agreements, automatic salary adjustments and seniority.</li> <li>• No rehiring on vacant positions in 2020. Effect is included in the revised strategy plan.</li> <li>• In the draft plan effects of the Strategy 2023 was necessary to meet the targets. During 2020 and 2021 this plan will be accelerated with primarily the agreements of voluntary resignations (a company total of 77). The voluntary resignations will have full year effect in 2022 and forward.</li> <li>• Furthermore, more temporary reductions are planned for use of extra shifts and the rehiring of vacant positions.</li> <li>• In the draft plan training costs for the operational staff was expected. With the amount of voluntary resignations - also amongst the operational staff - training is a requirement going forward. The demographic shows a high amount of expected retirements going forward.</li> </ul> <p>In RP1/RP2 Naviair reported "Work performed for own account and capitalized" under <i>exceptional items</i>.</p> <p>From Naviairs annual report under Accounting policies: "Work performed for own account and capitalized" comprises staff costs and other internal expenses incurred during the financial year and recognized in the cost of self-constructed intangible assets and property, plant and equipment.</p> <p>Given that these costs are not "exceptional" per definition the costs are now as of RP3 reported with Staff costs.</p> <p>The Staff costs are added with inflation.</p>
of which, pension costs	<p>Pension costs are explained in the Performance plan and constitutes an average of 17 per cent of the Staff costs.</p>
1.2 Other operating costs	<p>Costs for administration, facilities and maintenance, training etc.</p> <p>The level in 2020 is expected to increase compared to 2019.</p> <p>The following movements in costs have been identified:</p> <ul style="list-style-type: none"> <li>• The reported costs of year 2019 was including netted funding. This method has been discontinued in the determined costs for RP3.</li> <li>• Overall lower costs for training primarily in 2020/2021 compared to draft plan.</li> <li>• Increase in the need to train operational staff in later periods to a level closer to the expectations of the draft plan. Should be seen in context with the voluntary resignations and the demographics of Naviair where several retirements are foreseen during RP3.</li> <li>• Naviair has implemented costs containment efforts during 2020/2021 and had for draft plan several initiatives for targeting the OPEX-side.</li> <li>• This has been accelerated with expected effect in the costs from 2022, and with partial more temporary effect in 2020/2021</li> </ul> <p>Other operating costs are added with inflation.</p>

**En-route Charging Zone Denmark  
Reference Period 3 (2020-2024)**

1.3 Depreciation	The depreciations are expected to increase during RP3 as result of the investment plan, and because of investments finalized in 2019 and 2020.
1.4 Cost of capital	Capital structure and the subordinated loan are the main contributors to the calculation of cost of capital. Also the level of capitalised interim interests has an effect on the cost of capital. Recalculated method for RP3 aligning the assumptions and calculations with the RP3 regulation. Due to the revenue gap from the COVID-19 crisis there will be a draw on the facilities from the bank and state loan (expected peak in 2022 of 650 M DKK) which will lead to increased interest payments.
1.5 Exceptional items	Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The “negative” costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. It is the intention from Naviair not to charge the users in 2020 more than 97% of the baseline (2019-level) which will be added in the user rate from year 2023 an onwards.  The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.  Due to the change in STATFOR forecast, which expects significantly more traffic in 2022 and 2023 an amount of identified variable costs have been added with reference to consultation material regarding the update in November 2021.
<b>2. Detail by service (in nominal terms)</b>	
2.1 Air Traffic Management	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.2 Communication	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.3 Navigation	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.4 Surveillance	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.5 Search and rescue	
2.6 Aeronautical Information	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.7 Meteorological services	
2.8 Supervision costs	
2.9 Other State costs	
<b>Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008</b>	
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<b>Entity: DMI</b>	
<b>1. Detail by nature (in nominal terms)</b>	
1.1 Staff costs	Staff costs reported as salary costs including pension costs for all activities. Staff costs have increased over 2018-2020 due to higher costs for meteorological services, see below. Also a slight change of the allocation of costs for General Management with high salaries has contributed to the 2019/2020 baseline. Also renewal of the general IT infrastructure and developments to workstation systems contribute. Necessary measures to meet RP3 targets will be implemented.
of which, pension costs	For staff at DMI the weighted average pension costs amount to 17.7% of the salary.
1.2 Other operating costs	Other operating costs will increase over RP3 but very close to inflation. Necessary measures to meet RP3 targets will be implemented.
1.3 Depreciation	Depreciations for RP3 are reported as expected according to DMI investment plans of 2019 RP3 is heavily influenced by a substantial renewal program to the DMI infrastructure e.g. renewal of lightning detection systems. Investments will take place throughout RP3.
1.4 Cost of capital	Cost of capital for RP3 are reported as expected according to DMI investment plans of 2019 RP3 is heavily influenced by a substantial maintenance program to the DMI infrastructure.
1.5 Exceptional items	

**En-route Charging Zone Denmark  
Reference Period 3 (2020-2024)**

<b>2. Detail by service (in nominal terms)</b>	
2.1 Air Traffic Management	
2.2 Communication	
2.3 Navigation	
2.4 Surveillance	
2.5 Search and rescue	
2.6 Aeronautical Information	
2.7 Meteorological services	In general costs for meteorological services to civil aviation are expected to increase for RP3 compared to RP2, due to development of services in line with ICAO ASBUs while also compliant with SWIM. Mandatory SWIM compliance will take effect in 2019 and continue over RP3. The development costs will change to operating costs and decrease in beginning of RP3
2.8 Supervision costs	
2.9 Other State costs	
<b>Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008</b>	

<b>Entity: NSA (Trafikstyrelsen)</b>	
<b>1. Detail by nature (in nominal terms)</b>	
1.1 Staff costs	Allocation of costs is based on expected time recordings. Costs for 2021-2024 have been estimated on the basis of 2020 realized costs as well as expectations of streamlining costs.
of which, pension costs	Pension costs are estimated as the average pension percentage at 14,7%.
1.2 Other operating costs	Based on expected activities as well as overhead costs and contributions to Eurocontrol. Costs for 2021-2024 have been estimated on the basis of 2020 realized costs.
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	
<b>2. Detail by service (in nominal terms)</b>	
2.1 Air Traffic Management	Consist of staff costs and operating costs for tasks defined as ATM related in accordance with regulations in force
2.2 Communication	
2.3 Navigation	
2.4 Surveillance	

***Pension costs***

*Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)*

<b>Entity: Naviar</b>	
<b>Assumptions underlying the determined pension costs and expected evolution over Reference Period 3</b>	
The percentages for pensions are different amongst groups of employees. The determined pension costs are based on an average of 17 per cent of the staff costs that are eligible for pension.	

<b>Entity: DMI</b>	
<b>Assumptions underlying the determined pension costs and expected evolution over Reference Period 3</b>	
It is assumed that the relative composition of the staff will remain constant and that allocation of costs from different activities will remain as it is with only minor changes. DMI personnel receive pension as 15, 17,1 or 18% part of the salary respectively. Pension costs for this submission have been calculated as a weighted average of the pension costs according to the allocation of staff costs for each activity.	
Pension costs are paid into commercial pension companies administering the funds and investments.	

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

<b>Entity: NSA</b>
<b>Assumptions underlying the determined pension costs and expected evolution over Reference Period 3</b>
Pension costs are estimated as the average pension percentage.

**g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the fourth subparagraph of Article 22(4), and, where current cost accounting is used, provision of comparable historical cost data;**

### **ANSP (NAVIAIR):**

Accounting policies: Depreciation, amortisation and impairment losses

Depreciation, amortisation and impairment losses on property, plant and equipment and intangible assets consist of depreciation, amortisation and impairment losses for the year determined on the basis of the set residual values and useful lives of the individual assets and impairment tests carried out, respectively. Government grants for depreciable capital expenditure projects are recognised as the relevant assets are depreciated.

### **MET (DMI):**

Historical costs are used.

### **NSA (Trafikstyrelsen):**

N/A.

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

### **ANSP (NAVIAIR):**

<b>NAVIAIR</b>	
<b>Costs of new and existing investments (see also performance plan item 2)</b>	
3.10 Depreciation	Covered in item f) above  In order of tracking any eventual deviation there will be a thorough monitoring of the investment plan compared to future updated investment plans and their respective relation to depreciations and cost of capital. This will enable informed decisions any future adjustments.
3.11 Cost of capital	Cost of capital relating to fixed assets.
3.12 Cost of leasing	

### **MET (DMI):**

<b>DMI</b>	
<b>Costs of new and existing investments (see also performance plan item 2)</b>	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Interests relates to assets financed by loans. Interest on assets 5.0 % Share of financing through equity is 0 as DMI is a government agency.
3.12 Cost of leasing	

<b>NSA (Trafikstyrelsen)</b>
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## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f above
3.11 Cost of capital	N/A
3.12 Cost of leasing	N/A

Eurocontrol costs	
3.13 Eurocontrol costs (Euro)	Based on information from Eurocontrol.
3.14 Exchange rate (if applicable)	The NSA has applied the exchange rate as informed by Eurocontrol

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

### ANSP (NAVIAIR):

On 18.5.2010, the Danish Parliament (Folketinget) adopted the Bill on conversion of Naviair into a state-owned company (effective, 27.10.2010) with financial effect from the 1.1.2010. The adopted Bill also established Naviair with a new strong capital structure of 600 M DKK in cash deposits, 536 M DKK in subordinated loan and refinancing of long term debt of approx. 800 M DKK to the Danish state through external bank financing.

As a consequence of the conversion of Naviair into a state-owned company with accounting effect as of 1.1.2010, Naviair has adjusted the accounting principles to generally follow international accounting principles, including implementation of deployment of interest rates on mortgage loans in connection with construction projects/investments.

#### Justification for the Cost of Capital

Requirements for the cost of capital for Naviair were set at the conversion of Naviair into a state-owned company. For Naviair as a whole, the business activities are under the same statutory account. The total asset base used for the calculation of the cost of capital is allocated to either En route, TNC CPH or a third activity are allocated based upon the historic distribution of revenue for Naviair, which is in itself a reflection of activity levels.

<i>Definition of the Total Asset Base</i>	<i>En route</i>	<i>TNC CPH</i>	<i>Other</i>
<i>RP3 DC (turnover based distribution)</i>	70,0%	20,0%	10,0%

#### 1. Cost of Capital:

The total cost of capital in RP3 is determined by the forecasted Total asset base for RP3, which is defined in the table below. The total cost of capital is the distribution of the combined amount of interest payment on debt, incl. the sub-ordinated loan, return on equity and the deduction of capitalisation of interim interest, re. table a) below. Reference is also made to annexes C and F to the RP3 Performance Plan for further descriptions on establishing RP2 and RP3 cost of capital.

##### 1.1. Cost of Debt:

The payments of interests cover the external debt/financing, incl. the sub-ordinated loan. Due to the revenue gap from the COVID-19 crisis there will be a draw on the facilities from the bank and state loan (expected peak in 2022 of 650 M DKK) which will lead to increased interest payments.

Naviair is in dialogue with the Ministry of Transportation around lowering the interest on the sub-ordinated loan to a more market conform interest rate.

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

### 1.2 Return on Equity:

When Naviair in 2010 was converted into a state-owned company the owner (Ministry of Transport/Transportministeriet) stated a requirement for an equity ratio of 55 per cent (incl. subordinated loan) and a return on equity of 6.7 per cent before tax.

This percentage is in RP3 set to 5.0 per cent before tax.

### 1.3 Deduction of capitalisation of interim interest.

For the RP3 the capitalisation of interim interest is subtracted in the cost of capital as to not be charged twice – as part of cost of capital and again as part of the depreciations. On a technical note the subtraction of this item from the cost of capital will lower the calculation in the

The table below describes (with reference to the Naviair's Annual Report) the principles of the Asset base.

<b>ANSP (Naviair): 2020</b>	
<b>Average asset base</b>	
3.1 NBV fixed assets	Net Book Value of fixed assets: <ul style="list-style-type: none"> <li>• Property, plant and equipment</li> <li>• Intangible assets.</li> </ul> <b>2020: 833,8 M DKK</b>
3.2 Adjustments total assets	Adjustments: <ul style="list-style-type: none"> <li>• Investments</li> <li>• Deferred tax</li> </ul> <b>2020: 4,6 M DKK</b>
3.3 Net current assets	Net current assets: <ul style="list-style-type: none"> <li>• Current assets</li> <li>• Provisions for regulatory over-recoveries &amp;</li> <li>• Short-term liabilities other than provisions</li> </ul> <b>2020: 92,4 M DKK</b> The large discrepancy of Net current assets in RP2 versus RP3 is that the figures for RP2 did not include the liability-side, hence the figure was reported incorrectly (value too high).
<b>Cost of capital % - 5,2 per cent</b>	
3.6 Return on equity	5,0 per cent (Pre-tax). This is reported as 5,0% (pre-tax) which is the reported figure for Return on Equity for En route RP2. This percentage applies for the company in RP3.
3.7 Average interest on debts	9,0 per cent – Naviair holds a sub-ordinated loan, and have access to a credit facility, which draws an interest when used. The draw on credit facility is 1 per cent.
3.8 Share of financing through equity	<b>2020: 95,14 per cent (PRB-formula)</b> The State-owner has defined that an important measurement of the financial health of Naviair is the solidity, incl. the sub-ordinated loan. The incorrect reporting of Net current assets led to an overestimation of the Total Asset Base in RP2. The calculation thus under-represented the Share of financing through equity.

<b>NAVIAIR 2020</b>	
<b>Average asset base</b>	
3.1 NBV fixed assets	833,8
3.2 Adjustments total assets	4,6
3.3 Net current assets	92,4

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

Cost of capital %	
3.6 Return on equity	5,0%
3.7 Average interest on debts	9,0%
3.8 Share of financing through equity	95,14%

### MET (DMI):

DMI	
<b>Average asset base</b>	
3.1 NBV fixed assets	Assets consist of facilities supporting core functions e.g. HPC, in-situ observation systems, lightning detection, weather radar. A fraction of NBV of fixed assets, as allocable to aviation, is reported. A substantial renewal of the infrastructure is planned for RP3 which is reflected in the asset base.
3.2 Adjustments total assets	According to DMI investment plan for core activities.
3.3 Net current assets	
<b>Cost of capital %</b>	
3.6 Return on equity	Return on equity has been calculated as equity divided by income including government funding. .
3.7 Average interest on debts	Is set by Ministry of Finance to be calculated as 5%
3.8 Share of financing through equity	Share of financing through equity is 0 as DMI is a government agency.

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

NAVIAR					
Determined costs of common projects (in nominal terms in '000 national currency)					
CP reference	2020	2021	2022	2023	2024
NewPENS Stakeholders contribution for the procurement and deployment of NewPENS (2016_012_AF1)	118	0	0	0	0
National WAN Infrastructure - CANDI-IP preparation project (#127AF5) og CANDI-IP execution phase (2015_131_AF5)	2.821	2.821	2.821	2.821	2.821
VoIP Programme (2015_132_AF3)	2.874	2.874	2.874	2.874	1.919
DK-SE FAB Aeronautical Data Quality - ADQ (2015_099_AF5)	-47	0	0	0	0
ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport (2017_060_AFS)	2.290	166	99	99	0
Borealis - FRA Implementation Part 2 (2015_227_AF3_A)	125	801	1.116	1.116	1.116
Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program (2015_207_AF3_A)	122	5.547	5.547	5.547	5.547
Synchronised PBN Implementation (2016_012_AF1)	64	65	345	0	0
European Deployment Roadmap for Flight Object Interoperability (2016_027_AF5)		0	0	0	0
COOPANS SWIM	1680	855	2.974	4.479	5.467
<b>Total (Table 1 item 3.9)</b>	<b>10.046</b>	<b>13.129</b>	<b>15.776</b>	<b>16.937</b>	<b>16.870</b>



## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

### 2. Actual costs and unit costs

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

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance.

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

The baseline adjustments should be duly considered when comparing the costs of 2019 (RP2) and 2020 (RP3) with regards to the changes in methodology of "netted funding" and the cost of capital. The adjustments have been thoroughly explained in the supporting material of the RP3 draft plan (November 2019) and will be the basis of the new revised Performance plan (October 2021).

<b>RP3 Monitoring – Year 2020 vs. 2019</b>	
<b>ANSP: NAVIAIR</b>	
1.1 Staff costs	The increase in staff costs are due to the voluntary resignations of 77 FTE on Naviair-level with full effect in 2022 (+46 M DKK). The departure of the FTE started late 2020 with the majority in 2021. The full year effect is therefore planned for 2022. Furthermore, there has been a lower use of extra shifts (-6.3 M DKK) which are leveled out by increases due to trainees already started in 2019 (pre-COVID) and other contractual wage increases as well as less reimbursement of civil servant pensions in 2020 compared to 2019.
1.2 Other operating costs	Overall, the level of other operation costs is the same in 2020 as in 2019. The underlying drivers are fewer costs for projects, incl. less travel etc. and further education and UNIT training and administrative costs, incl. cantina and IT. Cost increases are due to increases in initial training, dubious debtors, and costs related to strategic re-orientation due to COVID.
1.3 Depreciation	The increases are mostly due to finished projects late 2019 which has full effect in 2020 as compared to 2019. This includes projects such as COOPANS builds.
1.4 Cost of capital	No increase when comparing with a baseline-adjusted cost of capital.
1.5 Exceptional items	Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The "negative" costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. It is the intention from Naviair not to charge the users in 2020 more than 97% of the baseline (2019-level) which will be added in the user rate from year 2023 onwards.  The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.

<b>RP3 Monitoring – Year 2020 vs. 2019</b>	
<b>ANSP: DMI</b>	
1.1 Staff costs	
1.2 Other operating costs	A decrease of 2,8 MDKK due to affects of the COVID crises on maintenance, investments implementation, travel, e.t.c.
1.3 Depreciation	Depreciation was expected higher in 2020 but a number of investments were not completed to COVID. Depreciation will increase over RP3.
1.4 Cost of capital	
1.5 Exceptional items	

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

RP3 Monitoring – Year 2020 vs. 2019	
<b>STATE/NSA: Trafikstyrelsen</b>	
1.1 Staff costs	More internal resources, that is employed personnel, and thereby more work hours have been applied to the area. Whereas the previous year more external resources (other operation costs) were spent, and therefore affected the staff costs less.
1.2 Other operating costs	The difference is primarily due to reduced other state costs regarding Eurocontrol.
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	

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

2020 actual service units vs. 2019 actual service units

No differences reported

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

NAVIAR					
Determined costs of common projects (in nominal terms in '000 national currency)					
CP reference	2020	2021	2022	2023	2024
NewPENS Stakeholders contribution for the procurement and deployment of NewPENS (2016_012_AF1)	118				
National WAN Infrastructure - CANDI-IP preparation project (#127AF5) og CANDI-IP execution phase (2015_131_AF5)	2.821				
VoIP Programme (2015_132_AF3)	2.874				
DK-SE FAB Aeronautical Data Quality - ADQ (2015_099_AF5)	-47				
ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport (2017_060_AFS)	2.290				
Borealis - FRA Implementation Part 2 (2015_227_AF3_A)	125				
Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program (2015_207_AF3_A)	122				
Synchronised PBN Implementation (2016_012_AF1)	64				
European Deployment Roadmap for Flight Object Interoperability (2016_027_AF5)					
COOPANS SWIM	1680				
<b>Total (Table 1 item 3.9)</b>	<b>10.046</b>				

**En-route Charging Zone Denmark**  
**Reference Period 3 (2020-2024)**

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

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

**e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the national supervisory authority in accordance with Article 28(4).**

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

### ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION

#### a) Description and rationale for establishment of the different charging zones, in particular with regard to terminal charging zones and potential cross-subsidies between charging zones;

There is only one en route charging zone in Denmark.

There is only one airport with more than 80.000 thousands movements per year.

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

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	<b>2020</b>
Costs for exempted VFR flights	18,8 M DKK
Costs for exempted IFR flights	4.1 M DKK
<b>Total costs for exempted flights</b>	<b>22,9 M DKK</b>

Description of the financing means covering the costs incurred for services provided to exempted flights in 2020?

The state finances the costs for exempted flights.

Costs planned in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2021.

	<b>2021</b>
Costs for exempted VFR flights	18,8 M DKK
Costs for exempted IFR flights	4,0 M DKK
<b>Total costs for exempted flights</b>	<b>22,8 M DKK</b>

#### c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Article 27;

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(1) and (2)).

#### d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Article 28(3) including description of the changes referred to in that Article;

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

## En-route Charging Zone Denmark Reference Period 3 (2020-2024)

### e) Description of adjustments resulting from unforeseen changes in costs in accordance with Article 28(3) to (6);

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

### f) Description of the other revenues, if any, broken down between the different categories indicated in Article 25(3);

Income from Union-funding will be added as Other revenue according to Commission Implementing Regulation (EU) 2019/317.

### g) Description of the application of the financial incentive schemes referred to in Article 11(3) and 11(4) in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Article 32 where applicable, and resulting adjustments;

#### *Financial incentive schemes*

The description and justification of the parameters of the incentive scheme defined in accordance with Article 11(3) and 11 (4) are provided in the body of the performance plan under item 5.2.

#### *Modulation of charges*

The actual application and relating financial advantages and disadvantages for 2020 is not applicable (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 3 (3)).

### h) Description of adjustments relating to the temporary application of a unit rate under Article 29(5);

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(4)).

### i) Description of the cross-financing between en route charging zones, or between terminal charging zones, in accordance with point (e) of Article 15(2) of Regulation 550/2004;

There is no cross-financing between en-route charging zones or between terminal charging zones.

### j) Information on the application of a lower unit rate under Article 29(6) than the unit rate calculated in accordance with Article 25(2) and the means to finance the difference in revenue;

None.

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

## **En-route Charging Zone Denmark Reference Period 3 (2020-2024)**

The “Exceptional Measures” allows for returning over-recovery from year 2020 (traffic adjustment) already in year 2022. Naviair has decided to calculate this over a two year period due to liquidity issues. The amount from 2021 will be also be added over a two year period starting in 2023.

The regulation allows for calculation of the traffic adjustment from 2020 to be added in the unit rate of 2022. The amount of 37 M DKK comes primarily from traffic risk sharing and inflation adjustment from year 2018.

**En-route Charging Zone Denmark  
Reference Period 3 (2020-2024)**

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

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

**ANSP (NAVIAIR):**

Route table 4 is completed with the Project references to specific projects which receive funding. Shown in part two of RT4 are the projects with depreciation effect covering RP2 determined costs. This funding is included in the calculation of the unit rate. This also includes some “other projects” (e.g. Green Predictable flights) which covered depreciations in the RP2 determined costs but were projects from before RP2 and RP1.

The increase in funding returned as other revenue is due to the issue of “netted funding” and as of RP3 reporting the full costs. Hence the baseline correction.

# Terminal Charging Zone Denmark

## Reference Period 3 (2020-2024)

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

#### 1. Determined costs and unit costs

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

**ANSP (Naviair):**

Allocation of costs is based on time recordings, and allocation based on specific activities. The allocation keys have been prepared based on activity measurements/resource consumption, number of positions, areas of work and an assessment of the interrelationships of the activities. The principles and actual allocation keys are maintained in a memo describing all costbases of Naviair. The memo (and changes to the principles) are subject to approval in a forum of directors responsible for cost areas. The memo is shared with the NSA yearly.

From 2010, costs for ATS related to approach services are being allocated 100 per cent to the en route charging zone. The costs of all eligible services, facilities and activities have been allocated in a transparent manner to the charging zones, in respect of which they are actually incurred.

Operational training and education costs are allocated to the relevant cost base reflecting the demand from the operational site.

The distribution in "Detail by service" has been revisited and is unchanged compared to that of RP2.

No changes foreseen for RP3.

**MET (DMI):**

Allocation of costs is based on time recordings.

Cost for MET services related to the functions as MWO for Copenhagen FIR and as MO for Danish civil airports, including aviation specific R&D, are allocated 100% to the charging zone, Other MET services are not allocated. Core costs are allocated in proportion to the relative use of facilities by MET services for aviation, based on time recordings from the time managements systems.

**b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5);**

The Government finances exempted flights.

**c) Criteria used to allocate costs between terminal and en route services, in accordance with Article 22(5);**

**ANSP (Naviair):**

From 2010, costs for ATS related to approach services are being allocated 100 per cent to the en route charging zone. The costs of all eligible services, facilities and activities have been allocated in a transparent manner to the charging zones, in respect of where they are actually incurred.



## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

Costs of Roskilde Airport will be allocated 50 per cent to en route.

### **MET (DMI):**

Costs for meteorological services are allocated to the ENR and TNC cost base using man-hours as the cost driver. Costs services provided to terminal functions are allocated to this and other costs, e.g. ENR or mainly ENR according to ICAO guidelines, are allocated to en-route. By this mechanism 7 % of the total costs for providing meteorological services to civil aviation are allocated to terminal costs corresponding to the relative workload on the aviation shifts.

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

### **MET (DMI):**

	2018	2019	2020	2021	2022	2023	2024
Direct	784	860	857	869	848	862	874
Core	581	637	674	684	628	638	648

Costs including overhead, calculated in parallel to ENR figures. Mismatch to reported figures caused by roundings.

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

### **MET (DMI):**

The methodology used for allocating total MET costs and MET core costs to civil aviation.

The direct costs for providing MET services is allocated to civil aviation based on time recordings. This includes development exclusively for aviation.

The core costs are allocated to civil aviation using the following cost pools:

- General management and administration
- Buildings
- Commonly used telecommunication and data processing
- Core Research and development
- In situ observation systems
- Remote sensing systems

The costs are allocated to civil aviation in proportion to the relative aeronautical and non-aeronautical use made of the facility based on time recordings. This calculation is done on a yearly basis, to ensure the most accurate reflection of the actual status and to ensure a fair allocation of costs to aviation. This however results in the costs shifting somewhat from year to year, due to changes in allocation.

The allocation has been assumed constant over RP3.

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

For facilities serving meteorological services e.g. weather radar the proportion of costs allocated to civil aviation is the ratio of recorded man hours on aviation services to the recorded total man hours for meteorological services e.g. meteorological services to the public, defense and Greenland.

For facilities serving all services, e.g. supercomputer installation, the proportion of costs allocated to civil aviation is the ratio of recorded man hours for aviation services to the recorded total man hours spent on ice services, oceanographical, climatological and meteorological services.

By this mechanism:

6.3% of all general management costs

13,6% of core costs of facilities used by all services

24.1% of core cost of facilities used by meteorological services  
are allocated to civil aviation.

More detailed examples of allocation can be seen below.

<i>Core activities</i>	<i>Civil aviation Share of costs</i>
<i>Surface observation stations</i>	<i>24,1%</i>
<i>Weather radar</i>	<i>24,1%</i>
<i>Satellite reception</i>	<i>24,1%</i>
<i>Lighting detection</i>	<i>24,1%</i>
<i>Development, meteorological workstations</i>	<i>24,1%</i>
<i>Numerical Weather Prediction</i>	<i>13,6%</i>
<i>Telecommunication/IT production</i>	<i>13,6%</i>
<i>Supercomputer facilities</i>	<i>13,6%</i>
<i>Training</i>	<i>13,6%</i>
<i>Contribution to WMO</i>	<i>13,6%</i>
<i>Contribution to ECMWF</i>	<i>13,6%</i>
<i>Contribution to EUMETSAT</i>	<i>13,6%</i>

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

### *Determined costs by nature and by service*

<b>Entity: Naviair</b>	
<b>1. Detail by nature (in nominal terms)</b>	
1.1 Staff costs	<p>Wages and salaries, employers' contributions to social security, etc.</p> <p>The primary changes in RP3 will be methodology changes when comparing RP2 year 2019 and 2020 DC, which results in an increase compared to year 2019:</p> <ul style="list-style-type: none"> <li>• Reported costs of year 2019 was including netted funding. This method has been discontinued in the determined costs for RP3.</li> <li>• Increases due to Collective agreements, automatic salary adjustments and seniority.</li> </ul>

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

	<ul style="list-style-type: none"> <li>• No rehiring on vacant positions in 2020. Effect is included in the revised strategy plan.</li> <li>• In the draft plan effects of the Strategy 2023 was necessary to meet the targets. During 2020 and 2021 this plan will be accelerated with primarily the agreements of voluntary resignations (a company total of 77). The voluntary resignations will have full year effect in 2022 and forward.</li> <li>• Furthermore, more temporary reductions are planned for use of extra shifts and the rehiring of vacant positions.</li> <li>• In the draft plan training costs for the operational staff was expected. With the amount of voluntary resignations - also amongst the operational staff - training is a requirement going forward. The demographic shows a high amount of expected retirements going forward.</li> </ul> <p>In RP1/RP2 Naviair reported “Work performed for own account and capitalized” under <i>exceptional items</i>.</p> <p>From Naviairs annual report under Accounting policies: “Work performed for own account and capitalized” comprises staff costs and other internal expenses incurred during the financial year and recognized in the cost of self-constructed intangible assets and property, plant and equipment.</p> <p>Given that these costs are not “exceptional” per definition the costs are now as of RP3 reported with Staff costs.</p> <p>The Staff costs are added with inflation.</p>
of which, pension costs	Pension costs are explained in the Performance plan. They follow an average of 17 per cent of the Staff costs.
1.2 Other operating costs	<p>Costs for administration, facilities and maintenance, training etc. The level in 2020 is expected to increase compared to 2019. The following movements in costs have been identified:</p> <ul style="list-style-type: none"> <li>• The reported costs of year 2019 was including netted funding. This method has been discontinued in the determined costs for RP3.</li> <li>• Overall lower costs for training primarily in 2020/2021 compared to draft plan.</li> <li>• Increase in the need to train operational staff in later periods to a level closer to the expectations of the draft plan. Should be seen in context with the voluntary resignations and the demographics of Naviair where several retirements are foreseen during RP3.</li> <li>• Naviair has implemented costs containment efforts during 2020/2021 and had for draft plan several initiatives for targeting the OPEX-side.</li> <li>• This has been accelerated with expected effect in the costs from 2022, and with partial more temporary effect in 2020/2021</li> </ul> <p>Other operating costs are added with inflation.</p>
1.3 Depreciation	The depreciations are expected to increase during RP3 as result of the investment plan, and because of investments finalized in 2019 and 2020.
1.4 Cost of capital	<p>Capital structure and the subordinated loan are the main contributors to the calculation of cost of capital. Also the level of capitalised interim interests has an effect on the cost of capital. Recalculated method for RP3 aligning the assumptions and calculations with the RP3 regulation.</p> <p>Due to the revenue gap from the COVID-19 crisis there will be a draw on the facilities from the bank and state loan (expected peak in 2022 of 650 M DKK) which will lead to increased interest payments.</p>

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

1.5 Exceptional items	<p>Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The “negative” costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. It is the intention from Naviair not to charge the users in 2020 more than 97% of the baseline (2019-level) which will be added in the user rate from year 2023 an onwards.</p> <p>The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.</p> <p>Due to the change in STATFOR forecast, which expects significantly more traffic in 2022 and 2023 an amount of identified variable costs have been added with reference to consultation material regarding the update in November 2021.</p>
<b>2. Detail by service (in nominal terms)</b>	
2.1 Air Traffic Management	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.2 Communication	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.3 Navigation	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.4 Surveillance	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.5 Search and rescue	
2.6 Aeronautical Information	Naviair revisited the “detail by service” and continues with the same proportions as in RP2.
2.7 Meteorological services	
2.8 Supervision costs	
2.9 Other State costs	
<b>Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008</b>	
< >	

<b>Entity: DMI</b>	
<b>1. Detail by nature (in nominal terms)</b>	
1.1 Staff costs	<p>Staff costs reported as salary costs including pension costs for all activities. Staff costs have increased over 2018-2020 due to higher costs for meteorological services, see below. Also a slight change of the allocation of costs for General Management with high salaries has contributed to the 2019/2020 baseline. Also renewal of the general IT infrastructure and developments to workstation systems contribute. Necessary measures to meet RP3 targets will be implemented.</p>
of which, pension costs	<For staff at DMI the weighted average pension costs amount to 17.7% of the salary. >
1.2 Other operating costs	Other operating costs will increase over RP3 but very close to inflation. Necessary measures to meet RP3 targets will be implemented.
1.3 Depreciation	Depreciation of assets is not allocated to TNC.
1.4 Cost of capital	< >
1.5 Exceptional items	< >
<b>2. Detail by service (in nominal terms)</b>	
2.1 Air Traffic Management	< >
2.2 Communication	< >
2.3 Navigation	< >
2.4 Surveillance	< >
2.5 Search and rescue	< >
2.6 Aeronautical Information	< >
2.7 Meteorological services	In general costs for meteorological services to civil aviation are expected to increase for RP3 compared to RP2, due to development of services in line with ICAO ASBUs while also compliant with SWIM. Mandatory SWIM compliance will take effect in 2019 and continue over RP3. The development costs will change to operating costs and decrease in beginning of RP3

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2.8 Supervision costs	< >
2.9 Other State costs	< >
<b>Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008</b>	
< >	

***Pension costs***

*Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)*

<b>Entity: Naviair</b>
<b>Assumptions underlying the determined pension costs and expected evolution over Reference Period 3</b>
The percentages for pensions are different amongst groups of employees. The determined pension costs are based on an average of 17.1 per cent of the staff costs that are eligible for pension.

<b>Entity: DMI</b>
<b>Assumptions underlying the determined pension costs and expected evolution over Reference Period 3</b>
It is assumed that the relative composition of the staff will remain constant and that allocation of costs from different activities will remain as it is with only minor changes. DMI personnel receive pension as 15, 17,1 or 18% part of the salary respectively. Pension costs for this submission have been calculated as a weighted average of the pension costs according to the allocation of staff costs for each activity.
Pension costs are paid into commercial pension companies administering the funds and investments.

**g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the fourth subparagraph of Article 22(4), and, where current cost accounting is used, provision of comparable historical cost data;**

Accounting policies: Depreciation, amortization and impairment losses

Depreciation, amortization and impairment losses on property, plant and equipment and intangible assets consist of depreciation, amortization and impairment losses for the year determined on the basis of the set residual values and useful lives of the individual assets and impairment tests carried out, respectively. Government grants for depreciable capital expenditure projects are recognized as the relevant assets are depreciated.

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

**ANSP (NAVIAIR):**

<b>NAVIAIR</b>	
<b>Costs of new and existing investments (see also performance plan item 2)</b>	
	Covered in item f) above
	In order of tracking any eventual deviation there will be a thorough monitoring of the investment plan compared to future updated investment plans and their respective relation to depreciations and cost of capital. This will enable informed decisions any future adjustments.
3.10 Depreciation	

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

3.11 Cost of capital	Cost of capital relating to fixed assets.
3.12 Cost of leasing	

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

### ANSP (NAVIAR):

On 18.5.2010, the Danish Parliament (Folketinget) adopted the Bill on conversion of Naviar into a state-owned company (effective, 27.10.2010) with financial effect from the 1.1.2010. The adopted Bill also established Naviar with a new strong capital structure of 600 M DKK in cash deposits, 536 M DKK in subordinated loan and refinancing of long term debt of approx. 800 M DKK to the Danish state through external bank financing.

As a consequence of the conversion of Naviar into a state-owned company with accounting effect as of 1.1.2010, Naviar has adjusted the accounting principles to generally follow international accounting principles, including implementation of deployment of interest rates on mortgage loans in connection with construction projects/investments.

#### Justification for the Cost of Capital

Requirements for the cost of capital for Naviar were set at the conversion of Naviar into a state-owned company. For Naviar as a whole, the business activities are under the same statutory account. The total asset base used for the calculation of the cost of capital is allocated to either En route, TNC CPH or a third activity are allocated based upon the historic distribution of revenue for Naviar, which is in itself a reflection of activity levels.

<i>Definition of the Total Asset Base</i>	<i>En route</i>	<i>TNC CPH</i>	<i>Other</i>
<i>RP3 DC (turnover based distribution)</i>	70,0%	20,0%	10,0%

#### 1. Cost of Capital:

The total cost of capital in RP3 is determined by the forecasted Total asset base for RP3, which is defined in the table below. The total cost of capital is the distribution of the combined amount of interest payment on debt, incl. the sub-ordinated loan, return on equity and the deduction of capitalisation of interim interest, re. table a) below. Reference is also made to annexes C and F to the RP3 Performance Plan for further descriptions on establishing RP2 and RP3 cost of capital.

##### 1.1. Cost of Debt:

The payments of interests cover the external debt/financing, incl. the sub-ordinated loan. Due to the revenue gap from the COVID-19 crisis there will be a draw on the facilities from the bank and state loan (expected peak in 2022 of 650 M DKK) which will lead to increased interest payments.

Naviar is in dialogue with the Ministry of Transportation around lowering the interest on the sub-ordinated loan to a more market conform interest rate.

##### 1.2 Return on Equity:

When Naviar in 2010 was converted into a state-owned company the owner (Ministry of Transport/Transportministeriet) stated a requirement for an equity ratio of 55 per cent (incl. sub-ordinated loan) and a return on equity of 6.7 per cent before tax.

This percentage is in RP3 set to 5.0 per cent before tax.

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

### 1.3 Deduction of capitalisation of interim interest.

For the RP3 the capitalisation of interim interest is subtracted in the cost of capital as to not be charged twice – as part of cost of capital and again as part of the depreciations.

The table below describes (with reference to the Naviair's Annual Report) the principles of the Asset base.

<b>ANSP (Naviair): 2020</b>	
<b>Average asset base</b>	
3.1 NBV fixed assets	Net Book Value of fixed assets: <ul style="list-style-type: none"> <li>• Property, plant and equipment</li> <li>• Intangible assets.</li> </ul> <b>2020: 238,2 M DKK</b>
3.2 Adjustments total assets	Adjustments: <ul style="list-style-type: none"> <li>• Investments</li> <li>• Deferred tax</li> </ul> <b>2020: 1,3 M DKK</b>
3.3 Net current assets	Net current assets: <ul style="list-style-type: none"> <li>• Current assets</li> <li>• Provisions for regulatory over-recoveries &amp;</li> <li>• Short-term liabilities other than provisions</li> </ul> <b>2020: 26,4 M DKK</b> The large discrepancy of Net current assets in RP2 versus RP3 is that the figures for RP2 did not include the liability-side, hence the figure was reported incorrectly (value too high).
<b>Cost of capital % - 5,63 per cent</b>	
3.6 Return on equity	5,0 per cent (Pre-tax). This is reported as 5,0% (pre-tax) which is the reported figure for Return on Equity for En route RP2. This percentage applies for the company in RP3.
3.7 Average interest on debts	9,0 per cent – Naviair holds a sub-ordinated loan, and have access to a credit facility, which draws an interest when used. The draw on credit facility is 3 per cent.
3.8 Share of financing through equity	<b>2020: 90,97 per cent (PRB-formula)</b> The State-owner has defined that an important measurement of the financial health of Naviair is the solidity, incl. the sub-ordinated loan. The incorrect reporting of Net current assets led to an overestimation of the Total Asset Base in RP2. The calculation thus under-represented the Share of financing through equity.

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

<b>NAVIAIR</b>					
<b>Determined costs of common projects (in nominal terms in '000 national currency)</b>					
CP reference	2020	2021	2022	2023	2024
National WAN Infrastructure - CANDI-IP preparation project (#127AF5) og CANDI-IP execution phase (2015_131_AF5)	498	498	498	498	498
VoIP Programme (2015_132_AF3)	507	507	507	507	339
2015_043_AF2 AF2.4 A-SMGCS - Routing & Planning	-21	0	451	451	0
2015_046_AF2 AF 2.5 A-SMGCS - Safety Nets	-21	0	828	828	0
DK-SE FAB Aeronautical Data Quality - ADQ (2015_099_AF5)	-8	0	0	0	0
ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport (2017_060_AFS)	404	29	18	18	0

## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program (2015_207_AF3_A)	6	292	292	292	292
Synchronised PBN Implementation (2016_012_AF1)	64	65	345	0	0
COOPANS SWIM	88	45	157	236	288
<b>Total (Table 1 item 3.9)</b>	<b>1.517</b>	<b>1.436</b>	<b>3.095</b>	<b>2.830</b>	<b>1.416</b>



## Terminal Charging Zone Denmark Reference Period 3 (2020-2024)

### 2. Actual costs and unit costs

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

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance.

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

The baseline adjustments should be duly considered when comparing the costs of 2019 (RP2) and 2020 (RP3) with regards to the changes in methodology of "netted funding" and the cost of capital. The adjustments have been thoroughly explained in the supporting material of the RP3 draft plan (November 2019) and will be the basis of the new revised Performance plan (October 2021).

<b>RP3 Monitoring – Year 2020 vs. 2019</b>	
<b>ANSP: Naviair</b>	
1.1 Staff costs	The increase in staff costs are due to the voluntary resignations of 77 FTE on Naviair-level with full effect in 2022 (+15 M DKK). The departure of the FTE started late 2020 with the majority in 2021. The full year effect is therefore planned for 2022. Furthermore, there has been a lower use of extra shifts (-1.9 M DKK) which are leveled out by increases due to trainees already started in 2019 (pre-COVID) and other contractual wage increases as well as less reimbursement of civil servant pensions in 2020 compared to 2019.
1.2 Other operating costs	Overall, the level of other operating costs is 4.1 M DKK lower than 2019. The underlying drivers are fewer costs for projects, incl. less travel etc. (-2 M DKK) and further education and UNIT training (-1 M DKK) and administrative costs, incl. cantina and IT (-1 M DKK). Cost increases are due to strategic re-orientation due to COVID (+0.3 M DKK).
1.3 Depreciation	The increases are mostly due to finished projects late 2019 which has full effect in 2020 as compared to 2019. This includes projects such as COOPANS builds and radar in Roskilde.
1.4 Cost of capital	No increase when comparing with a baseline-adjusted cost of capital.
1.5 Exceptional items	Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The "negative" costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. It is the intention from Naviair not to charge the users in 2020 more than 97% of the baseline (2019-level) which will be added in the user rate from year 2023 onwards.  The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.

<b>RP3 Monitoring – Year 2020 vs. 2019</b>	
<b>ANSP: DMI</b>	
1.1 Staff costs	< ... >
1.2 Other operating costs	A decrease of 60.000 DKK due to effects of the COVID crises on maintenance, investments implementation, travel, e.t.c. There will be a backlog from 2020 which will result in higher costs in coming years, however this will be limited in 2021 due to the same reasons.
1.3 Depreciation	< ... >
1.4 Cost of capital	< ... >
1.5 Exceptional items	< ... >

**Terminal Charging Zone Denmark  
Reference Period 3 (2020-2024)**

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

2020 actual service units vs. 2019 actual service units

No differences reported

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

<b>NAVIAIR</b>					
<b>Determined costs of common projects (in nominal terms in '000 national currency)</b>					
<b>CP reference</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
National WAN Infrastructure - CANDI-IP preparation project (#127AF5) og CANDI-IP execution phase (2015_131_AF5)	498				
VoIP Programme (2015_132_AF3)	507				
2015_043_AF2 AF2.4 A-SMGCS - Routing & Planning	-21				
2015_046_AF2 AF 2.5 A-SMGCS - Safety Nets	-21				
DK-SE FAB Aeronautical Data Quality - ADQ (2015_099_AF5)	-8				
ADQ Components in the SWIM Infrastructure - upstream data inclusion in the full data chain solution - ANSP and Airport (2017_060_AFS)	404				
Harmonisation of Technical ATM Platform in 5 ANSP including support of free Route Airspace and preparation of PCP program (2015_207_AF3_A)	6				
Synchronised PBN Implementation (2016_012_AF1)	64				
COOPANS SWIM	88				
<b>Total (Table 1 item 3.9)</b>	<b>1.517</b>				

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

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

**e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the national supervisory authority in accordance with Article 28(4).**

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

**Terminal Charging Zone Denmark  
Reference Period 3 (2020-2024)**

**Terminal Charging Zone Denmark  
Reference Period 3 (2020-2024)**

**ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION**

**a) Description and rationale for establishment of the different charging zones, in particular with regard to terminal charging zones and potential cross-subsidies between charging zones;**

There is only one en route charging zone in Denmark.

There is only one airport with more than 80.000 thousands movements per year.

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

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	<b>2020</b>
Costs for exempted VFR flights	
Costs for exempted IFR flights	0,7 M DKK
<b>Total costs for exempted flights</b>	<b>0,7 M DKK</b>

Description of the financing means covering the costs incurred for services provided to exempted flights in 2020?

The state finances the costs for exempted flights.

Costs planned in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2021.

	<b>2021</b>
Costs for exempted VFR flights	
Costs for exempted IFR flights	0,6 M DKK
<b>Total costs for exempted flights</b>	<b>0,6 M DKK</b>

**c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Article 27;**

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(1) and (2)).

**d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Article 28(3) including description of the changes referred to in that Article;**

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

**Terminal Charging Zone Denmark**  
**Reference Period 3 (2020-2024)**

**e) Description of adjustments resulting from unforeseen changes in costs in accordance with Article 28(3) to (6);**

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

**f) Description of the other revenues, if any, broken down between the different categories indicated in Article 25(3);**

Income from Union-funding will be added as Other revenue according to Commission Implementing Regulation (EU) 2019/317.

**g) Description of the application of the financial incentive schemes referred to in Article 11(3) and 11(4) in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Article 32 where applicable, and resulting adjustments;**

***Financial incentive schemes***

The description and justification of the parameters of the incentive scheme defined in accordance with Article 11(3) and 11 (4) are provided in the body of the performance plan under item 5.2.

***Modulation of charges***

<...>

The actual application and relating financial advantages and disadvantages for 2020 is not applicable (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 3 (3)).

**h) Description of adjustments relating to the temporary application of a unit rate under Article 29(5);**

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(4)).

**i) Description of the cross-financing between en route charging zones, or between terminal charging zones, in accordance with point (e) of Article 15(2) of Regulation 550/2004;**

There is no cross-financing between en-route charging zones or between terminal charging zones.

**j) Information on the application of a lower unit rate under Article 29(6) than the unit rate calculated in accordance with Article 25(2) and the means to finance the difference in revenue;**

<...>

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

## **Terminal Charging Zone Denmark Reference Period 3 (2020-2024)**

The “Exceptional Measures” allows for returning over-recovery from year 2020 (traffic adjustment) already in year 2022. Naviair has decided to calculate this over a two year period due to liquidity issues. The amount from 2021 will be also be added over a two year period starting in 2023.

The regulation allows for calculation of the traffic adjustment from 2020 to be added in the unit rate of 2022. The amount of 12 M DKK comes primarily from traffic risk sharing and inflation adjustment from year 2018.

**Terminal Charging Zone Denmark**  
**Reference Period 3 (2020-2024)**

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

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

**ANSP (NAVIAIR):**

Route table 4 is completed with the Project references to specific projects which receive funding. Shown in part two of RT4 are the projects with depreciation effect covering RP2 determined costs. This funding is included in the calculation of the unit rate. This also includes some “other projects” (e.g. Green Predictable flights) which covered depreciations in the RP2 determined costs but were projects from before RP2 and RP1.

The increase in funding returned as other revenue is due to the issue of “netted funding” and as of RP3 reporting the full costs. Hence the baseline correction.

**MET (DMI), NSA:**

## **ANNEX C - CONSULTATION**

### **Process**

The Danish RP3 stakeholder consultation was held on Tuesday 17 August 2021 from 9h to 14h. The consultation was organized by the Danish Civil Aviation and Railway Authority. Due to the Covid-19 pandemic the consultation was held on-line using Microsoft Teams. A consultation on 2020 performance and on the preliminary 2022 En route and TNC user rates was conducted together with the RP3 consultation after written permission from the Commission. By this, articles 10(4), 24(2), 24(3) and 30(1) of EU-regulation 2019/317, and articles 9(1)a-d of EU-regulation 391/2013 are observed.

In May 2021, invitations were sent out to the airline representatives, the largest En route and TNC customers, to the Danish ANSP Naviair, to the Met provider DMI, to the major airports and to the Commission and the PRB. The invitation was also uploaded at the Commission/PRB official web-calendar. On 8 July 2021, consultation material (Danish draft RP3 performance plan (incl. annex on baseline adjustments and justifications for local targets), reporting tables and additional information) was sent out to registered participants in the consultation. The material was subsequently sent out to participants who registered after this date.

The following organizations attended the consultation: IATA, SAS, KLM, Lufthansa Group, Naviair, DMI, Billund Airport, IFATCA, DATCA, Eurocontrol and the PRB. Moreover, the material was sent to Ryanair upon request, but Ryanair did not attend the consultation.

After the consultation, the Danish Civil Aviation and Railway Authority received additional questions from Lufthansa and on the 17 September 2021 a follow-up note containing answers and clarifications was sent to the participants in the consultation. On 22 September 2021 further information regarding the development of Naviairs staff costs was sent.

Please find below in this document:

The final minutes from the consultation.

Additional questions from Lufthansa

Follow up note with answers and clarifications

Slide detailing the development in Naviairs staff costs from 2020 to 2024.

On the 5 November 2021 an updated version of the draft performance plan based on the October 2021 STATFOR forecast was sent in written consultation among stakeholders.

Please find attached:

A cover note from Danish NSA

A note from Naviair detailing the impact of the new October STATFOR forecast

Responses from KLM, Lufthansa and DATCA as well as a response from Danish NSA



13 Sep. 2021

**Final Minutes – Consultation on the Danish RP3 draft performance plan and on 2020 actual Performance held on 17 August 2021 – virtual meeting**

Participants:

IATA:	Mr. Rory Sergison
SAS:	Mr. Francis Becht
Lufthansa Group:	Mr. Stephan Weidenhiller
IFATCA:	Mr. Tom Laursen (also ATCO at Naviair)
DATCA:	Mr. Esben Blum
Billund Airport:	Mr. Peter Strøm Mortensen
PRB:	Mrs. Estelle Malavolti
	Mr. Jay Patel
KLM:	Mr. Johan Zandstra
Eurocontrol:	Mr. Denis Huet
DMI:	Mrs. Simone Roy Jessen
	Mr. Mads Christian Jessen
Naviair:	Mr. Mads Kvist Eriksen
	Mr. Thorsten Elkjær
	Mrs. Lise Kronborg
	Mr. Casper Kramme Jepsen
	Mr. Kasper Korsgaard Bertelsen
Danish Civil Aviation and Railway Authority:	Mr. Kåre Clemmesen
	Mr. Lars Korsholm
	Mr. Bjarne Sørensen
	Mrs. Ditte Løvenborg
	Mr. Christoffer Bendixen

The consultation was organized to cover the requirements set in art. 10(4) and 24(2) of EU regulation 2019/317, and articles 24(3) and 30(1) of the same regulation.

In order to facilitate the consultation a PowerPoint presentation by the Danish Civil Aviation and Railway Authority (DK-CAA) was used. The presentation is attached to the minutes and was circulated among the participants after the consultation.

### **1. Welcome and presentation of agenda**

DK-CAA presented the agenda for the consultation, which is corresponding to the numeration of the minutes and the presentation attached.

- 1) Welcome and presentation
- 2) 2020 actual performance: safety, environment, capacity, cost efficiency
- 3) RP3
  - a. General assumptions (scope, traffic forecast, airports)
  - b. Investment plans
  - c. RP3 Performance targets (local vs. EU)
    - i. Safety
    - ii. Environment
    - iii. Capacity
    - iv. Cost efficiency (Baseline 2019, Cost trends)
  - d. Incentive schemes
  - e. Possible update after new Statfor forecast in October

### **2. 2020 actual performance: safety, environment, capacity, cost efficiency**

Deputy Director General Kåre Clemmesen presented the 2020 performance for the specific items as seen in the presentation.

SAS asked about the cost of capital related to the draft performance plan part 3.4.4. Naviair replied that an annex explaining the baseline adjustment in cost of capital is provided in the performance plan. An adjustment to cost of capital is required to harmonize the calculation with the requirements in the performance and charging scheme article 22 (4) (d) of regulation 2019/317. The methodology baseline adjustment to the reported actual costs of 2019 reflects revised allocations of equity and debt on cost bases and a correction on the application of return on equity. Furthermore, the interest rate on the subordinated

loan was deemed not in line with competitive market practices by the European Commission. Naviair is negotiating with the Ministry of Transport in order to lower the interest rate. Naviair has used the expected lower interest rate in the calculation from 2022.

Both Lufthansa Group, KLM and IATA all echoed a concern related to the increase in cost for 2020 given the drastic lower traffic numbers for the same period and asked if further cost reductions measures had been implemented.

Naviair explained that the increased cost for 2020 would not affect the airspace users via increased charges as the financing of the increased cost would be held by Naviair alone and that Naviair would meet the union-wide target with a determined cost reduction in 2020 to 97% of 2019 baseline costs. Naviair will also meet the union wide targets for total determined costs in the rest of the RP3 period.

As a follow up to the explanation by Naviair, SAS asked whether Naviair had received any kind of financial packages from the Danish government in 2020. Naviair explained that they had not received any kind of financial benefit from the government, which was mainly due to the regulatory constraints to receive such financial packages. Both Lufthansa and KLM explicitly commented that such regulatory constraints illustrated a regulatory fault, when the government is unable to offset the cost of the ANSP in such crises, which have a crucial effect on the industry as a whole. As a general remark the airlines encouraged the participants to echo this critique to the government of Denmark and to the European Commission.

### **3. RP3**

Deputy Director General Kåre Clemmesen presented the revised draft Performance Plan for RP3.

In relation to the performance targets IATA questioned how achievable the plan is for safety, environment and capacity, and if there will be any incentives schemes. Naviair answered that overall, they see the targets as achievable and informed about the ongoing work regarding a new safety policy. For particularly the environment but also the capacity targets Naviair mentioned the future need for increasing military training areas with the implementation of the F-35 fighter jet, which could indirectly impact the targets, but are not expected to hinder the fulfillment of the targets. To this statement IATA highlighted

the use of Flexible Use of Airspace (FUA) to ensure the best use of airspace between military and civil aviation.

In relation to the cost efficiencies and the cost of capital, participants had a series of questions during the meeting relating to specifically the cost of capital.

Lufthansa questioned what the difference between DMI and Naviair was, since DMI has a lower cost of capital than Naviair. DK-CAA explained that the overall difference was that DMI is part of the public administration (in the same way that DK-CAA is), while Naviair is a state-owned company. The interest rate for the subordinated loan for Naviair (state loan) is therefore set by the Ministry of Finance and expected to be lowered from 9% to 4.5% from 2022. The Ministry has used a consultancy agency to estimate the new interest rate.

A note explaining DMI's cost of capital will be forwarded later.

SAS questioned the inclusion of under-recovery in the base for the cost of capital. Naviair explained that under-recovery is financed with equity and debt. The total asset base is increasing when having under-recovery and decreasing when having received the under-recovery and therefore affects the cost of capital. Users expressed concern that they were "banking a loss" i.e., paying a higher interest than Naviair is able to get on the loan market to finance the carry-overs. Naviair notices that the users will not pay more in cost of capital than the determined total asset base is projected in the RP3-period.

Lufthansa asked why Naviair doesn't pay back the subordinated loan with the high interest rate. Naviair answered that Naviair have the obligation to pay back other loans before paying back the subordinated loan. This is a demand from lenders of the other loans. As a follow-up question Lufthansa asked if there have been paid any dividends to the state in 2020, for which Naviair answered no. Lufthansa made the statement that it seems the Danish government down-priorities the importance of aviation in Denmark.

Some airlines and IATA suggested that the Danish State should waive the cost of capital (return on equity). They explained that a number of other States have done this. IATA also mentioned that Spain will support the 2022 user rate by using article 29 paragraph 6 in regulation (EU) 2019/317.

In relation to the cost reductions measures the participants raised several questions.

SAS questioned the cost details for 'exceptional items' and whether it contained unidentified measures. Naviair explained that due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The "negative" costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total costs for the period of 2020-2024 above the required cost reduction, with reference to the decision from the Appeal Committee. The items in year 2020 also "includes" provisions for voluntary resignations. Naviair emphasized that the costs occurred for voluntary resignations would not be charged by the airspace users but covered by Naviair itself. The cost of voluntary resignations is also only present in the 2020 numbers.

IATA also questioned the cost details for 'exceptional items' and the understanding of this item. IATA therefore requested a further breakdown of the item, so it would be easier to identify cost reductions. This would also help on IATA's final reporting to the Commission. Specifically, IATA also asked how the voluntary resignations would be financed. Naviair explained that the cost of voluntary resignations could lead to a write down of equity.

Naviair again emphasized that Naviar would meet the union-wide targets for determined costs in all RP3 years and that users would not be charged costs above the targets. How Naviair will achieve this has not been decided yet but could be a combination of future cost reductions and a write down on equity.

Naviair safeguarded to similar questions from Lufthansa, that the cost of voluntary resignations would not be financed by airspace users - also not via any backdoor financing.

In relations to the changes between the draft RP3-plans for 2019 and 2021 participants raised several questions related to staff cost.

SAS questioned how much the reduction of the 90 FTE is correlated with the cost reductions. Naviair explained that the full effect of voluntary resignations would be in 2022 and be equivalent to cost reductions of 80 MDKK per year for all of Naviair. En-route represents approx. 66% of the 80 MDKK. At the same time, due to the demography of ATCOs in Naviair, there would also be a need to recruit new ATCO staff, which would increase staff cost, which explains why the cost reductions on staff would not amount to the 80 MDKK cost reductions from voluntary resignations.

As a follow up question SAS asked what the cost of training new ATCOs would be in 2022 and if the training cost is part of staff cost or the operating cost. Naviair elaborated that training cost would be approx. 10 MDKK in 2022 compared to 2021 and the cost is covered by both 'staff' cost and 'other operating costs'.

In relation to recruitment participants raised several questions to the presentation.

SAS asked how many ATCOs Naviair would recruit in the future; how much ATCOs constitutes of the total staff number and finally how would salary levels differ for new recruitments compared to senior staff. Naviair explained that large numbers of ATCO recruitments were expected to be needed in the coming years due to demography and to meet the capacity targets – lack of ATCO staff have created capacity problems in the past. In Naviair ATCO staff is approx. half of the total staff and new ATCOs would on average have a lower salary, but also lower productivity due to lack of experience. The current performance of ATCOs in Naviair was in top 10 of Europe, partly due to the current productivity of senior ATCOs.

Both SAS and Lufthansa requested further details elaborating the cost of voluntary resignations for both ATCO and other staff and how the total cost is expected to decrease over time. This will also be elaborated in a separate note.

Lufthansa questioned the pension scheme and why the pension cost was not being reduced over time when staff numbers are reduced. Naviair explained that the pension scheme in Denmark as a general view is different from most other countries. Specifically pension contribution costs is part of the total staff cost and pension contributions is paid monthly to external independent pension funds according to the collective agreements with unions. Therefore, when staff cost increases, the pension cost does too.

This section on Pensions will be re-visited before submitting the final performance plan.

Lufthansa requested PRB to verify the pension scheme.

In relations to investments participants raised several questions.

Lufthansa questioned whether COOPANS investments also benefitted airports not included in the performance scheme and how come the COOPANS investments are depreciated from 2020 when the planned date of entry into operation is July 2024. Naviair explained that the

COOPANS investment only covers En route and TNC and that depreciations are starting in 2020 because the investments in different COOPANS builds under 3.x has already been launched prior to the RP3 period. The date in the table references the last of the builds under 3.x in 2024.

KLM requested more precise (quantitative) business cases, e.g. cost benefit analysis, for the investments and further details on how it would benefit airspace users. KLM and other airlines elaborated that they are in general lacking quantitative data and explanations for the benefit for these investments including what expected benefit it would create for the network. Naviair explained that the investments related to the Common Projects are part of a union-wide business case and that other new investments mainly are modernization of equipment as current assets are currently going out of life.

Naviair also noted that there is an error in the investment part (2.2) of the draft performance plan. The reported total value of assets in table 2.1.1 is not correct. This will be corrected in the draft performance plan that will be submitted on the 1. October. This correction will not affect other figures in the plan.

SAS noted that Naviair has investments of 392 MDKK without having estimated any quantitative effects in the Performance plan.

Lufthansa questioned the amount of investments for redundancy systems. Naviair explained that these investments were anticipated as the current system is not failsafe and for some parts end of life, so a backup system is essential to ensure the business continuity.

Both KLM and IATA questioned the difference in investments from the former draft performance plan to the current and how investments had been affected by Covid-19. Naviair explained that there had been a big scale back on CAPEX and furthermore a new VOR and DME strategy would reduce the number of VOR stations by 50%, but replace the ones required for minimum operational use. This means 3 out of 5 VOR stations will be decommissioned. As a general remark Naviair explained, that a large amount of the investments goes into keeping equipment functional since much the of the equipment are end of life, while also adding new functionalities which are required by EU law.

In relation to the new unit rates Lufthansa recommended that Denmark followed the German model, where the under-recovery from 2020 and -21 is distributed over a 7-year period from 2023 and scaled according to the expected traffic development instead of being equally

spread over the years. DK-CAA noted the suggestion and has asked the Commission if this method is valid.

In relation to the incentive schemes IATA noted that they will be advocating for an asymmetrical scheme due to the fact, that there have not been capacity problems in Denmark in the past.

In relation to the possible update after October Statfor forecast IATA noted, that a majority of member states have a 15 +/- % trigger for deviation, which made concerns for the flexibility with the danish 2 +/-%. Naviair explained that currently Naviair can keep the planned level of ATCOs with the capacity currently expected, but if the traffic increases further than planned, new recruitments are required and then there has to be made a revised plan. IATA would return with a position on the small Danish buffer.

#### **4. Sum Up and further process**

IATA together with the airlines noted that the minimum expectation is that every member state will achieve the targets.



**Fra:** [WEIDENHILLER, STEPHAN](#)  
**Til:** [Bjarne Skovgaard Sørensen](#); [Rory Sergison](#); [Francis.Becht@sas.se](#); [estelle.malavolti@prb.eusinglesky.eu](#); [jay.patel@egis-group.com](#); [Johan.Zandstra@KLM.COM](#); [magdalena.jaworska@prb.eusinglesky.eu](#); [nicola.volta@be.ey.com](#)  
**Cc:** [Kåre Clemmesen](#); [Lars Korsholm](#); [Ditte Løvenborg](#); [Christoffer Bendixen](#); [Simone Roy Jessen](#); [Mads Christian Jessen](#); [Mads Kvist Eriksen](#); [Thorsten Elkjær](#); [Lise Kronborg](#); [Casper Kramme Jepsen](#); [Kasper Korsgaard Bertelsen](#)  
**Emne:** AW: Draft minutes from Danish draft PP consultation  
**Dato:** 3. september 2021 13:03:58

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Dear Bjarne,

Thank you very much sending us the minutes and consultation document of the Danish draft RP3 performance plan.

I see most of our questions raised to be covered in the minutes, but unfortunately not the answers that we would like to have. Improvement to the performance plan is needed to ensure Denmark meeting consistently the performance targets over all years of the period. Additionally to the questions raised in the minutes we would like to see more and in-depth information on:

Staff planning:

- Can Naviair please provide us with intended sector opening schemes and the expected amount of traffic to be able to reconcile the staff effort p.a..
- We are also not convinced that the efforts for a defined benefit and defined contribution pension scheme should be the same. We would require here more information and therefore repeat our request for a indepth analysis by the PRB

Cost of Capital:

- We fully support that Denmark should not allow Naviair to charge any return on equity, as it did not pay out any dividends in the past.
- We also want to highlight the following topics:
  - Why has the MoT set the RoE at 5%, when the Danish state finances itself at -0.16%?(10y bond yield)?
  - We also want to emphasize that the maximum risk of an ANSP is capped 4.4% due to vast regulative safeguards of the regulation. This is also confirmed by the PRB.

Investments:

- After consulting with various other COOPANS countries and asking about redundancy and system failure procedures, any other COOPANS country confirmed to us that the system offers so much self-redundancy due to its decentralized architecture and multilayer set-up that a back-up system as planned by Naviair is not deemed as necessary, also from a safety point. Therefore TBST (with support from the PRB) should look into the back-up system investment once more and assess the necessity and eligibility of the investment.

Thank you very much for looking into those items again and providing us with answers as well as and updates performance plan in due time.

If you have any questions and remarks, please don't hesitate and contact me

Kind regards

Stephan Weidenhiller

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**Stephan WEIDENHILLER**

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**Von:** Bjarne Skovgaard Sørensen <bsor@tbst.dk>

**Gesendet:** Mittwoch, 1. September 2021 08:53

**An:** Rory Sergison <sergisonr@iata.org>; Francis.Becht@sas.se; WEIDENHILLER, STEPHAN <stephan.weidenhiller@dlh.de>; Tom Laursen <evpeur@ifatca.org>; Esben Blum <ebj@datca.dk>; psm@bll.dk; estelle.malavolti@prb.eusinglesky.eu; jay.patel@egis-group.com; Johan.Zandstra@KLM.COM; HUET Denis <denis.huet@eurocontrol.int>

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**Betreff:** Draft minutes from Danish draft PP consultation

Dear all

Please find attached the draft minutes of the Consultation on the Danish RP3 draft performance plan and on 2020 actual Performance, held on 17 August 2021. Also attached is the presentation used at the consultation.

We would be grateful if you could provide us with your comments and remarks by Thursday 9 September 2021 close of business.

Venlig hilsen/Best regards

Bjarne Skovgaard Sørensen  
Specialkonsulent / Senior Advisor

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Amtsgericht Koeln HR B 2168  
Vorsitzender des Aufsichtsrats / Chairman of the Supervisory Board: Dr. Karl-Ludwig Kley  
Vorstand / Executive Board: Carsten Spohr (Vorsitzender / Chairman), Christina Foerster, Harry Hohmeister, Dr. Detlef Kayser, Dr.  
Michael Niggemann, Remco Steenbergen

## **The revised Danish RP3 draft performance plan - follow up note on the stakeholder consultation held on 17 August 2021**

### **Background**

The Danish consultation on the revised draft performance plan was held on 17 August 2021 as a virtual meeting. Based on the consultation discussions and the written responses received after the consultation this note has been prepared. The note contains further clarifications to supplement the information given at the consultation as well as answers to questions and comments received afterwards.

### **Answers and clarifications**

#### **DMI – cost of capital**

The difference between the cost of capital of Naviair and DMI was discussed at the consultation, and it was agreed that further information on the calculation of DMI's cost of capital would be provided.

DMI's cost of capital is calculated using the following method:

Each of DMI's activities is categorized according to how much they deliver service to aviation based on time recordings. The actual allocation keys can be found in the Additional Information document. The budget for each activity is divided into salaries, income, depreciation, financial expenses, and other operations.

The budgeted amount of each part of each activity is multiplied by the relevant allocation key, after which the items are summed. The total amount for financial expenses is DMI's cost of capital.

DMI is a government institution, which means that the borrowing rate is fixed at 5% regardless of the borrowing rate in the market.

The cost of capital percentage is calculated by taking the cost of capital and dividing by the total asset base.

DMI has experienced delays on many investments due to the corona pandemic, which is reflected in lower depreciation in 2020 compared to the 2021 to 2024 period.

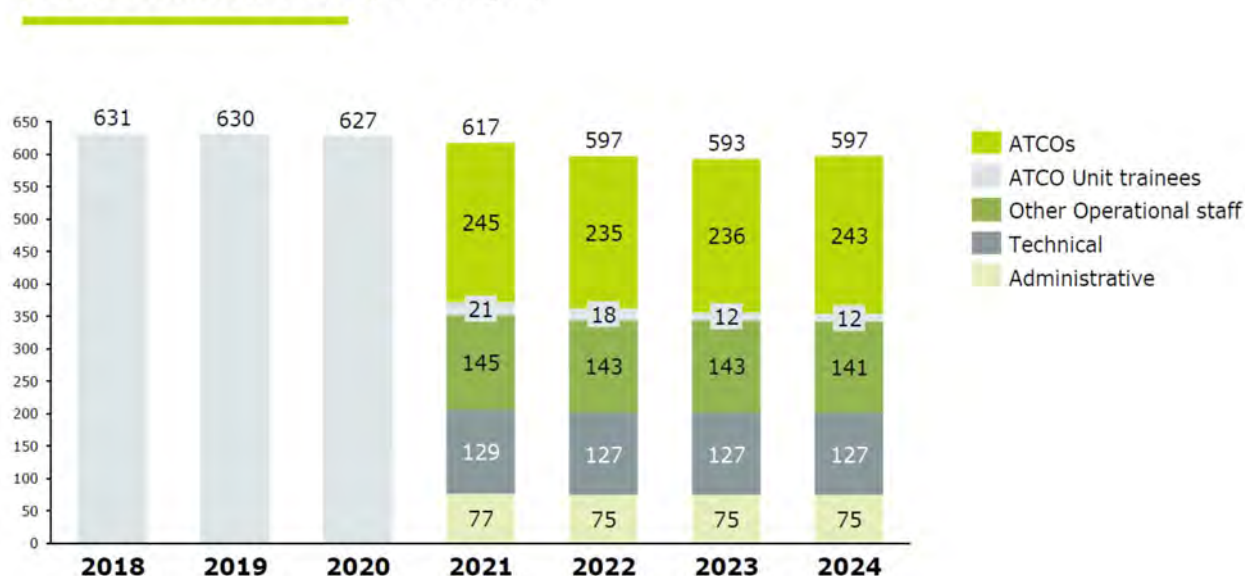
During the RP3 period DMI will increase the asset base due to modernization of DMI's observation-systems and infrastructure. The increase in investments leads to increased financial costs. However, the percentage increase in financial costs is lower compared to the

percentage increase in fixed assets, resulting in a lower cost of capital percentage.

### Naviair staff composition

At the consultation further information regarding the composition of Naviairs FTEs was requested. The chart below breaks down the expected development of FTE in categories over the RP3 period.

**FTE | Break-down of FTE per Category**



### Pensions

At the consultation Lufthansa questioned the pension scheme and why the pension cost was not being reduced over time when staff numbers are reduced. It was explained that in Denmark pension costs are part of total staff cost and therefore when staff cost increases, the pension costs does too. Pension contributions are paid monthly to external independent pension funds. In this sense the Danish pension system is more transparent and less critical than in many other countries.

Minor clarifications have been made in the section on Pensions (3.4.3 Pensions) in the draft performance plan.

### Scaled adjustments of under-recovery

During the consultation Lufthansa recommended that Denmark follow the German model, where the under-recovery from 2020 and -21 is distributed over a 7-year period from 2023 and scaled according to

the expected traffic development instead of being equally spread over the years.

Denmark has been in touch with the Commission to clarify if this method is in accordance with Implementing Regulation 2020/1627 (Exceptional Measures). The Commission's view is that it will not be in line with the rules. The adjustment needs to be spread 'equally', i.e., the same amount of money recovered each year of the period.

### **Correction of investment in Draft Performance Plan**

As mentioned during the consultation Naviair has validated the CAPEX total value (investments made prior to 2020). During the validation some COOPANS-CAPEX were flagged as "other new" and have been re-located accordingly under COOPANS 3.x. This also goes for the re-location of depreciations. The total sum of depreciations is not changed. Furthermore, the validation shows that some CAPEX was mislabeled in the CAPEX-data but not in the depreciation-data – there are two different lists. This CAPEX has been removed from the reporting and explains the reduction from previous reporting. In the Draft Performance Plan the tables in sheet (2.1 Investments\_ANSP#1) have been updated accordingly.

### **Investment in back-up ATM System**

After the consultation meeting Lufthansa has asked the Danish NSA to review whether it is deemed necessary for Naviair to invest in a new back-up ATM system. Lufthansa did refer to, that other COOPANS partners during their consultations have indicated that there is no need for a back-up system as the COOPANS system offers enough redundancy. The total investment in a new back-up system during the RP3 period is 38,6 MDKK and the system is planned to enter operation in January 2024.

The Danish NSA has reassessed this investment and it is the position of the NSA, that the investment in a new back-up ATM system is necessary to ensure that the Danish airspace always remains open.

The COOPAN's ATM system is shut down one night each month when traffic is limited, to allow for AIRAC (Aeronautical Information Regulation and Control) upgrade of the system. During that time, Danish airspace is controlled by the current back-up ATM system. The COOPANS ATM system is also shut down several times a year to upgrade hardware or software. During these periods, the airspace is also controlled from the backup ATM system.

It is the assessment of the Danish NSA that the current Backup ATM system cannot technically last to RP4 and that it must be replaced during RP3. If this is not done the risk is that Naviair will not be able to live up to the requirements for uptime that Danish State has placed on Naviair, as the Danish airspace must be closed completely on a regular basis. An increased risk of delays and possibly closure of Danish airspace must also be expected in connection with testing and upgrading of the COOPANS ATM system.

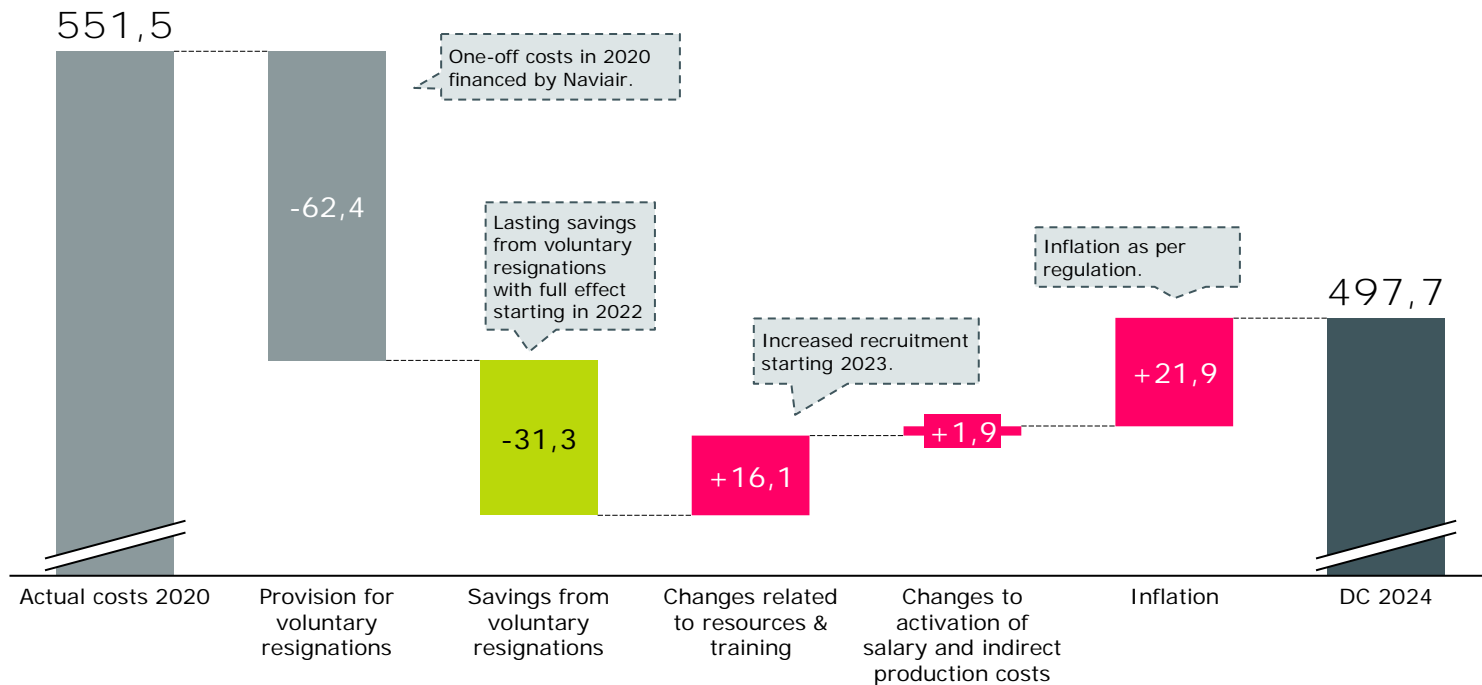
According to our information, all COOPANS partners, where the system is operational, also use different kind of back-up ATM systems.

### **Sector opening scheme**

Lufthansa has also asked for further information regarding the intended sector opening schemes and the expected amount of traffic to be able to reconcile the staff effort p.a.

The planned sector configuration is defined Network Operations Plan which is updated according to Network Manager processes. Reference is kindly made to this plan and to the information in sheet (3.3.1 En route) in the draft performance plan.

# Staff costs 2020-2024 | En route & TNC CPH per route tables (M DKK)





## Written consultation on the updated Danish RP3 Draft Performance Plan

On 27 October 2021, Denmark received the EU Commission's verification of the completeness of the Danish draft performance plan, which was originally submitted to the Commission on 29 September 2021.

As you are aware the verification requested all states to review and update the draft performance plans in light of the Eurocontrol STATFOR baseline traffic forecast published on 15 October 2021.

In the draft performance plan, Danish ANSP Naviair, has committed itself to comply with the union wide targets for cost efficiency for all years measured on total determined costs. This was thoroughly discussed during the user consultation on 17 August 2021. However, this commitment was based on the forecasted traffic in the May 2021 STATFOR forecast. The updated October 2021 traffic forecast for 2022 is significantly above the previously forecast showing that the expected number of operations in Danish airspace is increased by 18 %.

On this basis Naviair has requested the Danish NSA to include a minor increase of determined costs in the updated draft performance plan to minimize the risk of disadvantageous consequences of the increased traffic.

The increase in costs is 18 MDKK in 2022, 13 MDKK in 2023 and 6 MDKK in 2024 which corresponds to 2,4 %, 1,6 % and 0,8 % respectively.

Danish NSA has analyzed the request from Naviair and assessed that an increase in costs of this order is justified.

Attached you will find a note from Naviair detailing the reasoning behind the increase in costs as well as the effect on unit rates taking into account the October 2021 SATFOR forecast.

Date: 05-11-2021

You are kindly invited to provide us with your comments to the update of the draft performance plan by Wednesday 10 November 2021 COB.

Best regards

Bjarne Sørensen

Senior adviser

Danish Civil Aviation and Railway Authority

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IMPACT OF NEW OCTOBER STATFOR FORECAST

Naviairs draft performance plan reduced costs by 2020-2024 in line with the assumption of cost reductions in the RP3-targets (ref. 2021/891).

The recovery of traffic is accelerated by 1 year in the latest STATFOR forecast of October 2021 compared to the forecast of May 2021. The most predominantly increase expected already in the year 2022.

Given the short period of time to change the performance plan Naviair has pragmatically assessed the new traffic forecasts against the submitted RP3-planning in October with reference to the sensitivity-principles addressed during the user consultation.

The increased traffic requires Naviair to increase the utilisation of ATCOs by prioritizing operational duty and thereby increasing the resources originally reduced to a lower level of recovery. The ATCOs assigned to training and other necessary assignments requires replacement with additional costs consequently.

The result is an expected increase in variable costs to maintain the level of service needed. The increase in the overall determined costs are in the range of 18 MDKK in 2022, 13 MDKK in 2023, and 6 MDKK in 2024 corresponding to 0.8%-2.4% of the combined determined costs for En route and TNC CPH. Given Naviairs already planned recruitments the increase in costs diminishes accordingly by 2024.

Naviair further identifies a latent risk relating to the traffic risk sharing mechanism and setting a new reference point with the updated traffic forecast.

The revised determined costs, traffic & service units will significantly lower the user unit rates (-18%) thus mitigating otherwise expected increases and the determined unit cost trend will be compliant with the EU-target of DUC.

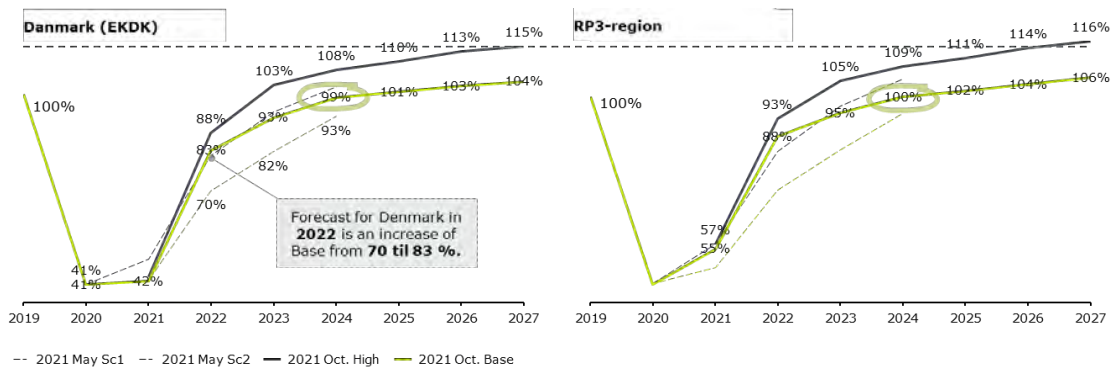
Details follows in the sections below.

a) Latest traffic forecast October 2021 expects quicker recovery  
The new traffic forecast has increased expectations for recovery to 2019-level and has accelerated this by a year.

For Denmark the increase compared to the May 2021 forecast is predominantly in the years 2022 and 2023, and from the STATFOR forecast the assumption of recovery in business travels assists in the recovery.

The difference between the May and October forecast exceeds the threshold values put forth by the 2021/891 and could otherwise have laid grounds for activation of a revision of the RP3-plan.

Figure 1: STATFOR October forecast – base & high compared to May 2021 Sc1&Sc2



It should be noted that the Scenario 2 from May 2021 was an increase +40 thousand operations in 2024 (May 2021) from that of the November 2020 scenario, which was the basis for the target values. This increase in traffic was absorbed by Naviair when submitting the draft plan in October 2021.

b) Naviair planned for reduction of costs in line with targets  
 As presented during the user consultation in August 2021 the key points for Naviairs determined costs were the following key points:

- Staff costs reduced by voluntary resignations (full effect 2022) and non-rehiring vacant positions – company total of 90 FTE.
- Increases in staff costs due training of operational staff (e.g. new ATCOs) in the end of RP3.
- Optimisation of procurement and effective administration offsets increased costs for training of operational staff.
- Depreciations: Depreciations increase during RP3 due to finished projects late RP2 and early RP3.
- Cost of capital: Reduced by expected change in interest on sub-ordinated loan to market conform level (9.0%→4,5%).
- Exceptional items reflect management decision to meet target on cost-reductions with further initiatives on cost-containment.

Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The “negative” costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. Naviair will not charge the users in 2020 more than 97% of the baseline (2019-level).

The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.

Denmark was still able to achieve the cost-efficiency target on the DUC for the period.

c) Marginally increase in variable costs to manage quicker recovery  
 The process of updating the revised RP3-plan within a short timeframe sets a demanding task for the ANSP. The October submission of the RP3-plan includes recruitment and necessary use of ATCO-resources to train recruits and an expected lower need for extra shifts aligned with the traffic volume of the May 2021 forecast.

As presented at the User Consultation Naviair stressed that the recruitment effort is necessary to handle increases in traffic starting 2022 rising to 2019-level in 2024/2025 (STATFOR May 2021) and the demographic composition of the operational staff, where many will be eligible for retirement in the short term.

With the new October forecast this effort must be accelerated by 1 year. An increase in traffic will result in increased costs given the need to accelerate recruitment while keeping the same level of capacity. The %-increase in costs is significantly lower than the increase in traffic.

Naviair has used a pragmatic approach and assessed the amount of variable costs needed to accelerate the previous planned resources matching a traffic level in 2022 at 70% upwards to 83% of 2019.

Identified variable costs for this assessment are related to increasing the utilisation of ATCOs by prioritizing operational duty and thereby increasing the resources originally reduced to a lower level of recovery. The ATCO-resources otherwise assigned to training new ATCOs and performing other necessary assignments requires replacement with additional costs consequently.

The relationship between variable costs associated with handling increased traffic a year earlier than planned throughout the period amounts to a company total of 10 MDKK (a mix corresponding to 7 FTE and other operating costs) for an increase in traffic of 10 percent. The table below provides the overall increases in costs.

*Table 1: Relationship between determined costs and traffic (MDKK)*

	2022	2023	2024
Traffic deviation (%)	17,9%	12,9%	6,3%
Increased costs (MDKK)	17.9	12.9	6.3
Change in total costs	2.4%	1.6%	0.8%

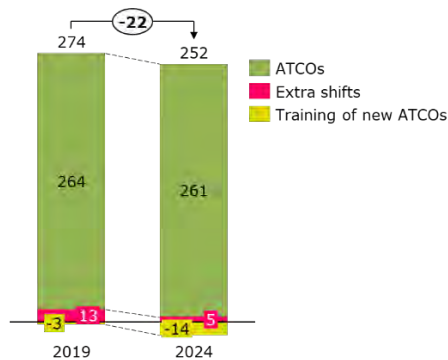
The split of costs between En route and TNC CPH are approx. 6/7 and 1/7 based on the needed resources – it should be noted that distribution assumes that En route, includes needed resources for APP performed in ACC-areas, ref. Additional information.

The increased cost amount is lowered at the end of the period as the difference between the Oct. and May forecasts are decreasing and as Naviairs already planned recruitment takes effect.

In the years 2018 and 2019 Naviair provided service with no delay and high performance in the environmental KPI's under a period of all time high traffic figures. Internally years of low/postponed recruitment and use of extra shifts were necessary to provide this level of service.

In the coming years the ATCO resources will be directed more towards activities related to training of new ATCOs but with efficiency gains still servicing a 2019-traffic level while lowering the need for extra shifts. The composition is shown in the figure below.

Figure 2: Composition of ATCOs and resources related to extra shifts and training



The RP3-targets for Capacity and Environment are demanding targets for Naviair with no more room for improvement, and the exposure to single events (system break-down for a few hours on a busy Tuesday) could tap into several months of the yearly allowance. Even at the May 2021 forecast the operational staff was tightly scaled for the targets - Both financially in terms of traffic risk sharing and incentive scheme on capacity, but also on the robustness of the business. The accelerated recovery increases the risk of a negative impact on meeting these values in the years to come. Consequently, exemplified by year 2022, capacity was previously planned to the delivery of an index 70 of 2019 traffic levels. Actual capacity correlates to available sector openings in the operational environment, which is defined by available resources. Hence, failing to increase the number of available resources, will lead to capacity restrictions, when demand rises above the defined capacity. The precise level of capacity restriction varies depending on seasonal and daily fluctuations.

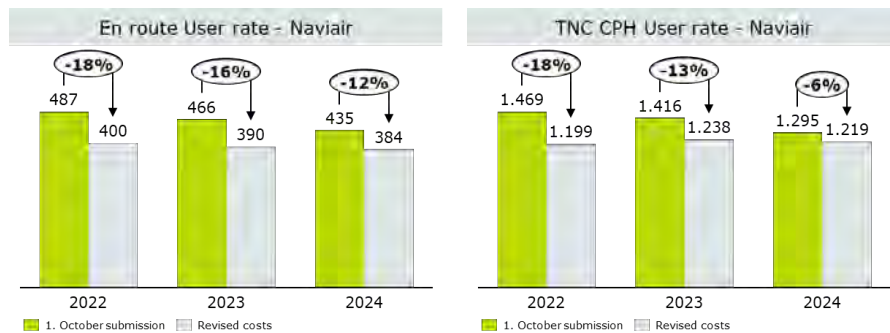
d) More risk exposure with traffic risk sharing based on new forecast Naviair identifies major concerns by extraordinarily introducing a new forecast with traffic levels exceeding the high case from May 2021. There is still uncertainty regarding the COVID-19 effect on recovery and the willingness to travel which increases the exposure of risk that the actual traffic will be lower.

Should the new forecast materialise in a traffic level below the Base scenario but still higher than the May forecast traffic risk sharing will be triggered. Naviair can then face a situation where the traffic levels are higher but where revenue at the same time is reduced below the determined total costs.

Further cost reductions are deemed difficult for Naviair. A maximum trigger of traffic risk sharing with a deviation of service units +/-10% corresponds to 4.4% of the determined costs which is approx. 35 MDKK yearly for En route and TNC CPH.

e) Significantly lowered unit rates with new costs & traffic The scale of increase in traffic will ultimately lower the user rates significantly with approx. -18% in year 2022. The costs are driven by the increases in movements. The service units however are expected to recover at a faster rate in the short term.

Figure 3: Naviair user rates are significantly lowered (DKK)



The temporary unit rate applied in 2020/2021 were set with higher traffic and reductions related to traffic risk sharing and inflation adjustment from RP2.

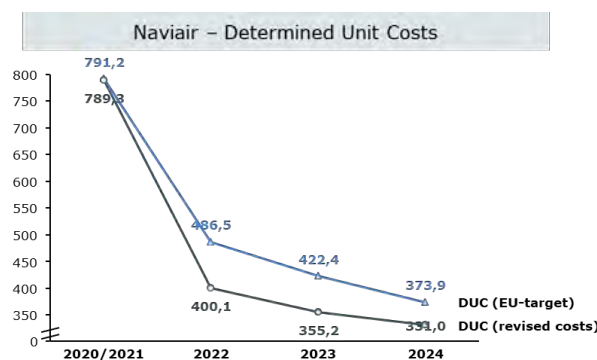
f) EU-trend in DUC is outperformed in all years

Based on material from the PRB there is a difference of 6-7% at union-wide level in the revised determined costs compared to that of the target on determined costs. The PRB further notes that “The costs included in the draft performance plans provide, a priori, for a sufficient margin for ANSPs to cope the higher traffic forecast and should thus not be modified.”

As presented in the draft performance plan and at the user consultation this is not the case for Naviair where determined costs were set to match the embedded target on Determined costs, and the plan was able to meet the target on Determined Unit Costs over the RP3-period.

With a revision of costs and updated traffic Naviair will outperform the En route DUC-trend in all years by approx. 300 MDKK2017 for the period.

Figure 4: Determined Unit Costs (€2017) and difference in Determined costs (M€2017)



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**Emne:** AW: Updated Danish RP3 Performance Plan  
**Dato:** 8. november 2021 12:12:16

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Dear Bjarne,

Thank you for your message and the opportunity to comment on the planned update of the Danish Performance Plan:

- The Airlines of the Lufthansa Group support the **use of Statfor Sc2** for calculating the unit rates in RP3 **but without adopting the cost base**:
- Denmark's Cost Development:
  - Lufthansa Group is worried to see **a further increase in cost in 2022, where the on 01<sup>st</sup> October filed performance plan already foresaw cost for 2022 being higher than 2019 actuals.**
  - This comes in a situation where 2022 traffic over Denmark will still be **approx. -18.5% below 2019 actuals**, even in the new Statfor Forecast.
  - Instead of increasing cost, **Denmark should reallocate cost and even reduce the cost base below the now filed performance plan.** Airspace users have pointed out several measures during consultation, where there is room for improvement. We regret that none of the suggestions were taken up:
    - Still not fully justified extremely high cost for back-up ATM system, that is not reported by any other COOPANS member
    - A reduced but still very high interest on the subordinated loan
    - An outdated defined benefit pension scheme that should be replaced by a more cost efficient defined contributions system
- **The Statfor Traffic Forecast can be supported by recent developments within LH Group and industry wide trends**, which were also reported to the stock markets by our CEO on 03<sup>rd</sup> November 2022:
  - In recent weeks we see a very dynamic booking development which reaches again 80% of the 2019 levels
  - Especially business travel has been outperforming expectations in recent weeks with bookings by over 100% higher than last year
  - We expect the overall traffic level for the full year to recover from 40% of 2019 levels in 2021 to 70%+ in 2022.
  - The air cargo market still sees a higher demand than supply and this will continue for the foreseeable future as shipping lines will need several more months until normal schedules are restored
  - Booking to recently reopened or just reopening long haul markets like USA, Canada and Thailand are very strong. With Japan we have the first East-Asian market having announced a cautious reopening which will hopefully have a knock-on effect on other countries in the region.
  - The traffic level of the Lufthansa Group has been on average about -17%-points



below the market development, as other traffic streams have been already reaching 2019 levels or are significantly above, such as Cargo, Biz, Charter and Low Cost Traffic.

⇒ If we take the 17% margin between Lufthansa Group levels and the overall aviation market development and then add it to the LH Group expectation of 70%+ in 2022 we would perfectly reach the 88% expectation of Statfor.

- Supporting documentation:
  - Investor presentation (esp. slides 5 & 21): [PowerPoint-Präsentation \(lufthansagroup.com\)](#)
  - Prognosis Report (page 21): [ZB3-2021\\_DE\\_Final \(lufthansagroup.com\)](#)
  - Comparism of LH traffic recovery vs. network wide performance (source Eurocontrol)

<b>01st of</b>	<b>Jul 21</b>	<b>Aug 21</b>	<b>Sep 21</b>	<b>Okt 21</b>	<b>Nov 21</b>
LH	-61%	-46%	-49%	-44%	-36%
ECTL	-44%	-32%	-29%	-28%	-20%
<b>Delta</b>	<b>-17%</b>	<b>-14%</b>	<b>-20%</b>	<b>-16%</b>	<b>-16%</b>

We are sure you can follow our argumentation and look forward discussing a much improved Danish performance plan with you during the Enlarged Committee.

If you have any questions regarding our statement, please don't hesitate to contact me at any time.

Kind regards

Stephan

---

**Stephan WEIDENHILLER**

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FRA GK/AG  
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---

**Von:** Bjarne Skovgaard Sørensen <bsor@tbst.dk>

**Gesendet:** Freitag, 5. November 2021 12:41

**An:** Rory Sergison <sergisonr@iata.org>; Francis.Becht@sas.se; WEIDENHILLER, STEPHAN <stephan.weidenhiller@dlh.de>; Tom Laursen <evpeur@ifatca.org>; Esben Blum <ebj@datca.dk>; psm@bll.dk; estelle.malavolti@prb.eusinglesky.eu; jay.patel@egis-group.com; Johan.Zandstra@KLM.COM; HUET Denis <denis.huet@eurocontrol.int>

**Cc:** Kåre Clemmesen <kacl@tbst.dk>; Lars Korsholm <lkor@tbst.dk>; Ditte Løvenborg <dlov@tbst.dk>; Christoffer Vahl Bendixen <cben@tbst.dk>; Simone Roy Jessen <srj@dmi.dk>;

Mads Christian Jessen <mcj@dmi.dk>; Mads Kvist Eriksen <mke@naviair.dk>; Thorsten Elkjær <tea@naviair.dk>; Lise Kronborg <lkr@naviair.dk>; Casper Kramme Jepsen <ckj@naviair.dk>; Kasper Korsgaard Bertelsen <kbe@naviair.dk>

**Betreff:** Updated Danish RP3 Performance Plan

Dear all

Please find attached a covernote from Danish NSA and a note from Naviair explaining the planned update of the Danish Draft Performance Plan in light of the Eurocontrol STATFOR traffic forecast published on 15 October 2021.

We would be grateful if you could provide us with any comments may you have by Wednesday 10 November 2021 COB.

Venlig hilsen/Best regards

Bjarne Skovgaard Sørensen  
Specialkonsulent / Senior Advisor

Trafikstyrelsen  
Danish Civil Aviation and Railway  
Authority  
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[www.trafikstyrelsen.dk](http://www.trafikstyrelsen.dk)

Sitz der Gesellschaft / Corporate Headquarters: Deutsche Lufthansa Aktiengesellschaft, Koeln, Registereintragung / Registration:  
Amtsgericht Koeln HR B 2168  
Vorsitzender des Aufsichtsrats / Chairman of the Supervisory Board: Dr. Karl-Ludwig Kley  
Vorstand / Executive Board: Carsten Spohr (Vorsitzender / Chairman), Christina Foerster, Harry Hohmeister, Dr. Detlef Kayser, Dr.  
Michael Niggemann, Remco Steenbergen

**From:** Zandstra, Johan (SPLHW) - KLM  
**Titel:** WEIDENHILLER, STEPHAN; Bjarne Skovgaard Sørensen; Rory Sergison; Francis.Becht@sas.se; Tom Laursen; Esben Blum; psm@bll.dk; estelle.malavolti@prb.eusingslesky.eu; jay.patel@egis-group.com; HUET Denis; Mikael berg; Nicola Volta  
**Cc:** Kåre Clemmesen; Lars Korsholm; Ditte Løvenborg; Christoffer Vahl Bendixen; Simone Roy Jensen; Mads Christian Jessen; Mads Kvist Eriksen; Thorsten Elkjær; Lise Kronborg; Casper Kramme Jepsen; Kasper Korsgaard Bertelsen  
**Emne:** RE: Updated Danish RP3 Performance Plan  
**Dato:** 10. november 2021 10:00:36  
**Vedhæftede filer:** [lmaqs001.png](#)

Dear Bjarne,

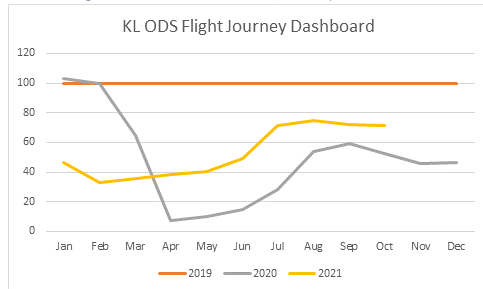
Thanks for reaching out to us, airspace users.

Completely in line with the responding email (Monday November 8<sup>th</sup> 12:11 hours) from Lufthansa, very well outlined by Mr. Stephan Weidenhiller and attached below we fully support the arguments presented.

In addition please note the following facts :

#### Perspective:

The actual flight of KLM are indicated below, as of July the index shows minimum of 70% - 75%



#### Outlook remaining 2021 and onwards:

As the US market is just opening (November 8<sup>th</sup> onwards) obviously we anticipate for a sharp increase in traffic for the remaining part of the year 2021.

For 2022 KLM is anticipating for traffic numbers close to 82% for ICA vs 2019 and some 90 -100% for European flights vs 2019. The weighted average corresponds with the numbers as forecasted by Eurocontrol; -11% vs 2019.

#### Insights from Eurocontrol:

KLM is supporting the statements made by Eamonn Brennan, Director General EUROCONTROL, in his email of October 15<sup>th</sup> at the publication of the new STATFOR Forecast: "Last year we had only five million flights but this summer has been very encouraging, with traffic close to our previous 'high' scenario and to airline expectations. As a result we expect to see about 6.2 million flights this year – still 44% fewer than we had in 2019. We are optimistic about traffic recovering to 2019 levels earlier than anticipated, with the baseline scenario indicating 9.8 million flights in 2022, just 11% down on 2019.

#### Conclusion:

Taking abovementioned in consideration, we can only conclude that **using of STATFOR Sc2** for calculating the unit rates in RP3 is the most appropriate approach to take without any higher amendment to the cost base.

We are convinced that our fair arguments will find common ground and we are looking forward to discussing with you the updated figures in the new Danish Performance plan consequently.

However, if you have any questions regarding our statement, please don't hesitate to contact undersigned.

Yours faithfully,

Johan

Johan Zandstra  
Procurement Officer Navigation Charges (SPLHW)  
MOB: +31 (0)6 51451057  
[https://url12.mallanyone.net/v1/?m=1mkjSZ-00078v-6O&i=57e1b682&c=H8Xhqv7b1zv1XHw6i-N\\_XJYoQrJHaaEGbkoJYc6gMYNUcezhzdbj7oKJWIF8UwHTHvYjX0zqXhOAY4qrMgF8Cqto9e6pmvwwQktv6ETHZGOObaLxE4EFHnsUtwOhYtYEUJJIPc4tocGJr11DI9Kh9VkfqlEugfdpJs7MwTKk5H8dNBq7GxUxD81c2z77-pTZPjhdOCLJAhoKeV9MgE2pGtgugloDgMgwoFbpxv23V4dMaQFRBnWi0m6IpA3](https://url12.mallanyone.net/v1/?m=1mkjSZ-00078v-6O&i=57e1b682&c=H8Xhqv7b1zv1XHw6i-N_XJYoQrJHaaEGbkoJYc6gMYNUcezhzdbj7oKJWIF8UwHTHvYjX0zqXhOAY4qrMgF8Cqto9e6pmvwwQktv6ETHZGOObaLxE4EFHnsUtwOhYtYEUJJIPc4tocGJr11DI9Kh9VkfqlEugfdpJs7MwTKk5H8dNBq7GxUxD81c2z77-pTZPjhdOCLJAhoKeV9MgE2pGtgugloDgMgwoFbpxv23V4dMaQFRBnWi0m6IpA3)  
EMAIL: [johan.zandstra@klm.com](mailto:johan.zandstra@klm.com)  
KLM Royal Dutch Airlines

**From:** WEIDENHILLER, STEPHAN <stephan.weidenhiller@dlh.de>

**Sent:** Monday, November 8, 2021 12:11 PM

**To:** Bjarne Skovgaard Sørensen <bcor@tbst.dk>; Rory Sergison <sergison@iata.org>; Francis.Becht@sas.se; Tom Laursen <evpeur@ifatca.org>; Esben Blum <ebj@datca.dk>; psm@bll.dk; estelle.malavolti@prb.eusingslesky.eu; jay.patel@egis-group.com; HUET Denis <denis.huuet@eurocontrol.int>; Zandstra, Johan (SPLHW) - KLM <Johan.Zandstra@KLM.COM>; Mikael berg <Mikael.Berg@sas.se>; Nicola Volta <nicola.volta@be.ey.com>

**Cc:** Kåre Clemmesen <kacl@tbst.dk>; Lars Korsholm <lkor@tbst.dk>; Ditte Løvenborg <dlov@tbst.dk>; Christoffer Vahl Bendixen <cben@tbst.dk>; Simone Roy Jensen <srj@dmi.dk>; Mads Christian Jessen <mcj@dmi.dk>; Mads Kvist Eriksen <mke@naviair.dk>; Thorsten Elkjær <tea@naviair.dk>; Lise Kronborg <lkr@naviair.dk>; Casper Kramme Jepsen <ckj@naviair.dk>; Kasper Korsgaard Bertelsen <kbe@naviair.dk>

**Subject:** AW: Updated Danish RP3 Performance Plan

Dear Bjarne,

Thank you for your message and the opportunity to comment on the planned update of the Danish Performance Plan:

- The Airlines of the Lufthansa Group support the **use of Statfor Sc2** for calculating the unit rates in RP3 **but without adopting the cost base**:
- Denmark's Cost Development:
  - Lufthansa Group is worried to see a **further increase in cost in 2022, where the on 01<sup>st</sup> October filed performance plan already foresaw cost for 2022 being higher than 2019 actuals**.
  - This comes in a situation where 2022 traffic over Denmark will still be **aprox. -18.5% below 2019 actuals**, even in the new Statfor Forecast.
  - Instead of increasing cost, **Denmark should reallocate cost and even reduce the cost base below the now filed performance plan**. Airspace users have pointed out several measures during consultation, where there is room for improvement. We regret that none of the suggestions were taken up:
    - Still not fully justified extremely high cost for back-up ATM system, that is not reported by any other COOPANS member

- A reduced but still very high interest on the subordinated loan
  - An outdated defined benefit pension scheme that should be replaced by a more cost efficient defined contributions system
- **The Statfor Traffic Forecast can be supported by recent developments within LH Group and industry wide trends**, which were also reported to the stock markets by our CEO on 03<sup>rd</sup> November 2022:
    - In recent weeks we see a very dynamic booking development which reaches again 80% of the 2019 levels
    - Especially business travel has been outperforming expectations in recent weeks with bookings by over 100% higher than last year
    - We expect the overall traffic level for the full year to recover from 40% of 2019 levels in 2021 to 70%+ in 2022.
    - The air cargo market still sees a higher demand than supply and this will continue for the foreseeable future as shipping lines will need several more months until normal schedules are restored
    - Booking to recently reopened or just reopening long haul markets like USA, Canada and Thailand are very strong. With Japan we have the first East-Asian market having announced a cautious reopening which will hopefully have a knock-on effect on other countries in the region.
    - The traffic level of the Lufthansa Group has been on average about -17%-points below the market development, as other traffic streams have been already reaching 2019 levels or are significantly above, such as Cargo, Biz, Charter and Low Cost Traffic.
    - ⇒ If we take the 17% margin between Lufthansa Group levels and the overall aviation market development and then add it to the LH Group expectation of 70%+ in 2022 we would perfectly reach the 88% expectation of Statfor.
  - Supporting documentation:
    - Investor presentation (esp. slides 5 & 21): [PowerPoint-Präsentation \(lufthansagroup.com\)](#)
    - Prognosis Report (page 21): [ZB3-2021\\_DE\\_Final \(lufthansagroup.com\)](#)
    - Comparison of LH traffic recovery vs. network wide performance (source Eurocontrol)

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We are sure you can follow our argumentation and look forward discussing a much improved Danish performance plan with you during the Enlarged Committee.

If you have any questions regarding our statement, please don't hesitate to contact me at any time.

Kind regards

Stephan

Stephan WEIDENHILLER  
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 Group Regulatory & Industry Charges  
 FRA GK/AG  
 Lufthansa Aviation Center  
 60546 Frankfurt/Main  
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 E-Mail: [stephan.weidenhiller@dlh.de](mailto:stephan.weidenhiller@dlh.de)  
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**Von:** Bjarne Skovgaard Sørensen <[bsor@tbst.dk](mailto:bsor@tbst.dk)>  
**Gesendet:** Freitag, 5. November 2021 12:41  
**An:** Rory Sergison <[rsergison@ata.org](mailto:rsergison@ata.org)>; Francis Becht <[sas@sas.se](mailto:sas@sas.se)>; WEIDENHILLER, STEPHAN <[stephan.weidenhiller@dlh.de](mailto:stephan.weidenhiller@dlh.de)>; Tom Laursen <[evpeur@ifatca.org](mailto:evpeur@ifatca.org)>; Esben Blum <[ebi@datca.dk](mailto:ebi@datca.dk)>; psm@bll.dk; estelle.malavolti@prb.eusinglesky.eu; jav.patel@egis-group.com; Johan Zandstra@KLM.COM; HUET Denis <[denis.hueta@eurocontrol.int](mailto:denis.hueta@eurocontrol.int)>  
**Cc:** Kåre Clemmesen <[kac@tbst.dk](mailto:kac@tbst.dk)>; Lars Korsholm <[kor@tbst.dk](mailto:kor@tbst.dk)>; Ditte Løvenborg <[dlov@tbst.dk](mailto:dlov@tbst.dk)>; Christoffer Vahl Bendixen <[cben@tbst.dk](mailto:cben@tbst.dk)>; Simone Roy Jessen <[sri@dmi.dk](mailto:sri@dmi.dk)>; Mads Christian Jessen <[mci@dmi.dk](mailto:mci@dmi.dk)>; Mads Kvist Eriksen <[mke@naviair.dk](mailto:mke@naviair.dk)>; Thorsten Elkjær <[tea@naviair.dk](mailto:tea@naviair.dk)>; Lise Kronborg <[kr@naviair.dk](mailto:kr@naviair.dk)>; Casper Kramme Jepsen <[cj@naviair.dk](mailto:cj@naviair.dk)>; Kasper Korsgaard Bertelsen <[kbe@naviair.dk](mailto:kbe@naviair.dk)>  
**Betreff:** Updated Danish RP3 Performance Plan

Dear all

Please find attached a covernote from Danish NSA and a note from Naviair explaining the planned update of the Danish Draft Performance Plan in light of the Eurocontrol STATFOR traffic forecast published on 15 October 2021.

We would be grateful if you could provide us with any comments may you have by Wednesday 10 November 2021 COB.

Venlig hilsen/Best regards

Bjarne Skovgaard Sørensen  
 Specialkonsulent / Senior Advisor

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Sitz der Gesellschaft / Corporate Headquarters: Deutsche Lufthansa Aktiengesellschaft, Köln, Registeringentrtragung / Registration: Amtsgericht Köln HR B 2168  
 Vorsitzender des Aufsichtsrats / Chairman of the Supervisory Board: Dr. Karl-Ludwig Kley  
 Vorstand / Executive Board: Carsten Spohr (Vorsitzender / Chairman), Christina Foerster, Harry Hohmeister, Dr. Delfe Kayser, Dr. Michael Niggemann, Remco Steenbergen

\*\*\*\*\*  
 For information, services and offers, please visit our web site: [https://url12.mailanyone.net/v1/?m=1mkjSZ-00078v-6O&i=57e1b682&c=2EdhcbTk\\_XiVd9uR4Qi-8CtY6K15EQqUqnZUOQ33L1mLuYSntSqnc\\_3Fxi9tWo6f36mkt0BCp8WUUbYvHfUGIN2Uz2thMtDkgUWW9WcU-9ZB111LJ47Imz7CXLr0Tn15PInSjvuh94Gs0UWdxmZJXc9vriu\\_O4dO53O-07MFoips5zXkrDjnLeQApnzp4QECHDyJfLNQ\\_jKWHfswQ](https://url12.mailanyone.net/v1/?m=1mkjSZ-00078v-6O&i=57e1b682&c=2EdhcbTk_XiVd9uR4Qi-8CtY6K15EQqUqnZUOQ33L1mLuYSntSqnc_3Fxi9tWo6f36mkt0BCp8WUUbYvHfUGIN2Uz2thMtDkgUWW9WcU-9ZB111LJ47Imz7CXLr0Tn15PInSjvuh94Gs0UWdxmZJXc9vriu_O4dO53O-07MFoips5zXkrDjnLeQApnzp4QECHDyJfLNQ_jKWHfswQ). This e-mail and any attachment may contain confidential and privileged material intended for the addressee only. If you are not the addressee, you are notified that no part of the e-mail or any attachment may be disclosed, copied or distributed, and that any other action related to this e-mail or attachment is strictly prohibited, and may be unlawful. If you have received this e-mail by error, please notify the sender immediately by return e-mail, and delete this message.

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\*\*\*\*\*

**Fra:** [Esben Blum](#)  
**Til:** [Bjarne Skovgaard Sørensen](#)  
**Cc:** [Rory Sergison](#); [Francis.Becht@sas.se](#); [WEIDENHILLER, STEPHAN](#); [Tom Laursen](#); [psm@bll.dk](#); [estelle.malavolti@prb.eusinglesky.eu](#); [jay.patel@egis-group.com](#); [Johan.Zandstra@klm.com](#); [HUET Denis](#); [Kåre Clemmesen](#); [Lars Korsholm](#); [Ditte Løvenborg](#); [Christoffer Vahl Bendixen](#); [Simone Roy Jessen](#); [Mads Christian Jessen](#); [Mads Kvist Eriksen](#); [Thorsten Elkjær](#); [Lise Kronborg](#); [Casper Kramme Jepsen](#); [Kasper Korsgaard Bertelsen](#)  
**Emne:** Re: Updated Danish RP3 Performance Plan  
**Dato:** 10. november 2021 17:51:26

---

Dear Bjarne,

Thank you for your message and the opportunity to comment on the Danish performance plan for RP3.

DATCA is missing a section about Naviair's capabilities to deliver on all performance areas. There has been an emphasis on cost-efficiency in the revision process but minimal discussion about the effects on the other performance areas.

DATCA is concerned about Naviair's ability to meet the capacity targets with the staff left in the company. This concern is valid for the STATFOR from May and now more so in the latent from October. The cause of this is mainly the decision to reduce the number of ATCOs by 15% released on early retirement packages.

Med venlig hilsen / Kind regards,

Esben Blum

Formand / President  
DATCA - Danish Air Traffic Controllers Association  
[+45 26 81 00 18](tel:+4526810018)  
[ebj@datca.dk](mailto:ebj@datca.dk)  
[www.datca.dk](http://www.datca.dk)

Den 5. nov. 2021 kl. 14.14 skrev Bjarne Skovgaard Sørensen <[bsor@tbst.dk](mailto:bsor@tbst.dk)>:

Dear all

Please find attached a covernote from Danish NSA and a note from Naviair explaining the planned update of the Danish Draft Performance Plan in light of the Eurocontrol STATFOR traffic forecast published on 15 October 2021.

We would be grateful if you could provide us with any comments may you have by Wednesday 10 November 2021 COB.

Venlig hilsen/Best regards

Bjarne Skovgaard Sørensen  
Specialkonsulent / Senior Advisor

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Danish Civil Aviation and Railway  
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<Naviair Impact of new October STATFOR forecast.pdf>

<Covernote written consultation Danish RP3 PP.pdf>

**Fra:** [Bjarne Skovgaard Sørensen](#)  
**Til:** ["Rory Sergison"](#); ["Francis.Becht@sas.se"](#); ["WEIDENHILLER, STEPHAN"](#); ["Tom Laursen"](#); ["Esben Blum"](#); ["psm@bjl.dk"](#); ["estelle.malayolti@prb.eusinglesky.eu"](#); ["jay.patel@egis-group.com"](#); ["Johan.Zandstra@KLM.COM"](#); ["HUET Denis"](#); [Lars-W.Andersen@sas.dk](#)  
**Cc:** [Kåre Clemmesen](#); [Lars Korsholm](#); [Ditte Løvenborg](#); [Christoffer Vahl Bendixen](#); [Simone Roy Jessen](#); [Mads Christian Jessen](#); ["Mads Kvist Eriksen"](#); ["Thorsten Elkjær"](#); ["Lise Kronborg"](#); ["Casper Kramme Jepsen"](#); ["Kasper Korsgaard Bertelsen"](#)  
**Emne:** Updated Danish RP3 Performance Plan  
**Dato:** 14. november 2021 10:48:12

---

Dear all

Thank you for your comments to the planned update of the Danish draft performance plan.

We have received comments from Lufthansa, KLM, SAS and from Danish ATCO union DATCA.

Lufthansa, KLM and SAS all agreed that the draft performance plan should be updated using the STATFOR October 2021 baseline traffic forecast.

However, the airlines cannot accept the limited increase in cost planned in the updated draft performance plan as a response to the significant higher traffic forecast. It is the view of the airlines that the costbase in the draft performance plan submitted on the 1 October 2021 is sufficient to cover a higher traffic level. Questions was also raised to Naviairs plan to relocate ATCOs currently involved in training to operations.

DATCA requested further information on expected impact on other performance parameters than cost efficiency. DATCA is concerned about Naviair's ability to meet the capacity targets with the staff left in the company.

After reviewing the comments received it is still the position of the Danish NSA that it is justified that Naviairs costbase is slightly increased compared to the October draft performance plan. As mentioned in the distributed note from Naviair costs and operational capacity have been closely scaled to the traffic foreseen in the May 2021 forecast which makes it difficult for Naviair to handle the significantly higher traffic as foreseen in the October forecast without increasing the number of ATCOs. According to Article 10 of Regulation 317/2019 "the same forecasts shall be applied to all key performance areas". When assessing the fulfillment of the targets, it should therefore be taken into account that there is now a different traffic forecast with significantly more traffic in 2022 and 2023 than the one where the targets were set and this may have an impact on Naviair's operational robustness, as also mentioned in the note.

Regarding the ATCOs currently involved in training it is the expectation that they can be replaced by Entry Point North instructors or other suppliers.

Venlig hilsen/Best regards

Bjarne Skovgaard Sørensen  
Specialkonsulent / Senior Advisor

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# Consultation on the Danish RP3 draft performance plan and on 2020 actual performance - 17 August 2021

Trafikstyrelsen  
Danish Civil Aviation and Railway Authority  
DK Consultation on RP3 draft performance plan  
17 August 2021



# Agenda

- 9h: Welcome and presentation of the agenda
- 9h15: 2020 actual performance: safety, environment, capacity, cost efficiency
- 10h: **RP3**  
General assumptions (scope, traffic forecasts, airports)  
Investment plans  
RP3 Performance targets (local vs. EU)
  - Safety
  - Environment
  - Capacity
  - Cost efficiency (Baseline 2019, Cost trends)Incentive schemes  
Possible update after new Statfor forecast in October
- 13h30: Sum up and further process
- 14h: Thank you!

# Regulatory references

## RP3 PP

### **EU regulation 2019/317:**

Art. 10(4): ..... national supervisory authorities shall consult air navigation service providers, airspace users' representatives and, where relevant, airport operators and airport coordinators on the draft performance plans, including on the performance targets and incentive schemes contained therein.

Art. 24(2): At the latest four months before the start of the reference period, Member States shall, in a coordinated manner, consult air navigation service providers, airspace users' representatives, and, where relevant, airport operators and airport coordinators on the intended establishment of the determined costs included in the cost base for en route and terminal charges, new and existing investments, service unit forecasts and charging policy for the reference period concerned. ...

# Regulatory references

## RP3

### **EU regulation 2019/317:**

Art. 24(3): During the reference period, Member States shall on an annual basis, in a coordinated manner, and in accordance with point 1 of Annex XII, consult air navigation service providers, airspace users' representatives, and, where relevant, airport operators and airport coordinators on the actual costs incurred during the previous year and the difference between the actual costs and the determined costs contained in the performance plan.

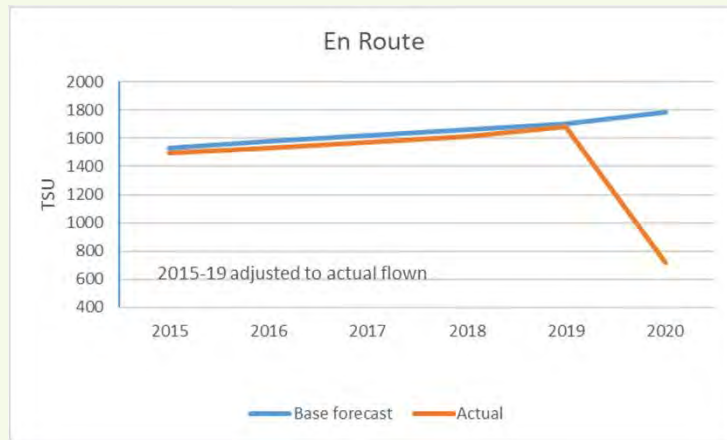
Art. 30(1): Member States shall, by 1 August of each year, in a coordinated manner, consult the air navigation service providers, airspace users' representatives, and, where relevant, airport operators and airport coordinators on essential elements relating to the implementation of this Regulation as set out in point 2 of Annex XII. This consultation may be conducted together with the consultation referred to in Article 24(3).

# 2020 performance

## Items overview

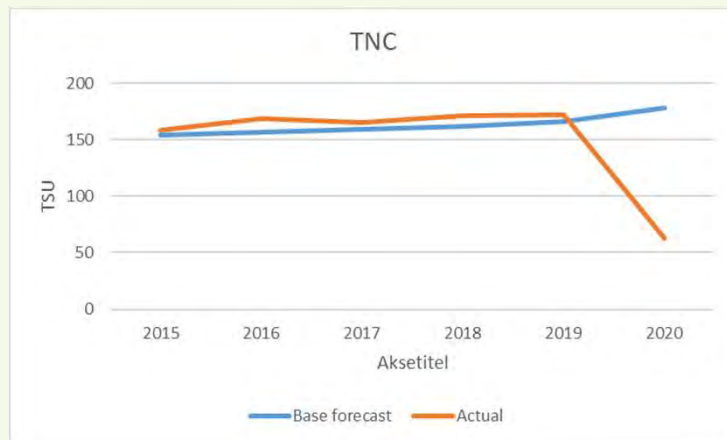
- Traffic
- Safety
- Environment
- Capacity – incentive scheme results
- Cost efficiency En route
- Cost efficiency TNC
- Investments

# 2020 performance - traffic



2020	En Route	TNC
RP3 Forecast, TSU ('000)	1680,0	178,4
Actual, TSU ('000)	716,8	63,5
Difference, pct.	-57,3	-64,4
Traffic Risk Sharing, MDKK	2020 and -21 to be regarded as a combined year *)	

\*)Adjustments resulting from Traffic Risk Sharing will be made in 2023 and -24



# 2020 performance - safety

## NAVIAIR

Effectiveness of Safety Management		2020
(a) safety policy and objectives	Values from PP	B
	Actual values	B
(b) safety risk management	Values from PP	B
	Actual values	B
(c) safety assurance	Values from PP	B
	Actual values	B
(d) safety promotion	Values from PP	B
	Actual values	B
(e) safety culture	Values from PP	B
	Actual values	B

## Denmark

Runway Incursions	2020
Total number of runway incursions with a safety impact	2
Total number of IFR and VFR movements at the airports	98.204
Rate of Runway Incursions at Airports Located in the Member State	0,20366

Separation minima	2020
Total number of separation minima infringements with a safety impact that occurred in the airspace	8
Total number of controlled flight hours within the airspace	280.286
Rate of separation minima infringements within the airspace of all controlling air traffic services units in the Member State	0,28542
<b>EKCH (Copenhagen - Kastrup)</b>	
2020	
Total number of runway incursions with any contribution from air traffic services or CNS services with a safety impact that occurred at the airport	0
Total number of IFR and VFR movements at the airports	98.204
Rate of Runway Incursions at the airport	0
<b>NAVIAIR</b>	
2020	
Total number of separation minima infringements with any contribution from air traffic services, or CNS services with a safety impact	0
Total number of controlled flight hours within the airspace	280.286
Rate of separation minima infringements within the airspace where the air navigation service provider provides air traffic services	0,00000

# 2020 performance - Enviroment

## Horizontal en-route flight efficiency (KEA)

Denmark	2020	2021	2022	2023	2024
Targets as shown in PP	1,21%				
Actual values	1,12%				
Difference	-0,09%				



# 2020 performance - Capacity

## En-route ATFM delay per flight

Denmark ( NAVIAIR)	2020	2021	2022	2023	2024
Targets as shown in PP	0,07				
Actual values	0,00				
Difference	-0,07				

No incentive schemes for 2020 and -21

# 2020 performance - Capacity

Terminal and airport ANS ATFM arrival delay per flight

Denmark		2020	2021	2022	2023	2024
National level <i>(all airports included in the SES PS)</i>	PP values	0,10				
	Actual	0,00				
	Diff.	-0,10				

## 2020 performance – Cost efficiency en route

Denmark	2019 A	2020 A	Difference in value	Difference in %
Total en route costs in nominal terms (in national currency)	701.118.720	712.917.370	11.798.651	1,7%
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	694.065.335	704.502.646	10.437.311	1,5%
Total en route Service Units (TSU)	1.780.648	716.778	-1.063.870	-59,7%
<b>Real en route unit costs (in national currency at 2017 prices) - DUC</b>	389,78	982,87	593	152,2%

- Normally actual costs are compared to planned cost. 2020 as an exception is compared to 2019 actual costs due to the effects of the pandemic.
- However for Denmark 2020 costs cannot directly be compared with the actual costs in 2019, as there is a method change from RP2 to RP3 in the way Naviar calculates its costs. This concerns netted funding and cost of capital.
- In RP2 eu subsidies wrongly were netted out in the costbase and thus artificially lowering the costbase. The effect of this in 2019 was 13,1 MDKK. This has been corrected in RP3.
- Furthermore the cost of capital was calculated differently compared to RP3. The effect of this in 2019 was 12,6 MDKK. In RP3 cost of capital is calculated according to the regulation.
- Adjusted for this, the comparable 2019 figure is DKK 719.763.577 in real terms. In reality, 2020 costs have thus been reduced by 3.7%.
- Compared to the determined cost for 2020, as they appear in the draft performance plan from 2019 of DKK 784.829.036, the costs have been reduced by 10.2%

## 2020 performance – Cost efficiency TNC

Denmark	2019 A	2020 A	Difference in value	Difference in %
Total terminal costs in nominal terms (in national currency)	186.527.309	179.920.722	-6.606.587	-3,5%
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	184.369.253	177.395.128	-6.974.125	-3,8%
Total terminal Service Units (TSU)	172.467	63.465	-109.002	-63,2%
<b>Real terminal unit costs (in national currency at 2017 prices) - DUC</b>	1.069,01	2.795,16	1.726	161,5%

- 2020 TNC costs likewise cannot directly be compared with the actual costs in 2019, as there is a method change from RP2 to RP3 in the way Naviar calculates its costs. This again concerns netted funding and cost of capital.
- In RP2 eu subsidies wrongly were netted out in the costbase and thus artificially lowering the costbase. The effect of this in 2019 was 2,0 MDKK.
- Furthermore the cost of capital was calculated differently compared to RP3. The effect of this in 2019 was -4,9 MDKK. In RP3 cost of capital is calculated according to the regulation.
- Adjusted for this, the comparable 2019 figure is DKK 181.428.280 in real terms. In reality, 2020 costs have thus been reduced by 2,9%
- Compared to the determined cost for 2020, as they appear in the draft performance plan from 2019 of DKK 194.159.070, the costs have been reduced by 8,6%

# 2020 performance – Investments

- Will be discussed during the RP3 presentation

# RP3 Revised draft Performance Plan

## Items overview

- Timeframe
- General policy
- Traffic
- Performance targets
  - Safety
  - Environment
  - Capacity
  - Cost-efficiency
- Investments
- Incentive schemes
- Possible update after October Statfor forecast

# RP3 draft PP

## Time frame to submission

DK RP3  
consultation  
17/8

Draft  
consultation  
minutes 1/9

Comments draft minutes,  
Consultation response  
9/9

DK RP3 PP  
submitted  
1/10



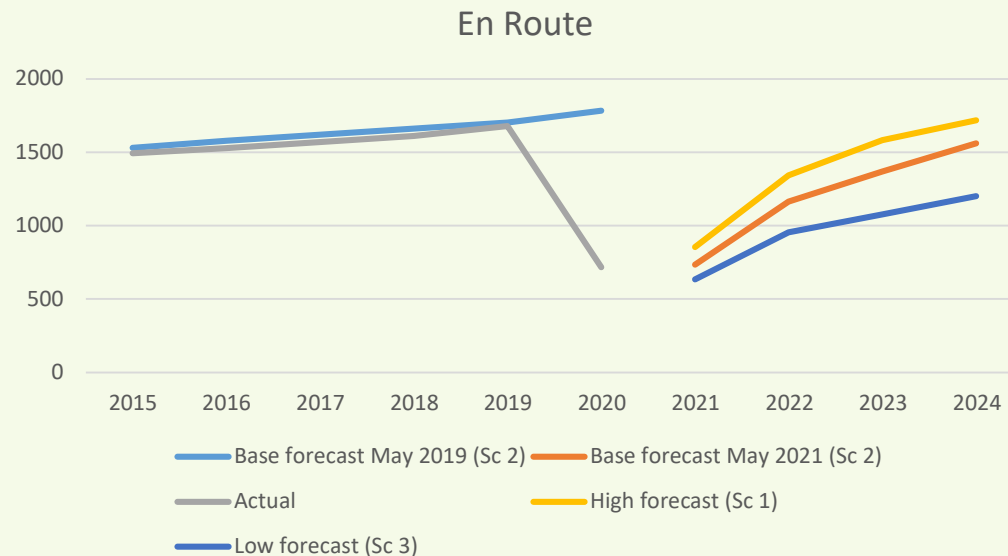
# RP3 draft PP

## General policy

- RP3 performance plan at national level
- Only Copenhagen Airport included (> 80.000 IFR movements)
- No modulation
- Carry-overs
  - Cost exempt from cost sharing (Eurocontrol costs)
    - RP3 -> in the n+2 unit rate
  - Other art. 28
    - Investment costs -> unit rate 2026 (end of RP3 after scrutiny)
    - Pension costs, interest rate -> unit rate 2026 (end of RP3 after scrutiny)
- No services subject to market conditions



# RP3 draft PP Traffic – en route

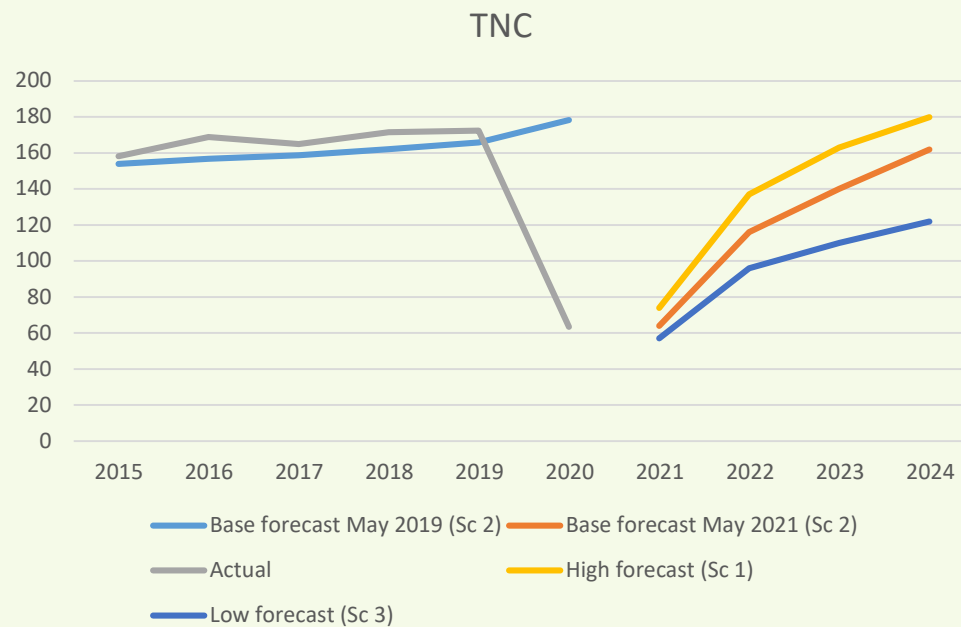


RP3: STATFOR May 2021  
(Sc 2)

Traffic risk sharing  
parameters according to  
reg. 317/2019, art. 27 (2-  
4). No adaption.

The October 2021  
Statfor forecast may be  
significantly different  
causing the need for a  
revision of the PP. This  
will be elaborated later

# RP3 draft PP Traffic – TNC



RP3: STATFOR Base (Sc 2)

Traffic risk sharing  
parameters according to  
reg. 317/2019, art. 27 (2-  
4). No adaption.

# RP3 draft PP

## Performance targets

- Safety
  - Level of Effectiveness of Safety Management achieved by ANSPs
- Environment
  - Horizontal en route flight efficiency (KEA)
- Capacity
  - En route ATFM delay per flight
  - Terminal and airport ANS ATFM arrival delay per flight
- Cost-efficiency
  - Determined unit cost (DUC) for en route ANS
  - Determined unit cost (DUC) for terminal ANS

# RP3 draft PP

## Safety

Level of Effectiveness of Safety Management achieved by ANSPs

<b>Safety</b>		2021	2022	2023	2024
<b>NAVIAIR</b>	Safety policy and objectives	C	C	C	C
	Safety risk management	B	C	D	D
	Safety assurance	B	C	C	C
	Safety promotion	B	C	C	C
	Safety culture	B	C	C	C

- EU-wide targets are only set for the year 2024
- The local targets show the itinerary towards meeting the Union-wide targets in 2024

# RP3 draft PP Enviroment

- Horizontal en route flight efficiency (KEA)

Enviroment	2021	2022	2023	2024
National reference values	1,14%	1,14%	1,14%	1,14%
EU wide targets	2,37%	2,37%	2,40%	2,40%
National targets	1,14%	1,14%	1,14%	1,14%

- The Network Manager's national reference values are chosen as national performance targets.
- FRA established since 2011

# RP3 draft PP

## Capacity – En route

- En route ATFM delay per flight

Capacity En Route	2021	2022	2023	2024
National reference values	0,03	0,06	0,06	0,05
EU wide targets	0,35	0,50	0,50	0,50
National targets	0,03	0,06	0,06	0,05

- The local targets correspond to the national reference values set by the Network Manager.

# RP3 draft PP Capacity – TNC

- TNC ATFM delay per flight

Capacity TNC	2021	2022	2023	2024
National targets	0,10	0,10	0,10	0,10

- No EU-wide targets on this KPI
- Target more ambitious than the RP2 target of 0,11

# RP3 draft PP

## Cost-efficiency

- **En route and TNC**

- **Baseline 2019**

- Adjustments for method changes RP2 -> RP3 on cost of capital and netted funding

- **Naviar cost reductions**

- **Unit rates 2022**

- **Cost trend 2021-2024**



# RP3 draft PP

## Baseline 2019 adjustments – Cost of capital

- The Baseline adjustments were thoroughly discussed during the first RP consultation.
- The figures shows the updated calculation of 2019 cost of capital using the RP3 method.

En route ('000 DKK)	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>52.075</b>	<b>29.509</b>	<b>46.387</b>
Return on equity	23.450	23.450	38.432
Interests on debt	40.815	15.962	12.600
<i>Hereof interests on subordinated loan</i>	<i>39.422</i>	<i>14.362</i>	<i>12.600</i>
<i>Hereof other financial costs</i>	<i>1.393</i>	<i>1.600</i>	
Capitalisation of interim interest	-3.020	-4.645	-4.645
Placement of excess liquidity	-9.171	-5.258	

TNC CPH	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>21.074</b>	<b>17.618</b>	<b>13.763</b>
Return on equity	16.570	16.570	10.981
Interests on debt	7.340	2.791	3.600
<i>Hereof interests on subordinated loan</i>	<i>7.090</i>	<i>2.525</i>	<i>3.600</i>
<i>Hereof other financial costs</i>	<i>250</i>	<i>265</i>	
Capitalisation of interim interest	-543	-818	-818
Placement of excess liquidity	-2.293	-925	

## RP3 draft PP

# Baseline 2019 adjustments – Cost of capital

- The Baseline adjustments between RP3/RP2 are as follows:
  - En Route: +16,9 MDKK
  - TNC CPH: -3,9 MDKK
- The interest rate on the subordinated loan (State loan) are expected to be lowered from 9 per cent to 4.5 per cent with effect from 2022.
- The reduced interest rate will also lower the baseline
  - En route: -3.8 MDKK
  - TNC CPH: -1.1 MDKK

The reduced interest rate is included in the determined costs in 2022 – 2024.
- Combined the total adjustments to the 2019 baseline due to cost of capital are:
  - En route: +13,1 MDKK
  - TNC CPH: -4,9 MDKK

## RP3 draft PP

# Baseline 2019 adjustments – Netted funding

- This adjustment was also thoroughly discussed during the first RP consultation.
- The figures shows the updated calculation effect of netted funding on actual 2019 costs.

2019A (BASELINE)			
En route (DKK 1 000)	2019A	deducted funding	2019 Baseline
1.1 Staff	384.314	5.486	389.800
1.2 Other operating costs	124.610	1.829	126.438
1.3 Depreciation	80.323	5.387	85.710
1.4 Cost of capital	29.509		29.509
1.5 Exceptional items	-15.310		-15.310
1.6 Total costs	603.445	12.701	616.146

TNC CPH (DKK 1 000)	2019A	deducted funding	2019 Baseline
1.1 Staff	120.498	1.121	121.619
1.2 Other operating costs	38.379	374	38.752
1.3 Depreciation	13.142	520	13.662
1.4 Cost of capital	17.618		17.618
1.5 Exceptional items	-4.664		-4.664
1.6 Total costs	184.972	2.015	186.987

RP2: Anticipated funding netted out from determined costs and actual costs

RP3: Gross cost reporting in accordance with regulation

Baseline impact (MDKK2017):

En route: 12,6 MDKK

TNC: 2,0 MDKK



# RP3 draft PP

## Baseline 2019 adjustments – Adjusted baselines

### En Route

Mill. DKK (2017)	2019 actual costs	Adjustment cost of capital	Adjustment Netted funding	Total adjustments	Total adjusted baseline 2019
Naviar (ANSP)	578,0	13,1	12,6	25,7	603,7
DMI (MET)	36,7			0,0	36,7
TS (NSA)	79,4			0,0	79,4
<b>Total</b>	<b>694,1</b>	<b>13,1</b>	<b>12,6</b>	<b>25,7</b>	<b>719,8</b>

### TNC

Mill. DKK (2017)	2019 actual costs	Adjustment cost of capital	Adjustment Netted funding	Total adjustments	Total adjusted baseline 2019
Naviar (ANSP)	182,8	-4,9	2,0	-2,9	179,9
DMI (MET)	1,5			0,0	1,5
TS (NSA)	0,0			0,0	0,0
<b>Total</b>	<b>184,3</b>	<b>-4,9</b>	<b>2,0</b>	<b>-2,9</b>	<b>181,4</b>

## RP3 draft PP – Naviair Costs reductions

- Naviair has implemented a number of costs reductions eg. voluntary resignations and cost containment efforts.
- However this is not sufficient to reach the union wide targets for determined costs (compared to the adjusted 2019 baseline).
- Therefore expected cost reductions are added in order to achieve the union wide targets.
- The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction

# RP3 draft PP – Naviair Costs reductions

## Naviair En Route

Cost details	2020/2021	2022	2023	2024
1.1 Staff	784.970	355.324	365.830	374.480
of which, pension costs	140.396	62.524	64.696	66.474
1.2 Other operating costs	255.242	128.326	131.227	126.636
1.3 Depreciation	177.819	98.251	100.785	100.161
1.4 Cost of capital	95.141	42.742	43.600	43.320
1.5 Exceptional items	-84.060	-20.402	-18.191	-7.440
<b>1.6 Total costs</b>	<b>1.229.112</b>	<b>604.241</b>	<b>623.251</b>	<b>637.157</b>

## Naviair TNC

Cost details	2020/2021	2022	2023	2024
1.1 Staff	242.018	112.171	118.176	123.174
of which, pension costs	42.759	19.530	20.340	20.974
1.2 Other operating costs	71.033	34.277	33.019	32.164
1.3 Depreciation	30.925	17.038	16.772	17.041
1.4 Cost of capital	28.076	12.662	12.907	12.827
1.5 Exceptional items	-16.485	-1.185		
<b>1.6 Total costs</b>	<b>355.567</b>	<b>174.963</b>	<b>180.873</b>	<b>185.207</b>

## En route & TNC CPH | Changes between draft RP3-plans 2019 & 2021

### Key points:

- Staff costs reduced by voluntary resignations (**full effect 2022**) and non-rehiring vacant positions – company total of 90 FTE.
- Other operating costs: Cost-containment initiatives, e.g. Optimisation of procurement and effective administration.
- Depreciations: Marginal changes in depreciations end of RP3 based on reassessed CAPEX.
- Cost of capital: Reduced by expected change in interest on sub-ordinated loan to market conform level (9.0%→4,5%).

	% vs. draft RP3 (2019)				
<b>B2019 (RP3)</b>	2020 A	2021 D	2022 D	2023 D	2024 D
1.1 Staff	5,8%	-8,7%	-10,3%	-8,4%	-5,6%
1.2 Other operating costs	-21,9%	-21,6%	-23,9%	-24,7%	-28,6%
1.3 Depreciation	2,6%	-0,6%	1,2%	0,9%	-6,2%
1.4 Cost of capital	2,4%	-3,1%	-15,3%	-15,3%	-17,3%
<b>1.6 Total costs</b>	<b>-11,4%</b>	<b>-11,6%</b>	<b>-14,8%</b>	<b>-13,3%</b>	<b>-12,4%</b>
4.1 Costs for exempted VFR flights	-60,7%	-58,0%	-58,0%	-58,0%	-58,0%
<b>Total Determined Costs</b>	<b>-12,3%</b>	<b>-12,5%</b>	<b>-15,7%</b>	<b>-14,2%</b>	<b>-13,3%</b>

## En route | Determined costs and bridge to 2019 (MDKK-2017)

### Key points:

- Staff costs reduced by voluntary resignations (**full effect 2022**) and non-rehiring vacant positions – company total of 90 FTE.
- Increases in staff costs due training of operational staff (e.g. new ATCOs) in the end of RP3.
- Optimisation of procurement and effective administration offsets increased costs for training of operational staff.
- Depreciations: Depreciations increase during RP3 due to finished projects late RP2 and early RP3.
- Cost of capital: Reduced by expected change in interest on sub-ordinated loan to market conform level (9.0%→4,5%).
- Exceptional items reflect management decision to meet target on cost-reductions with further initiatives on cost-containment.

En route	Methodology						RP3				
	RP2- method	Arrange	Actual 2019	Cost of capital	Netted funding	B2019 (RP3)	2020 A	2021 D	2022 D	2023 D	2024 D
Staff	379,0	-15,1	<b>363,9</b>	-	5,4	<b>369,3</b>	416,2	351,8	340,9	346,0	348,6
Other operating costs	122,9	-	<b>122,9</b>	-	1,8	<b>124,7</b>	124,8	124,8	123,1	124,1	117,9
Depreciation	80,3	-	<b>80,3</b>	-	5,4	<b>85,7</b>	87,8	90,0	98,3	100,8	100,2
Cost of capital	29,5	-	<b>29,5</b>	13,1	-	<b>42,6</b>	48,3	46,8	42,7	43,6	43,3
Exeptional items	-15,1	15,1	-	-	-	-	-73,1	-9,4	-19,6	-17,2	-6,9
<b>Total costs</b>	<b>596,6</b>	<b>-</b>	<b>596,6</b>	<b>13,1</b>	<b>12,6</b>	<b>622,3</b>	<b>604,1</b>	<b>603,9</b>	<b>585,5</b>	<b>597,3</b>	<b>603,1</b>
VFR exempt	18,6	-	-	-	-	18,6	18,5	18,3	18,0	17,8	17,5
<b>Determined/actual costs</b>	<b>578,0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>603,7</b>	<b>585,6</b>	<b>585,6</b>	<b>567,5</b>	<b>579,5</b>	<b>585,6</b>

Figures are listed in real terms (DKK 2017) – compared to RT1 the inflation is removed for costs excl. Depreciation and cost of capital.



## TNC CPH | Determined costs and bridge to 2019 (MDKK-2017)

### Key points:

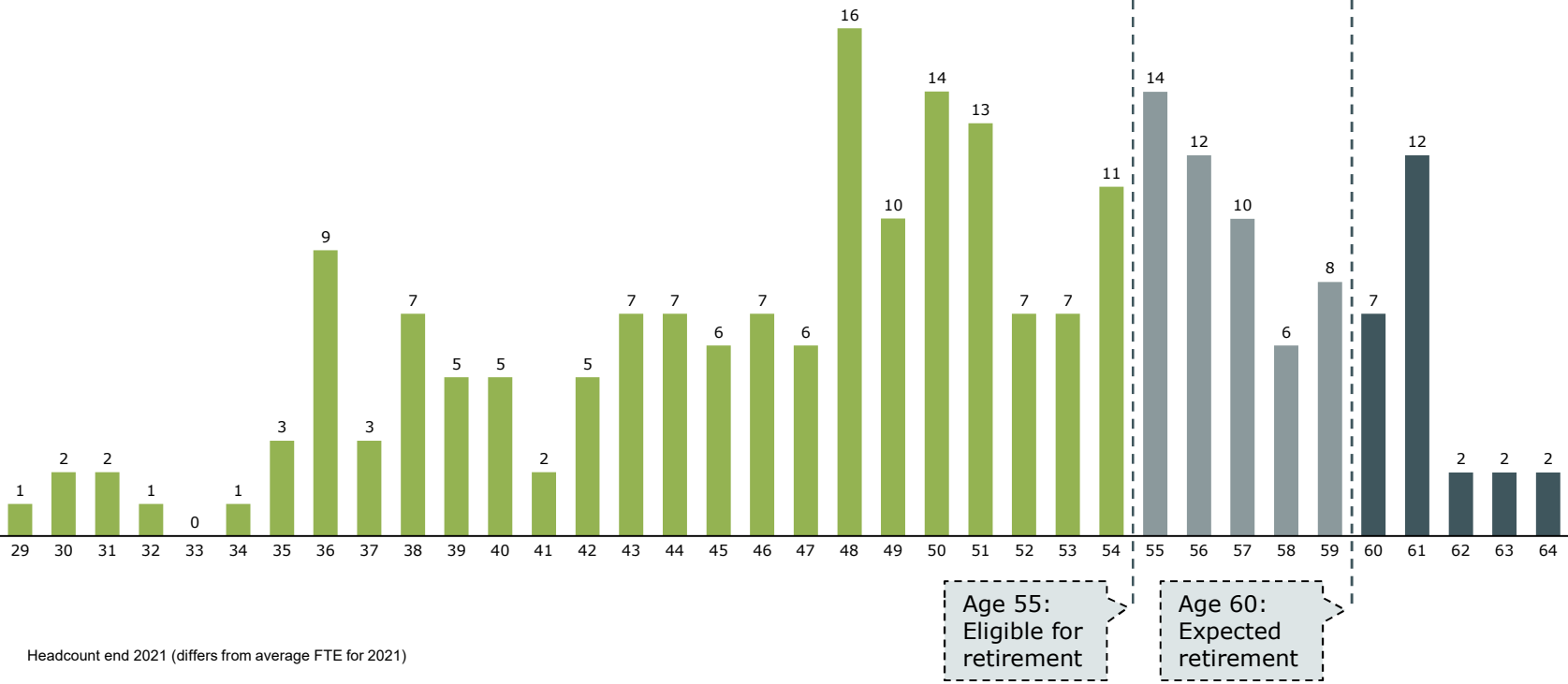
- Staff costs reduced by voluntary resignations (**full effect 2022**) and non-rehiring vacant positions – company total of 90 FTE.
- Increases in staff costs due training of operational staff (e.g. new ATCOs) in the end of RP3.
- Optimisation of procurement and effective administration offsets increased costs for training of operational staff.
- Depreciations: Depreciations increase during RP3 due to finished projects late RP2 and early RP3.
- Cost of capital: Reduced by expected change in interest on sub-ordinated loan to market conform level (9.0%→4,5%).
- Exceptional items reflect management decision to meet target on cost-reductions with further initiatives on cost-containment.

TNC CPH	Methodology						RP3				
	RP2- method	Arrange	Actual 2019	Cost of capital	Netted funding	B2019 (RP3)	2020 A	2021 D	2022 D	2023 D	2024 D
Staff	118,8	-4,6	<b>114,2</b>	-	1,1	<b>115,3</b>	126,1	110,7	107,6	111,8	114,7
Other operating costs	37,8	-	<b>37,8</b>	-	0,4	<b>38,2</b>	34,1	35,4	32,9	31,2	29,9
Depreciation	13,1	-	<b>13,1</b>	-	0,5	<b>13,7</b>	15,4	15,6	17,0	16,8	17,0
Cost of capital	17,6	-	<b>17,6</b>	-4,9	-	<b>12,7</b>	14,3	13,8	12,7	12,9	12,8
Exeptional items	-4,6	4,6	-	-	-	-	-15,3	-0,9	-1,1	-	-
<b>Total costs</b>	<b>182,8</b>	-	<b>182,8</b>	-4,9	2,0	<b>179,9</b>	174,5	174,5	169,1	172,7	174,5

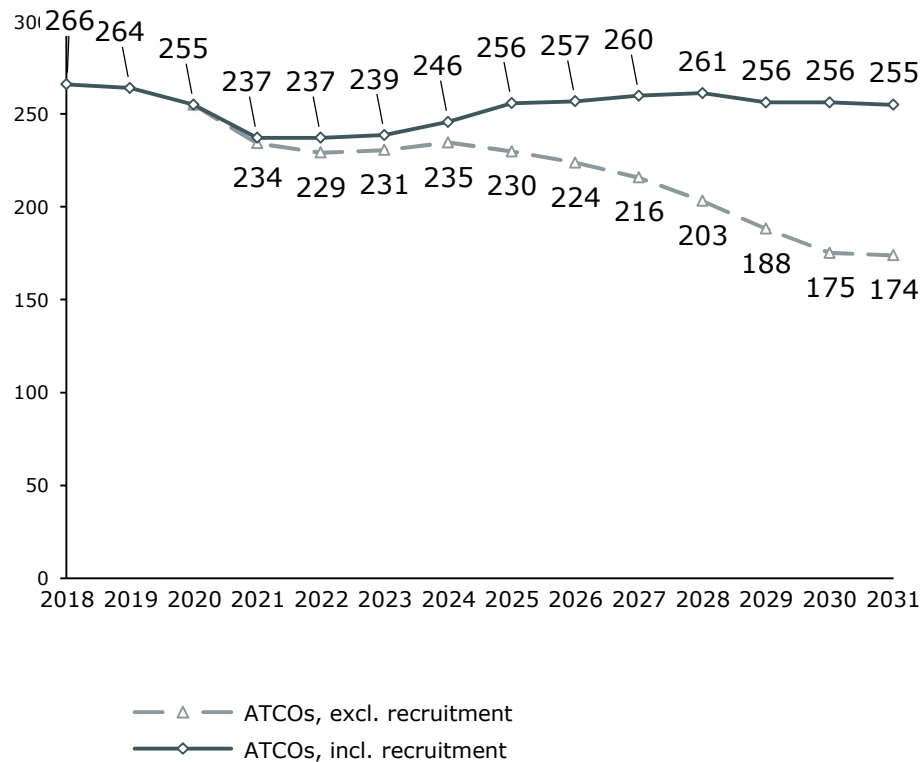
Figures are listed in real terms (DKK 2017) – compared to RT1 the inflation is removed for costs excl. Depreciation and cost of capital.

**Naviar ATCO** | High number of Eligible & Expected retirements by the end of RP3.

Existing Naviar ATCO population (after voluntary resignation) in 2024 is simulated to **232**.  
 By year 2024 **75** will be eligible for retirement (55+) and **25** past expected retirement age (60+)



## Recruitment | Recruitment of ATCOs needed to meet demand and capacity



Years 2018 and 2019 provided service with no delay and high performance in the environmental KPI's under a period of all time high traffic figures.

Internally years of low/postponed recruitment and use of extra shifts were necessary to provide the service.

The updated RP3-plan includes recruitment and necessary use of ATCO-resources to train recruits and an expected lower need for extra shifts.

The recruitment effort is necessary to handle increases in traffic starting 2022 rising to 2019-level in 2024/5 (STATFOR) and the demographic composition of the operational staff, where many will be eligible for retirement in the short term.

The RP3-targets for Capacity and Environment are demanding. With the present forecast the operational staff is tightly scaled for the targets and the expected return of traffic.

Risk of negative impact on these values if higher than expected deviations and volatility in the coming traffic.

# RP3 draft PP

## Cost-efficiency – En route cost trend 2020-2024

En route charging zone	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D	2024 D
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D	vs. 2014 B	vs. 2019 B
Denmark								
Total en route costs in nominal terms (in national currency)	698.953.930	726.918.302	1.407.543.726	702.314.861	719.297.711	733.097.028	4,9%	0,8%
<b>Total en route costs in real terms (in national currency at 2017 prices)</b>	<b>705.073.905</b>	<b>719.763.577</b>	<b>1.385.744.026</b>	<b>682.916.455</b>	<b>692.447.481</b>	<b>697.805.511</b>	-1,0%	-3,1%
Total en route costs in real terms (in EUR2017) <sup>1</sup>	94.807.246	96.782.482	186.333.055	91.827.861	93.109.443	93.829.907	-1,0%	-3,1%
YoY variation			92,5%	-50,7%	1,4%	0,8%		
Total en route Service Units (TSU)	1.444.679	1.679.151	1.451.778	1.164.000	1.369.000	1.563.000	8,2%	-6,9%
YoY variation			-13,5%	-19,8%	17,6%	14,2%		
<b>Real en route unit costs (in national currency at 2017 prices)</b>	<b>488,05</b>	<b>428,65</b>	<b>954,52</b>	<b>586,70</b>	<b>505,81</b>	<b>446,45</b>	-8,5%	4,2%
Real en route unit costs (in EUR2017) <sup>1</sup>	65,63	57,64	128,35	78,89	68,01	60,03	-8,5%	4,2%
YoY variation			122,7%	-38,5%	-13,8%	-11,7%		

	Eu targets	120,1	-38,5	-13,2	-11,5
National currency	DKK				
<sup>1</sup> Average exchange rate 2017 (1 EUR=)	7,43692				

# RP3 draft PP

## Cost-efficiency – TNC cost trend 2020-2024

Terminal charging zone Denmark - TCZ	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	183.607.046	358.652.091	176.438.731	182.373.288	186.728.588	1,7%
<b>Total terminal costs in real terms (in national currency at 2017 prices)</b>	<b>181.428.280</b>	<b>352.003.886</b>	<b>170.502.362</b>	<b>174.101.857</b>	<b>175.895.068</b>	-3,0%
Total terminal costs in real terms (in EUR2017) <sup>1</sup>	24.395.621	47.331.945	22.926.475	23.410.479	23.651.602	-3,0%
YoY variation		94,0%	-51,6%	2,1%	1,0%	
Total terminal Service Units (TNSU)	172.467	127.465	116.000	140.000	162.000	-6,1%
YoY variation		-26,1%	-9,0%	20,7%	15,7%	
<b>Real terminal unit costs (in national currency at 2017 prices)</b>	<b>1.051,96</b>	<b>2.761,57</b>	<b>1.469,85</b>	<b>1.243,58</b>	<b>1.085,77</b>	3,2%
Real terminal unit costs (in EUR2017) <sup>1</sup>	141,45	371,33	197,64	167,22	146,00	3,2%
YoY variation		162,5%	-46,8%	-15,4%	-12,7%	

	Eu targets	120,1	-38,5	-13,2	-11,5
National currency	DKK				
<sup>1</sup> Average exchange rate 2017 (1 EUR=)	<b>7,44</b>				



# RP3 draft PP

## Cost-efficiency – Unit rates 2022

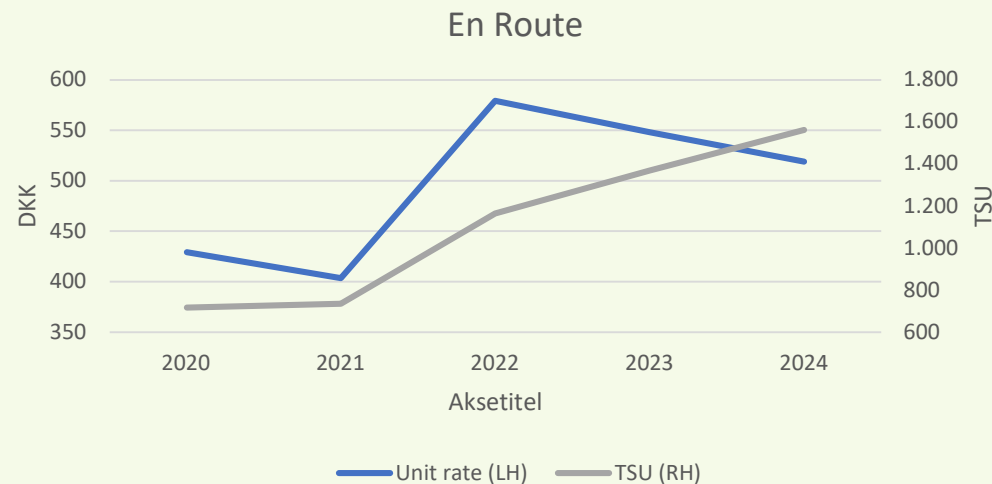
<b>En Route</b>	<b>2022</b>
Determined costs (DC) (MDKK)	702,3
Traffic adjustments (MDKK)	-28,1
<b>Total costs (MDKK)</b>	<b>674,2</b>
Forecast service units (M)	1,164
<b>Unit rate (DKK)</b>	<b>579,25</b>

<b>TNC</b>	<b>2022</b>
Determined costs (DC) (MDKK)	176,4
Traffic adjustments (MDKK)	-6,0
<b>Total costs (MDKK)</b>	<b>170,4</b>
Forecast service units (M)	0,116
<b>Unit rate (DKK)</b>	<b>1469,11</b>

# RP3 draft PP

## Cost-efficiency – Unit rates 2020-24

- From 2023 unit rates will include the carry overs resulting from the exceptional measures (2020/1627)
- Danish NSA has decided that the carry overs will be spread over 7 years (2023-2029)



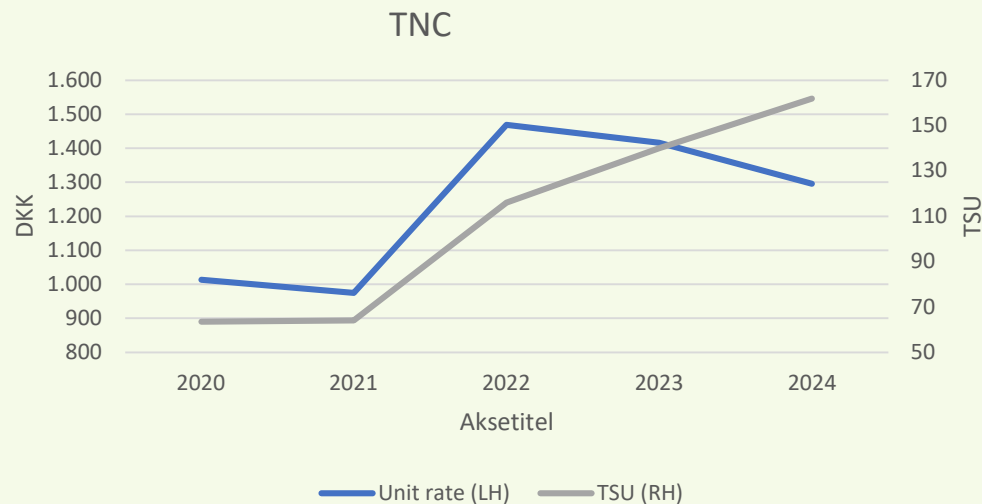
Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022



# RP3 draft PP

## Cost-efficiency – Unit rates 2020-24

- From 2023 unit rates will include the carry overs resulting from the exceptional measures (2020/1627)
- Danish NSA has decided that the carry overs will be spread over 7 years (2023-2029)



Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022





## RP3 draft PP | Naviair Investments

### Determined costs:

**New Major investments: 84.5 MDKK    Other new investments: 87.4 MDKK    Existing investments: 588.8 MDKK**

COOPANS build 3.x extension (81.7 MDKK) Table 2.1.3.2

Back-up ATM (2.8 MDKK)

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	COOPANS build 3.x extension	70.662.633	70.662.633	12.811.513	13.828.630	15.817.011	18.760.623	20.528.469	15	95%	5%	01-07-2024
2	Back-up ATM	38.562.712	38.562.712	0	0	0	0	2.764.795	15	95%	5%	01-01-2024
Sub-total of <b>new major investments</b> above (1)		109.225.345	109.225.345	12.811.513	13.828.630	15.817.011	18.760.623	23.293.264				
Sub-total <b>other new investments</b> (2)		283.191.300	283.191.300	4.483.926	13.794.644	19.702.331	26.697.590	29.966.978		75%	25%	
Sub-total <b>existing investments</b> (3)				141.996.471	126.586.633	114.829.696	106.687.001	98.700.326		86%	14%	
<b>Total new and existing investments</b> (1) + (2) + (3)		392.416.645	392.416.645	159.291.909	154.209.907	150.349.038	152.145.214	151.960.568				

\* The total % enroute+terminal should be equal to 100%.

Figures in column "Total value of the asset" will be corrected to reflect CAPEX before 2020, e.g. investments made prior to RP3 with depreciation effect starting in 2020+. This will be added in the final submission of the RP3 plan. The addition will not have impact on cost-figures

# Template | 2.1 Investments

## 2.1.3.2 - Details of the main other new investments in fixed assets planned over the reference period

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	VoIP BRS incl. BU-WAN extension	15.600.000	13.550.000	0	0	1.492.602	1.975.062	1.978.631	New VoIP Backup Radio System (End of Life, PCP)
2	Radar Esbjerg	26.453.122	10.400.000	180.766	1.509.098	1.359.699	1.349.400	1.351.839	New Mode S radar (End of Life + Borealis FRA)
3	Radar Roskilde	34.117.960	0	2.994.784	2.812.503	2.534.068	2.514.874	2.519.419	New combined Mode S and primary radar (End of Life)
4	VOR replacements (phase 1)	33.900.000	13.300.000	0	0	0	0	0	Replacement of 2 C-VOR's (End of Life) with D-VOR
5	DME replacements (phase 1)	20.900.000	6.300.000	0	146.967	264.835	262.829	263.304	1-to-1 replacement of 4 DME's (End of Life)
6	NAIS	11.400.000	11.400.000	0	0	690.100	913.164	914.814	Replacement of Info05 system (End of Life)
7	TWR window replacement	15.200.000	15.200.000	0	0	0	245.153	982.383	1-1 replacement in CPH TWR cap (End of Life)
8	TWR facade renovation	7.100.000	7.100.000	0	193.276	174.142	766.066	767.450	New coating to prevent corrosion (Life Extension)
9	Physical security	6.400.000	6.400.000	0	0	0	634.172	764.975	Increase physical security level in Naviair HQ and
10	DME Keep Alive	2.750.000	2.750.000	0	0	0	0	0	Replacement of KAS & BEL DME's (short term Life)

# RP3 draft PP

## DMI Investments

### **New major investments RP3 DC**

Total 0 MDKK

### **Other new investments RP3 DC**

Total 13,5 MDKK

### **Existing investments RP3 DC**

Total 4,7 MDKK

- Weather radars (2,4 MDKK)

- Synoptic weather stations (1,6 MDKK)

- Lightning detection network (0,4 MDKK)

- Other (buildings, IT, transport) (9,1 MDKK)

- HPC (1,8 MDKK)

- Weather radars (1,5 MDKK)

- Storage (0,3 MDKK)

- Other (buildings, IT, transport) (1,1 MDKK)

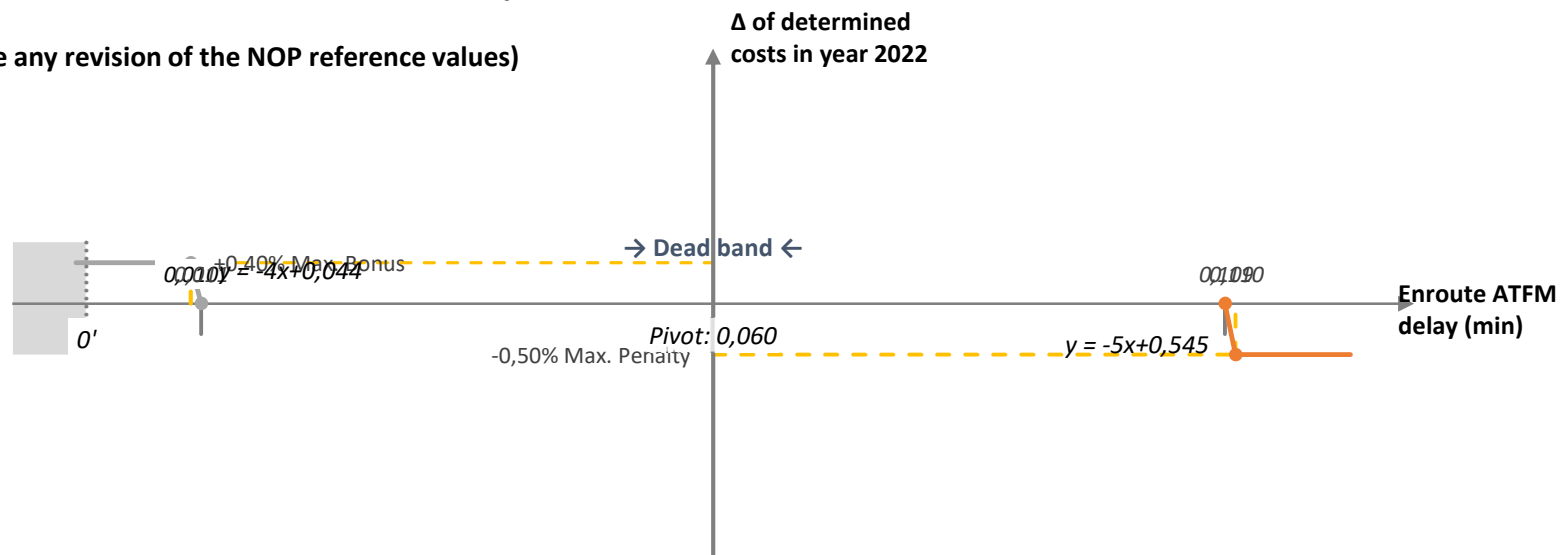


# RP3 draft PP

## Capacity incentive scheme – En route

		2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)				0,06	0,06	0,05
Alert threshold ( $\Delta$ Ref. value in fraction of min)				$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Performance Plan targets (mins of ATFM delay per flight)				0,06	0,06	0,05
Pivot values for RP3 (mins of ATFM delay per flight)				0,06	0,06	0,05
Financial advantages / disadvantages	Dead band range			[0,011-0,109]	[0,011-0,109]	[0,001-0,099]
	Bonus sliding range			[0,01-0,011]	[0,01-0,011]	[0-0,001]
	Penalty sliding range			[0,109-0,11]	[0,109-0,11]	[0,099-0,1]

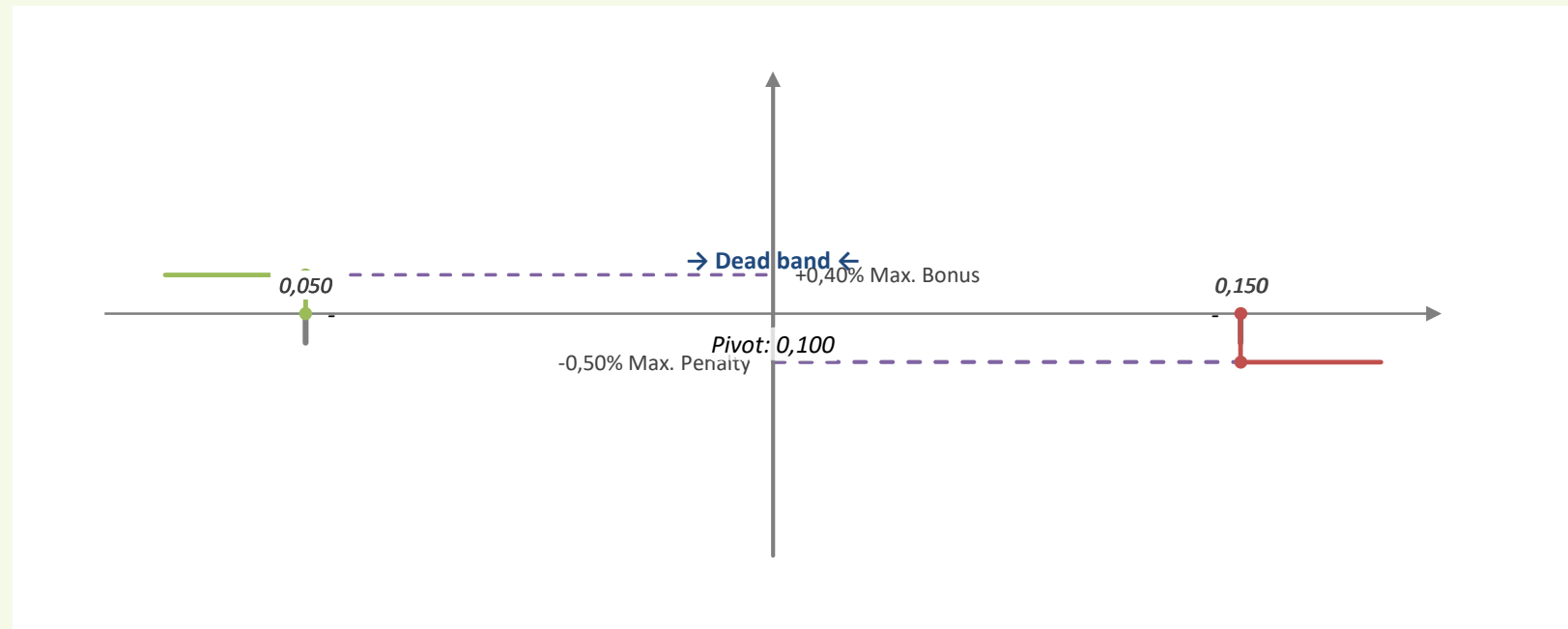
### Application of the en route incentive scheme in year 2022 (before any revision of the NOP reference values)



# RP3 draft PP

## Capacity incentive scheme – TNC

		2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)				0,1	0,1	0,1
Bonus/penalty range $\Delta$ (in fraction of min)				$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Pivot values for RP3 (mins of ATFM delay per flight)				0,10	0,10	0,10
Financial advantages / disadvantages	Dead band range			[0,05-0,15]	[0,05-0,15]	[0,05-0,15]
	Bonus sliding range			[0,05-0,05]	[0,05-0,05]	[0,05-0,05]
	Penalty sliding range			[0,15-0,15]	[0,15-0,15]	[0,15-0,15]



# Traffic adjustment based on October 2021 update

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Current determined RP3-cost are aligned to May 2021 forecast (slight increase from previous)

## **Forecast deviations +/- 2.0 %**

- Naviair suggests that deviations with a range of +/- 2.0 % between forecasts for the period (2022-2024) does not result in changes to submitted costs, e.g., Naviair will handle a +/- 2.0 % traffic-deviation in the new forecast at the same cost resulting in lower/higher unit rate.

## **Forecast deviations larger than +/- 2.0 % - sensitivity on in-elasticity (traffic/costs)**

### *Lower*

- In the short term the tools for cost-reductions are already activated, and recruitment of operational staff is needed for a planned return to 2019-level in late RP3 or early RP4. There is a limit to further reductions given the requirement to operate a 24/7 service and a limit on further collapsed sectors in low traffic situations, i.e., the rostering and sector hours are inelastic compared to traffic evolution.

### *Higher*

- An increase in traffic will result in increased costs given the need to accelerate recruitment while keeping the same level of capacity. The %-increase in costs is lower than the increase in traffic.

- Questions
- Thank You!

## NON-CONTINUATION OF ERRONEOUS RP2 NETTING OUT ANTICIPATED FUNDS IN DETERMINED COSTS

This memo was previously distributed for the draft RP3-planning in 2019. The memo is updated with actual figures for 2019 constituting the baseline adjustment.

### Summary

When the determined costs for Reference period 2 were originally established and reported a certain amount of anticipated EU-funding was deducted from the reported costs. This was done according to previous practice in Naviair when submitting route charges, and the fact that guidelines were not readily available at the time of the drafting of the RP2.

This method differs however from requirement of the regulation, according to article 7 (2) of 391/2013, and now article 22 of 2019/317, in which it follows that the costs in Route table 1 should correspond to the full costs for providing the service<sup>1</sup>.

As per remark from the EC in letter of compliance of 2<sup>nd</sup> October 2018 it was mentioned, that "...Denmark is encouraged to take measures during the preparation of RP3 Performance Plan and report the full costs, while the income from above-mentioned activities<sup>2</sup> should be considered for the calculation of future unit rates through the mechanism of other revenues."

To keep consistency in RP2 between determined and actual costs all costs have been reported with the same methodology.

In the table 2 below the amounts for actual costs for En route and TNC and for the years 2015, 2016, 2017, 2018 and 2019 are presented in order to disclose costs in a transparent manner throughout RP2 – this reporting has been carried out in the Annual Monitoring report 2016 – See Note 1 of Part 3. "Technical notes on en-route and terminal information reported by Denmark".

These issues, which affect actual costs and possibly the cost sharing for Denmark, have been addressed through the assessment of the compliance of the unit rates process during RP2.

For RP3 no netting of costs should occur. Consequently, this should already apply when establishing the baseline. Thus, the actual (RP2 netted) costs of 2019 will show a difference of 12,7 MDKK for En route and 2,0 MDKK for TNC CPH<sup>3</sup> compared to the setting of the Baseline for RP3, which will be higher. This is illustrated in the table 1 below.

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<sup>1</sup> Also mentioned in mail from Eurocontrol as part of the compliance check, 7th of June 2017.

<sup>2</sup> The letter refers to the Additional information section 2 c (Description of other revenues). This section mentions several other activities (Income from off shore activities and Entry Point North) than funding. It is however only the anticipated funding that creates the issue and requires a solution for RP3.

<sup>3</sup> The figures in 2017-prices when using the RP3-methodology are the following. En route: 12.701 tDKK (2017: 12.600 tDKK) and TNC CPH: 2.015 tDKK (2017: 1.994 tDKK).



Table 1: Deducted funding of the reported actual costs for 2019

2019A (BASELINE)			
En route (DKK 1 000)	2019A	deducted funding	2019 Baseline
1.1 Staff	384.314	5.486	389.800
1.2 Other operating costs	124.610	1.829	126.438
1.3 Depreciation	80.323	5.387	85.710
1.4 Cost of capital	29.509		29.509
1.5 Exceptional items	-15.310		-15.310
1.6 Total costs	603.445	12.701	616.146

TNC CPH (DKK 1 000)	2019A	deducted funding	2019 Baseline
1.1 Staff	120.498	1.121	121.619
1.2 Other operating costs	38.379	374	38.752
1.3 Depreciation	13.142	520	13.662
1.4 Cost of capital	17.618		17.618
1.5 Exceptional items	-4.664		-4.664
1.6 Total costs	184.972	2.015	186.987

Table 2: Deducted funding in the reported actual costs during RP2

2015				2016			
En route (DKK 1 000)	2015A	deducted funding	Excl. funding	En route (DKK 1 000)	2016A	deducted funding	Excl. funding
1.1 Staff	375.395	3.544	378.939	1.1 Staff	384.906	3.935	388.841
1.2 Other operating costs	107.819	1.181	109.000	1.2 Other operating costs	99.371	1.312	100.683
1.3 Depreciation	82.856	3.493	86.349	1.3 Depreciation	75.808	1.523	77.331
1.4 Cost of capital	57.101		57.101	1.4 Cost of capital	44.778		44.778
1.5 Exceptional items	-13.907		-13.907	1.5 Exceptional items	-15.755		-15.755
1.6 Total costs	609.264	8.218	617.482	1.6 Total costs	589.108	6.770	595.878

TNC CPH (DKK 1 000)	2015A	deducted funding	Excl. funding	TNC CPH (DKK 1 000)	2016A	deducted funding	Excl. funding
1.1 Staff	116.876	274	117.150	1.1 Staff	123.632	343	123.975
1.2 Other operating costs	30.982	91	31.073	1.2 Other operating costs	30.589	115	30.704
1.3 Depreciation	14.344	450	14.794	1.3 Depreciation	11.324	79	11.403
1.4 Cost of capital	22.027		22.027	1.4 Cost of capital	19.803		19.803
1.5 Exceptional items	-3.929		-3.929	1.5 Exceptional items	-4.599		-4.599
1.6 Total costs	180.299	815	181.114	1.6 Total costs	180.749	537	181.286

2017				2018			
En route (DKK 1 000)	2017A	deducted funding	Excl. funding	En route (DKK 1 000)	2018A	deducted funding	Excl. funding
1.1 Staff	382.684	6.588	389.272	1.1 Staff	384.080	6.784	390.864
1.2 Other operating costs	107.491	2.196	109.687	1.2 Other operating costs	112.963	2.261	115.224
1.3 Depreciation	72.017	1.782	73.799	1.3 Depreciation	77.560	3.052	80.612
1.4 Cost of capital	28.923		28.923	1.4 Cost of capital	25.149		25.149
1.5 Exceptional items	-16.210		-16.210	1.5 Exceptional items	-16.226		-16.226
1.6 Total costs	574.905	10.565	585.470	1.6 Total costs	583.526	12.097	595.623

TNC CPH (DKK 1 000)	2017A	deducted funding	Excl. funding	TNC CPH (DKK 1 000)	2018A	deducted funding	Excl. funding
1.1 Staff	118.219	987	119.206	1.1 Staff	121.108	1.532	122.640
1.2 Other operating costs	32.456	329	32.785	1.2 Other operating costs	36.796	511	37.306
1.3 Depreciation	10.685	93	10.778	1.3 Depreciation	11.562	303	11.865
1.4 Cost of capital	17.505		17.505	1.4 Cost of capital	17.275		17.275
1.5 Exceptional items	-4.696		-4.696	1.5 Exceptional items	-4.648		-4.648
1.6 Total costs	174.169	1.409	175.578	1.6 Total costs	182.092	2.346	184.438

## METHODOLOGY BASELINE ADJUSTMENT REGARDING COST OF CAPITAL

### 1. Required baseline-adjustment for comparable cost of capital

The "Statement made by the Commission's services"<sup>1</sup> provided before the Appeal Committee (11<sup>th</sup> May 2021) included that relevant changes between reference periods can be included and the point of issue was discussed in the SSC-meetings before.

"Regarding local baseline values, which are the basis for the trend assessment, it is underlined that each Member State should establish their own baseline values at local level, on the basis of the actual costs and traffic of calendar year 2019. *This baseline value may be adjusted to reflect relevant changes between the reference periods*".

The methodology change regarding cost of capital was discussed in detail during the preparation of the 2019-draft performance plan in coordination with the Danish NSA, the Commission/PRB and was the attention of the user consultation and supplemented by detailed descriptions of both the RP2- and RP3-method. Both memos are provided in Annex.

### 2. Harmonisation of the calculation of cost of capital

The change to cost of capital is required to harmonise the calculation in line with the performance and charging scheme article 22 (4) (d) 2019/317 and "need to be addressed in the preparation of RP3 Performance Plan" as requested by the Commission.

The baseline adjustment to the reported actual costs of 2019 reflects revised allocations of equity and debt on costbases and a correction on the application of return on equity.

The methodology required according to regulation 2019/317 must be applied with effect on the 2019-costs to make a comparable Baseline calculation. Calculation regarding cost of capital adjustment in the 2019 draft plan was based on the latest forecast of 2019. The adjustment is updated with actual 2019 costs.

Table 1: Calculation of Cost of capital 2019 using RP3-method

Equity - Primo 2019 (1.000 DKK)	1.098.065	
Subordinated loan (1.000 DKK)	200.000	
	En route	TNC CPH
<b>Sharing key</b>	70%	20%
RoE / Interests		
Equity (%)	5%	5%
Sub-ordinated loan (%)	9%	9%
	En route	TNC CPH
<b>Cost of capital</b>		
Equity	38.432	10.981
Interests	12.600	3.600
Capitalised interim interest	-4.645	-818
<b>Cost of capital RP3</b>	<b>46.387</b>	<b>13.763</b>

In the tables below the difference in methods can be seen. The tables are updated with actual 2019 figures whereas previous calculation for the draft 2019-plan was based on latest forecasted 2019-costs. Due to more capitalised interim interest the consequence is a reduced baseline:

<sup>1</sup> Statement made by the Commission's services, Ref. Ares(2021)3082484 - 07/05/2021.

Table 2: En route

En route ('000 DKK)	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>52.075</b>	<b>29.509</b>	<b>46.387</b>
Return on equity	23.450	23.450	38.432
Interests on debt	40.815	15.962	12.600
<i>Hereof interests on subordinated loan</i>	39.422	14.362	12.600
<i>Hereof other financial costs</i>	1.393	1.600	
Capitalisation of interim interest	-3.020	-4.645	-4.645
Placement of excess liquidity	-9.171	-5.258	

Table 3: TNC CPH

TNC CPH	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>21.074</b>	<b>17.618</b>	<b>13.763</b>
Return on equity	16.570	16.570	10.981
Interests on debt	7.340	2.791	3.600
<i>Hereof interests on subordinated loan</i>	7.090	2.525	3.600
<i>Hereof other financial costs</i>	250	265	
Capitalisation of interim interest	-543	-818	-818
Placement of excess liquidity	-2.293	-925	

The baseline adjustment between RP3/RP2-methodology as follows:

En route: +16,9 MDKK

TNC CPH: -3,9 MDKK

### 3. Adjustment concerning the Interest rate of the Subordinated loan

- Naviair has engaged on dialogue with the Ministry of Transportation to change the interest on debt on the subordinated loan to a more market conform interest rate of 4.5 per cent (previously 9 per cent).
- The lowering of the interest rate on the subordinated is expected to have effect in 2022.
- Naviair will adjust (lower) the baseline adjustment to reflect this change, and consequently lower the baseline adjustment by a factor of 3 years out of 5 years (3/5) due to the change in the payable interests in 2020 & 2021.

In conclusion the final adjustment for a comparable baseline is:

En route: + 13,1 MDKK (*reduction of 3,8 MDKK*)

TNC CPH: - 4,9 MDKK (*reduction of 1,1 MDKK*)

## COST OF CAPITAL – REVISED ALLOCATION OF EQUITY AND DEBT ON COST BASES, AND CORRECTION OF RP2 APPLICATION OF RETURN ON EQUITY

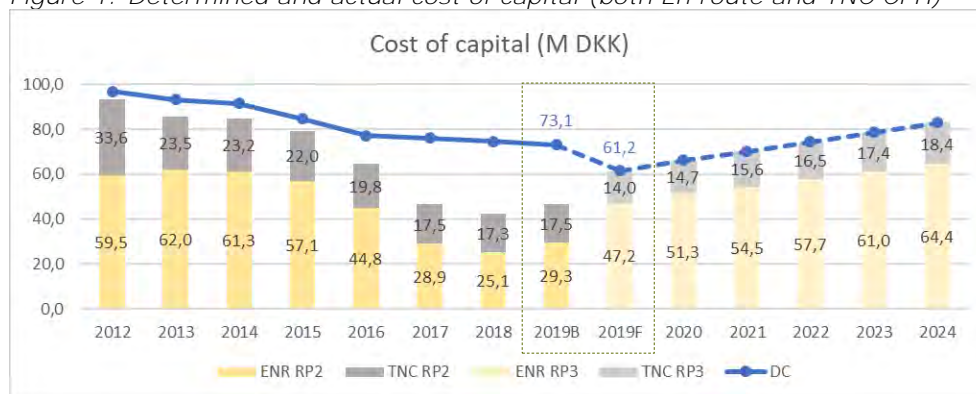
### Summary

The cost of capital for RP3 will be aligned with the regulation and the identified inconsistencies in the current RP2 method applied by Naviair will thereby be removed.

The alignment requires a revised allocation of equity and debt across cost bases and should be applied in the baseline for RP3 (year 2019).

Overall the cost of capital for En route and TNC CPH will be lower than currently charged to users in RP2 as seen in figure 1 below.

Figure 1: Determined and actual cost of capital (both En route and TNC CPH)<sup>1</sup>



2019B is Budget 2019 and 2019F is Budget 2019 with RP3-method for calculation of cost of capital.

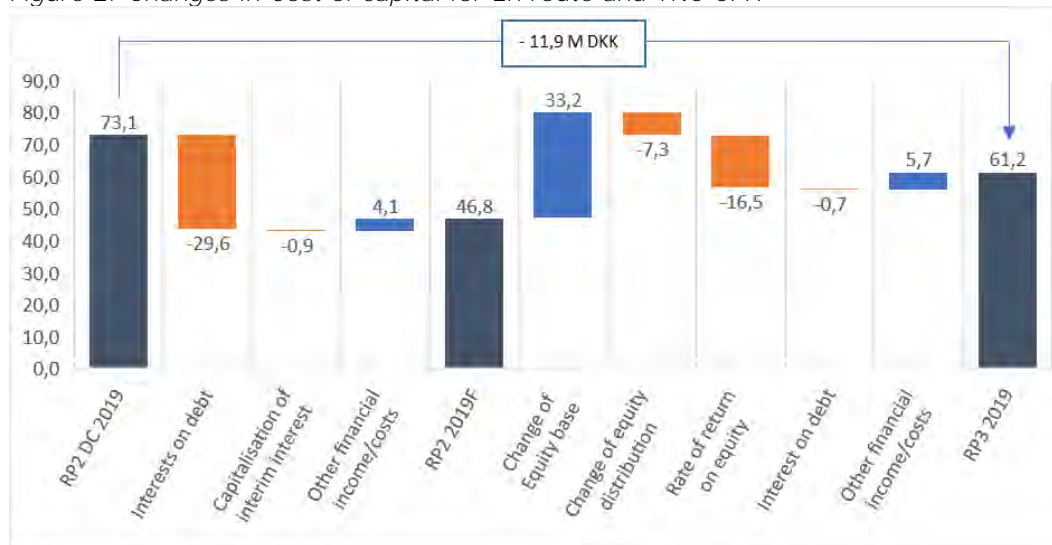
The effects from this overall change in methodology will be the following – the changes are shown in figure 2 below:

- Return on equity based on full equity instead of only contributed capital.
- Distribution of assets to En route / TNC CPH is lower in RP3 than in RP2.
- Lower rate of return on equity with 5,0 % in RP3 (6,67 % in RP2).
- Less financial income from less placement of excess liquidity is expected.

The methodology required according to regulation 2019/317 must be applied with effect on the 2019-cost estimates to make a comparable Baseline calculation. When calculating baseline for RP3 this change in methodology is an decrease of 11,9 M DKK compared to RP2. The changes are illustrated in figure 2 and described below in the section of 'Components of Naviairs cost of capital'.

<sup>1</sup> In Appendix table 3 the figures are provided for En route and TNC CPH separately.

Figure 2: Changes in Cost of capital for En route and TNC CPH



#### Background

It has been noted by the EC that “there are some outstanding issues, which have no impact on the 2019 unit rates, but need to be addressed in the preparation of RP3 Performance Plan.” One of these issues relates to the assumptions of the cost of capital.

“There is an inconsistency in the assumptions for the calculation of the cost of capital between en-route and terminal activities (in respect of proportion of financing through equity and average interest rates on debts).”<sup>2</sup>

Naviair has committed to harmonise the cost of capital in the RP3 Performance Plan in line with the performance and charging scheme article 22 (4) (d) 2019/317 and in doing so to fix this inconsistency<sup>3</sup>.

#### Components of Naviairs cost of capital

For Naviair the cost of capital in RP3 is the combined amount of

- return on equity,
- interest payment on debt,
- deduction of capitalisation of interim interest and
- Placement of excess liquidity.

The components across RP2 and RP3 are shown in table 1 below and elaborated upon in the following sections<sup>4</sup>.

In the RP2 determined costs Naviair based the cost of capital on only a partial amount of the equity and the interest on debt part was netted out with capitalised interim interests as well as financial income from the placement of excess liquidity. This lowered the cost of capital charged compared to a reasonable return of the total asset base.

<sup>2</sup> Latest by EC in letter of Article 17 of Commission Implementing Regulation (EU) 391/2013 on compliance of unit rates of 2<sup>nd</sup> October 2018.

<sup>3</sup> Described in Additional information and in the Annual Monitoring Report.

<sup>4</sup> In Appendix tables 4-5 the figures are provided for En route and TNC CPH separately.

Table 1: Cost of capital in RP2 and RP3 for en route and TNC CPH combined.

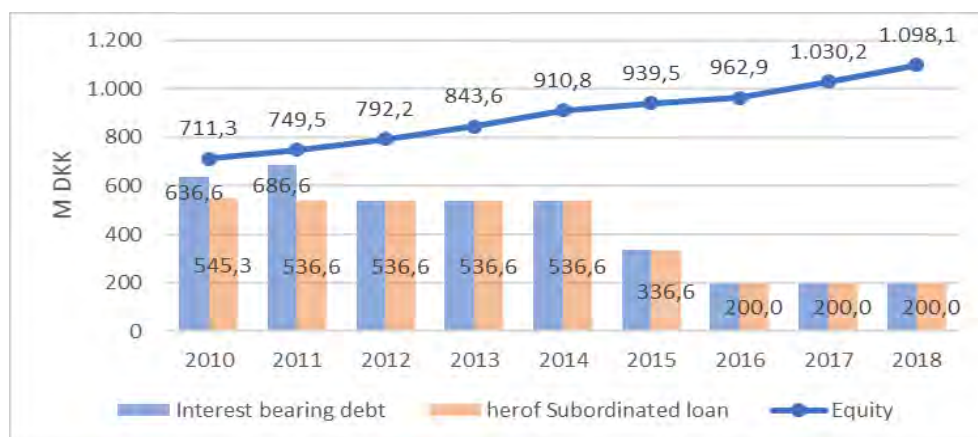
En route & TNC CPH ('000 DKK)	2019		
	RP2-method DC	RP2-method 'AC'	RP3-method DC
<b>Cost of capital</b>	<b>73.148</b>	<b>46.808</b>	<b>61.195</b>
Return on equity	40.020	40.020	49.413
Interests on debt	48.155	17.957	16.200
<i>Hereof interests on subordinated loan</i>	46.512	16.889	16.200
<i>Hereof other financial costs</i>	1.643	1.068	
Capitalisation of interim interest	-3.563	-4.418	-4.418
Placement of excess liquidity	-11.463	-6.751	

## a) Return on Equity:

As part of the terms for Naviair being transformed into a state-owned infrastructure company in 2010 it was provided that the combined equity/sub-ordinated loan should amount 55 per cent of the total liabilities (appr. 1.2 bn. DKK.) and that the return on equity (not incl. the sub-ordinated loan) should amount to 6,67 per cent p.a. pre-tax. These provisions were considered appropriate for keeping Naviair financially sound also in case a major customer is lost.

In the Annual report of 2010 the equity amounted to 711,3 M DKK, whereof 600,0 M DKK was contributed capital.

Figure 3: Equity and Debt from 2010-2018



A cost of capital based on the allocated equity to both En route and TNC CPH is considered of importance given the future requirements of investments, and consolidation of the company in case of the loss of a major customer.

In RP2 the return on equity was based on 6,67% of the contributed capital. This amount of approx. 40,0 M DKK was distributed 100 pct, to En route and TNC CPH according to a turnover-based metric.

For RP3 the return on equity will be based on the full amount of equity and the rate of return on equity will be 5,0% with a split of 70/20/10 of the total asset base with 10 pct. being allocated to other activities than En route and TNC.

Naviair does not have separation of business activities in the statutory accounts of the balance sheet.

For RP3 the Total Asset Base will be defined by the following relation of the different items. The proportion of the separation of activities (70/20/10) is determined on the proportion of revenue per area.

Table 2: Definition of Total Asset Base and proportion of separation in RP3:

Definition of the Total Asset Base	En route	TNC CPH	Other
RP2 DC (equity distribution)	58,6%	41,4%	-
RP2 DC (loan & asset distribution)	81,6%	14,7%	3,7%
RP3 DC (turnover based distribution)	70,0%	20,0%	10,0%

The share of equity being allocated to En route and TNC is thus lower in RP3 than in RP2.

In RP2, return on equity was only calculated on the initially contributed equity (the 600 MDKK), and not on the full amount of equity shown in figure 3. In RP3 this is being corrected with return on equity being calculated on the yearly estimated equity taking the basis on the primo RP3 level.

The combined impact (baseline adjustment) of a) the reduced combined share of equity allocated to En route and TNC, b) the lower applied rate of return and c) a corrected return based on the updated yearly estimated equity is 15,0 MDKK to En route and -5,6 MDKK to TNC.

*b) Interests on debt:*

In 2010 Naviair was transformed from a government entity with an account in the state budget, to a state-owned infrastructure company with its own independent economy de-linked from the state budget. As part of this transformation, Naviair was endowed with a state-financed sub-ordinated loan of 536,6 mill. DKK carrying an interest rate of 9 pct. p.a. The loan is without reimbursements for a period of 10 years; however, reimbursement will always be subject to Naviairs economic situation. Being subordinated, the loan comes second to any other (commercial) loan but may then count as equity in robustness assessments of Naviair. The interest rate of 9 pct. p.a. was considered comparable to market conditions of a loan on these conditions.

Since the transformation of Naviair in 2010, all other foreign capital (i.e. bank and other commercial loans) have been repaid. Moreover, extraordinary reimbursements in 2015 and 2016 have reduced the principal of the sub-ordinated loan from the initial 536,6 mill. DKK to currently 200 mill DKK. No further reimbursements are planned for RP2/RP3. However, possible reimbursements are a regular board agenda item, and the principal may therefore be further reduced if deemed financially sustainable.

During the process of preparing the RP3 regulation and targets significant risks were presented in terms of high demands on cost-efficiency combined with an uncertain baseline. The unknown factor of moving to charging by actual flown route presented risks. Naviair decided not to foresee any new repayments of the sub-ordinated debt during RP3.

For RP2 the distribution of interest of the loan was based on the distribution of assets.

For RP3 the distribution of the interest of the loan is based on the new distribution of the total asset base (70/20/10).

This re-allocation amounts to a baseline adjustment of -3,0 MDKK for En route and 1,2 MDKK for TNC (see tables 4 and 5).

*c) Capitalisation of interim interest:*

An assumed amount (3,5 M DKK) of capitalisation of interim interest was deducted from the amount of cost of capital in RP2. For En route (3,5 M DKK) and TNC CPH (0,5 M DKK).

For the RP3 the capitalisation of interim interest is subtracted in the cost of capital as to not be charged twice – as part of cost of capital and later on as part of the depreciations. This is the same principle as in RP2.

*d) Placement of excess liquidity:*

When preparing RP2 it was assumed that some financial income from excess liquidity, e.g. bank deposits, would be deducted from the combined charges of cost of capital. This amount was approx. 8-11 M DKK for En route and TNC CPH combined for the years of 2016-2019. The initial excess liquidity in RP2 was decided to repay on the subordinated loan instead of other kind of investment transactions.

In the last years of RP2 there has instead been placement of excess liquidity given the large amounts of over-recovery kept on the balance sheet due to adjustments from inflation and traffic risk sharing.

For RP3 the same placement of excess liquidity is not viewed as relevant; the current large amounts of over-recovery are returned to the users and new over-recoveries are not foreseen in RP3 since background assumptions are set in order not to generate over-/under recoveries.

The related adjustment to the 2019 baseline will be 5,8 MDKK for En route and 0,9 MDKK for TNC.

*Final remark*

To remove inconsistencies and align the principles and calculation of cost of capital with article 22 (4) (d) of 2019/317 a change in methodology is needed when comparing RP2 with RP3.

The inconsistencies present in the RP2 methodology has been remarked by EC during RP2, and Naviar has committed to fixing this for RP3.

The methodology required according to regulation 2019/317 must be applied with effect on the 2019-cost estimates to make a comparable Baseline calculation. This paper has described the amounts that should be taken into consideration when calculating the baseline for RP3 – the amounts are 17,9 M DKK and -3,5 M DKK respectively for En route and TNC CPH.



Appendix:

Table 3: Cost of capital for En route and TNC CPH (2015-2024)

En route	Costs	2015	2016	2017	2018	2019B	2019F	2020	2021	2022	2023	2024
RP2 DC	Debt	37,8	31,7	31,0	29,8	28,6						
	Equity	23,5	23,5	23,5	23,5	23,5						
RP2 AC	Debt	33,5	21,3	5,5	1,7	5,9						
	Equity	23,6	23,5	23,5	23,5	23,5						
RP3 DC	Debt						8,8	8,8	8,8	8,8	8,8	8,8
	Equity						38,4	38,7	41,9	45,1	48,4	51,8

TNC CPH	Costs	2015	2016	2017	2018	2019B	2019F	2020	2021	2022	2023	2024
RP2 DC	Debt	6,8	5,3	5,1	4,8	4,5						
	Equity	16,6	16,6	16,6	16,6	16,6						
RP2 AC	Debt	5,6	3,3	0,9	0,7	0,9						
	Equity	16,4	16,5	16,6	16,6	16,6						
RP3 DC	Debt						3,0	3,0	3,0	3,0	3,0	3,0
	Equity						11,0	11,1	12,0	12,9	13,8	14,8

Debt: Comprises of allocated interest payment (9,0%) of the subordinated loan, and for RP2 deducted with capitalized interim interest and assumed financial income from bank deposits.

Table 4: En route - cost of capital in RP2 and RP3.

En route	2019		
('000 DKK)	RP2-method DC	RP2-method 'AC'	RP3-method DC
<b>Cost of capital</b>	<b>52.075</b>	<b>29.329</b>	<b>47.206</b>
Return on equity	23.450	23.450	38.432
Interests on debt	40.815	15.552	12.600
<i>Hereof interests on subordinated loan</i>	39.422	14.627	12.600
<i>Hereof other financial costs</i>	1.393	925	
Capitalisation of interim interest	-3.020	-3.826	-3.826
Placement of excess liquidity	-9.171	-5.847	

Table 5: TNC CPH - cost of capital in RP2 and RP3.

TNC CPH	2019		
('000 DKK)	RP2-method DC	RP2-method 'AC'	RP3-method DC
<b>Cost of capital</b>	<b>21.074</b>	<b>17.479</b>	<b>13.989</b>
Return on equity	16.570	16.570	10.981
Interests on debt	7.340	2.406	3.600
<i>Hereof interests on subordinated loan</i>	7.090	2.263	3.600
<i>Hereof other financial costs</i>	250	143	
Capitalisation of interim interest	-543	-592	-592
Placement of excess liquidity	-2.293	-904	

**EXTRACT FROM " NAVI AIR – RESPONSE FOR RP3 STAKEHOLDER CONSULTATION" OF 13. SEPTEMBER 2019**

This is an extract regarding "cost of capital – alignment for RP3" from the memo which provided response to the topics raised at the RP3 stakeholder consultation held in Copenhagen on the 23<sup>rd</sup> of August 2019.

6. Cost of capital – alignment for RP3

The cost of capital for RP3 will be aligned with the regulation and the identified inconsistencies in the current RP2 method as commented by the Commission will thereby be removed.

The alignment requires a revised allocation of equity and debt across cost bases and should be applied in the baseline for RP3 (year 2019).

Overall the cost of capital for En route and TNC CPH will be lower than currently charged to users in RP2.

The aligned Cost of Capital is based on the following:

- Return on Equity: 5,0 %
- Basis: Full allocated equity (in RP2 is was a distribution of contributed capital)
- Interest on debt: 9,0%
- Basis: The only interest-bearing debt is the sub-ordinated loan of 200,0 MDKK, which has been reduced over RP2 from 536,6 MDKK.
- Deduction for capitalisation of interim interest (building interests).
- This method results in a WACC of 5,20%.

Table 9: Calculation of Cost of capital 2019 using RP3-method

Equity - 2018 (1.000 DKK)	1.098.065		
Subordinated loan (1.000 DKK)	200.000		
		En route	TNC CPH
<b>Sharing key</b>		70%	20%
RoE / Interests			
Equity (%)		5%	5%
Sub-ordinated loan (%)		9%	9%
<b>Cost of capital</b>		En route	TNC CPH
Equity		38.432	10.981
Interests		12.600	3.600
Capitalised interim interest		-3.826	-592
<b>Cost of capital RP3</b>		<b>47.206</b>	<b>13.989</b>

The methodology changes compared to RP2-determined costs, RP2-actual costs and RP3-determined costs are explained in the sections below under Appendix.

In the table below there is a comparison of the rates for equity/debt and financing for other countries under the Performance Scheme. The figures are based on the June 2019 submission of RP3-data. The data is shown for the year 2020.

In the table it shows that Naviair in terms of Equity and Cost of capital is lower than both the median and average of the other ANSP's. When it comes to share of financing through equity, we notice that 16 ANSP's out of 28 has a higher share of financing through equity (with 14 of these ANSP's having 100% equity financing).

Table 10: Year 2020 cost of capital components En route (June 2019 submission\*)

ANSP	3.5 Cost of capital pre tax rate	3.6 Return on equity	3.7 Average interest on debts	3.8 Share of financing through equity
Skyguide	2,50%	2,63%	2,23%	67,74%
NERL	2,84%	5,81%	0,86%	40,00%
SE "Oro navigacija"	3,50%	3,50%		100,00%
Luftfartsverket	3,91%	5,10%	0,00%	21,73%
AustroControl	4,00%	4,00%		100,00%
Skeyes	4,01%	4,10%	1,90%	96,00%
Latvijas Gaisa Satiksme, ANSP	4,21%	4,21%		100,00%
Estonia	4,32%	7,99%	1,65%	42,13%
LPS SR	4,43%	4,43%	0,00%	100,00%
DFS	4,75%	7,45%	1,85%	51,77%
ANS Finland	4,98%	9,00%	2,30%	40,00%
MATS	5,00%	5,00%	0,00%	100,00%
<b>Naviair</b>	<b>5,62%</b>	<b>5,00%</b>	<b>9,00%</b>	<b>84,50%</b>
DSNA	5,70%	7,70%	1,02%	70,00%
NAV Portugal	5,79%	5,79%	0,00%	100,00%
ENAIRES Continental	5,80%	6,85%	1,29%	81,13%
HungaroControl	5,90%	5,90%		100,00%
SLOVENIA CONTROL	6,21%	10,42%	3,40%	40,00%
Avinor	6,40%	11,30%	3,05%	40,00%
ANS CR	6,50%	6,50%		100,00%
PANSA	6,91%	6,91%	3,80%	100,00%
BULATSA	7,00%	7,00%		100,00%
CCL-ANSP	7,18%	13,11%	3,23%	40,00%
IAA	7,74%	7,09%	2,50%	90,00%
Greece	8,89%	8,89%		100,00%
ROMATSA	9,13%	9,13%		100,00%
ENAV	9,22%	9,22%	0,00%	100,00%
DCAC	12,51%	12,51%		100,00%
<b>Median</b>	<b>5,74%</b>	<b>6,88%</b>	<b>1,85%</b>	<b>98,00%</b>
<b>Gennemsnit</b>	<b>5,89%</b>	<b>7,02%</b>	<b>2,00%</b>	<b>78,75%</b>

\*Remark that Denmark's Route tables were subsequently updated for the user consultation. The figures used for the User consultation are Cost of capital pre tax rate: 5,20%, Share of Financing through equity: 95,05%. No changes in Return on equity and Average interest on debts.

Appendix: Assumptions and calculation for Cost of capital RP2

The following sections are based on the figures in the reporting tables used for the Stakeholder consultation, which was sent out on the 5<sup>th</sup> of July 2019. These figures are naturally subject to change.

The RP2-reporting of determined and actual cost of capital and total asset base has been based on two separate exercises:

- a. Determining the Cost of capital has been based on partial equity (contributed capital), payment of interest on sub-ordinated loan and financial items. A deduction of Capitalised interim interests and an assumed positive interest from placement of excess liquidity.
- b. Determining the Asset base, reported in the route tables by multiple sharing keys leading to inconsistencies and only reporting current assets instead of subtracting current liabilities.

When combining the methods of Cost of capital with the total asset base this has led to severe inconsistencies, which will be corrected in RP3.

a. *The determination of the Cost of capital*

The cost of capital was based on costs and not as a product of the total asset base.

The equity was based on only the contributed capital split with a turnover-based ratio between En route and TNC CPH. The interest payments from the subordinated loan and other financial items (Bank commitment fee and facility) were split with the ratio of depreciations.

Several deductions were made to the costs paid by the users in terms of deducting capitalised interim interests and an assumed interest income from placing excess liquidity thereby lowering the costs for the users up front.

In the tables below the difference in methods can be seen:

Table 11: En route

En route ('000 DKK)	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>52.075</b>	<b>29.329</b>	<b>47.206</b>
Return on equity	23.450	23.450	38.432
Interests on debt	40.815	15.552	12.600
<i>Hereof interests on subordinated loan</i>	39.422	14.627	12.600
<i>Hereof other financial costs</i>	1.393	925	
Capitalisation of interim interest	-3.020	-3.826	-3.826
Placement of excess liquidity	-9.171	-5.847	

Table 12: TNC CPH

TNC CPH	2019		
	RP2-method DC	RP2-method AC	RP3-method
<b>Cost of capital</b>	<b>21.074</b>	<b>17.479</b>	<b>13.989</b>
Return on equity	16.570	16.570	10.981
Interests on debt	7.340	2.406	3.600
<i>Hereof interests on subordinated loan</i>	7.090	2.263	3.600
<i>Hereof other financial costs</i>	250	143	
Capitalisation of interim interest	-543	-592	-592
Placement of excess liquidity	-2.293	-904	

The assumptions for RP2 Determined/Actual costs are in Appendix.

As seen above the calculation of cost of capital was focused on absolute figures, included netted amounts lowering the total costs for the users.

When preparing RP2 it was assumed that some financial income from excess liquidity, e.g. bank deposits, would be deducted from the combined charges of cost of capital. This amount was approx. 8-11 M DKK for En route and TNC CPH combined for the years of 2016-2019. The initial excess liquidity in RP2 was decided to repay on the subordinated loan instead of other kind of investment transactions.

In the last years of RP2 there has instead been placement of excess liquidity given the large amounts of over-recovery kept on the balance sheet due to adjustments from inflation and traffic risk sharing.

For RP3 the same placement of excess liquidity is not viewed as relevant; the current large amounts of over-recovery are returned to the users and new over-recoveries are not foreseen in RP3 since background assumptions are set in order not to generate over-/under recoveries.

The determination of the total asset base was done as a separate exercise, which has led to severe inconsistencies in the reporting.

*b. Setting the total asset base*

The reporting of the figures in the route tables are based on Naviairs budget for year 2019.

Since Naviair does not have separation of business activities in the statutory accounts of the balance sheet assumptions for distributing the total asset base had to be made.

In estimating the Total asset base the sharing key for the budget-year was used.

*Table 13: Reporting tables for Asset base and Cost of capital*

2019 AC	Naviair	En route	TNC CPH
3.1 Net book val. fixed assets	1.212.056	972.842	157.036
3.2 Adjustments total assets			
3.3 Net current assets	531.153	426.323	68.817
3.4 Total asset base	<b>1.743.209</b>	<b>1.399.165</b>	<b>225.853</b>
<i>Sharing key - Depreciations</i>		80,3%	13,0%

Explanation of items:

*3.1 Net book val. fixed assets*

Fixed assets (Intangible assets & Property, plant and equipment) 1.212,1 MDKK.

*3.2 Adjustments total assets*

In RP2 the adjustments were not used.

In RP3 the adjustments are based on the sum of the following Financial assets ("Investments in the annual report) and Deferred tax.

*3.3 Net current assets*

The basis for these figures is Naviairs Current assets 531,2 MDKK.

The fact that only the current assets were reported and not the net current assets is the explaining factor the large decrease in Net Current Assets when switching methods. The sharing key was depreciations (80,3%/13,0%).

#### Calculating the "Average interests on debt"

In determining the average interest on debt the defined total asset base was split in parts equity based on the turnover ratio of the contributed capital.

#### *Equity distribution*

The basis for the equity was only the contributed capital, 600,0 MDKK. This amount was split between En route and TNC CPH based on the share of turnover between the two areas:

- En route: 78,8% = 472,7 MDKK
- TNC CPH: 21,2% = 127,3 MDKK

It was assumed that the difference between the allocated equity and the "3.4 Total asset base" was then debt, e.g.

En route: 926,5 MDKK

TNC CPH: 98,5 MDKK

It was then assumed that the rest of total asset base was "debts". This highly overestimated the amount of debt, i.e. for En route the total asset base was defined at 1.399,2 MDKK and equity at 472,7 MDKK. By this method the "debt" should be 926,5 MDKK in a year where the only debt for Naviair was the subordinated loan of 200,0 MDKK.

In conclusion the method has led to the severe inconsistency that the average interest on debt was only 0,6% (5,9 MDKK divided by 926,5 MDKK = 0,6%) using En route as an example.

#### *Further explanation Interest on excess liquidity and "other financial items"*

In the submission of actual costs there is a mention of two specific items, which drew the attention of the Stakeholder and the NSA.

The items were: "other financial items" and "placement of excess liquidity"

#### *Regarding "other financial items"*

Naviair has a committed loan-facility in a bank and pays commitments fee. This cost is split according to assets.

#### *Regarding "placement of excess liquidity"*

When drafting the Performance plan for RP2 there was an assumption with regards to placement of excess liquidity given that no repayment of the subordinated loan was foreseen at the time of the submission.

This excess liquidity was purely assumption-based and was projected to generate interest-income in year 2019 of approx. 11 M DKK to be split between En route and TNC CPH. Despite being an assumption the cost of capital to be paid by the users in the determined costs was lowered with these amounts.

In the reporting of the actual costs it is important to notice that Naviair does not operate with a separation of the statutory accounts and as such there is no separate balance sheet for either En route, TNC CPH or other business areas. In effect this leads to a sort of cash-pool regime for Naviair.

Financial costs and financial income are treated equally and is split on the various costbases by the sharing key of assets. This entails that any income/costs are placed primarily on En route and TNC CPH.

Table 14: Detailed calculations of DC/AC for Cost of capital.

RP2 Determined costs: 2019				RP2 actual costs: 2019			
Return on Equity (En route & TNC CPH)	Basis	(%)	Cost of capital	Return on Equity (En route & TNC CPH)	Basis	(%)	Cost of capital
Contributed capital	600.000 x	6,7% =	40.020	Contributed capital	600.000 x	6,7% =	40.020
Turnover-based sharing key (ENR / TNC CPH)	78,2% //	21,8% =	100,0%	Turnover-based sharing key (ENR / TNC CPH)	78,2% //	21,8% =	100,0%
En route (share)	468.999 x	5,0% =	23.450	En route (share)	468.999 x	5,0% =	23.450
TNC CPH (share)	131.001 x	12,6% =	16.570	TNC CPH (share)	131.001 x	12,6% =	16.570
<b>Interests</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>	<b>Interests</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>
Subordinated loan	536.600 x	9,0% =	48.294	Subordinated loan	200.000 x	9,0% =	18.000
Sharing key - Depreciations	81,6% //	14,7% =	96,3%	Sharing key - Depreciations	81,3% //	12,6% =	93,8%
En route (share)	438.027 x	9,0% =	39.422	En route (share)	162.520 x	9,0% =	14.627
TNC CPH (share)	78.773 x	9,0% =	7.090	TNC CPH (share)	25.140 x	9,0% =	2.263
Other financial items				Other financial items			
En route (share)	1.393	=	1.393	En route (share)	925	=	925
TNC CPH (share)	250	=	250	TNC CPH (share)	143	=	143
<b>Capitalisation of interim interest</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>	<b>Capitalisation of interim interest</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>
Capitalisation of interim interest	-3.700			Capitalisation of interim interest	-4.709		
Sharing key - Depreciations	81,6% //	14,7% =	96,3%	Sharing key - Depreciations	81,26% //	12,6% =	93,8%
En route (share)	-3.020	=	-3.020	En route (share)	-3.827	=	-3.827
TNC CPH (share)	-543	=	-543	TNC CPH (share)	-592	=	-592
<b>Deduction for possible interest income</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>	<b>Deduction for possible interest income</b>	<b>Basis</b>	<b>(%)</b>	<b>Cost of capital</b>
Assumption on placement of liquidity	-11.463			Financial income year 2019	-7.195		
Sharing key	80,0% //	20,0% =	100,0%	Sharing key	81,3% //	12,6% =	93,8%
En route (share)	-9.171	=	-9.171	En route (share)	-5.847	=	-5.847
TNC CPH (share)	-2.293	=	-2.293	TNC CPH (share)	-904	=	-904

Table 15: RP2-method for calculation of Total Asset base year 2019

Balance sheet calculation of Total asset base.			
	En route	TNC CPH	Total
NVB fixed assets	972.842	157.036	1.212.056
Net current assets	426.323	68.817	531.153
<b>En route</b>			
NVB fixed assets	972.842	EK	472.681
Net current assets	426.323	Gæld	926.485
	1.399.165		1.399.165
			2019
			5,0%
			0,6%
			2,1%
			23.634
			5.695
			29.329
<b>TNC CPH</b>			
NVB fixed assets	157.036	EK	127.319
Net current assets	68.817	Gæld	98.534
	225.853		225.853
			2019
			12,6%
			1,5%
			7,7%
			16.042
			1.437
			17.479



Nr	Draft Performance Plan section	Topic	Finding	Admendments
1.	1.2; 3.4; Annex A; Annex B (if applicable)	En route and terminal traffic forecasts	Please review and update (as appropriate) the draft performance plan in respect of the traffic forecasts for en route services and terminal services in light of the Eurocontrol/STATFOR baseline traffic forecast published on 15 October 2021.	The draft performance plan has been updated with the baseline STATFOR October 2021 forecast.  Minor adjustments of Naviairs costbase have been made because of the updated traffic forecast. Reference is made to Annex T1 for justification of the update.
2.	1.1.4	Local circumstances and updated view on the impact of the COVID-19 crisis	The draft performance plan lacks a meaningful summary of the local circumstances and the updated view on the impact of the COVID-19 crisis which are relevant for the performance target setting.  Please provide further details.	The summary of the local circumstances and the impact of the COVID-19 crisis has been updated and further detailed.
3.	1.3	Stakeholder consultations	The results of the consultations are incomplete in the template, for example the actions agreed upon, the points of disagreement or the outcome of the consultations.  Please complete with a meaningful summary response to the questions as per the template.	The results of the consultation have been detailed in the template and a reference is made to Annex C where the points are further elaborated.  The result of the written consultation after the November update of the draft performance plan has been added.
4.	2.	Investments	The total value of the asset and the value of the assets allocated to air navigation services (columns D and E of 2.1.1) should be in euros and not in	The values in columns D and E of 2.1.1 have been converted to euros

			national currency.	
			Please modify.	
5.	2.	Investments: benefits for airspace users and outcome of consultations	<p>Relevant information is missing on the outcome of the consultations and the benefits for airspace users of some of the investments. This is covered to some extent in Annex C, but a meaningful summary should be provided as per the template.</p> <p>Please provide further details.</p>	<p>Text regarding major investments has been added:</p> <p><b>COOPANS ATM system</b> is the main ATC production system and is upgraded once or twice per year, depending on the need from primarily safety- or regulatory demands. Naviair do upgrade the COOPANS ATM systems software, synchronized with the rest of the COOPANS Members (LFV, IAA, CCL, ACG and Nav Portugal), in order to benefit from economical of scale. An up to date COOPANS ATM System is a prerequisite for Naviair to deliver a safe ATC service and to in different traffic situation, meet the capacity demands.</p> <p><b>The ATM Backup system</b> is an important brick in the ATM System Architecture. It enables Naviair to be able to update the COOPANS ATM system software every year and also to be able to update the dataset every month (AIRAC). Furthermore, the Backup ATM system is the ultimate contingency platform in the unlikely event that the COOPANS ATM system would have a critical failure.</p>
6.	3.1	Local safety targets	The description of the safety measures is not sufficient. Please provide further details.	<p>Updated text with timeline:</p> <p>Naviair will implement the identified measures to achieve the Safety Performance Target in 2024, as described in the EoS questionnaire under the justification for not achieving the next level category. Naviair has an overall plan reaching from 2021</p>

				<p>to 2024, for achieving the RP3 targets. Naviar has in 2021 improved components to the Safety Performance Targets, regarding;</p> <ul style="list-style-type: none"> <li>• Safety Culture</li> <li>• Safety Policy and Objectives</li> </ul> <p>ensuring that the Naviar's RP3 targets for these components is met in 2021.</p>
7.	3.4.3	Pensions	<p>The total pension costs, the breakdown and the information requested about the different pension schemes are missing in the draft performance plan, the reporting tables and the additional information.</p> <p>Please clarify/provide the required information.</p>	<p>The information on pension costs has been updated. It should be noted that at this point Naviar is not able to provide the detailed information required in table 3.4.3.4</p>
8.	3.4.4; Annex A; Annex B	Interest on debts	<p>The average interest on debt submitted in the reporting tables does not match the draft performance plan, except for 2022.</p> <p>The duration of loan 2 is not provided.</p> <p>There is no relevant information provided for the short-term bank overdraft.</p> <p>Please clarify and provide the missing information.</p>	<p>The information has been updated with regards to:</p> <ul style="list-style-type: none"> <li>• Average interest on debt</li> <li>• Duration of loan 2</li> <li>• Relevant information for bank-overdraft</li> </ul>
9.	4.2	SESAR Common Projects	<p>Please ensure that all references are made according to the common project 1 (CP1) regulation and not the pilot common project (PCP) regulation.</p>	<p>Updated to reflect CP1 regulation.</p>
10.	4.3	Change Management	<p>The “<i>change management practices and transition plans</i>” section is not explained in sufficient detail.</p> <p>Please provide the relevant information in</p>	<p>Text inserted.</p>

			sufficient detail for the assessment in line with European standards; Regulation (EU)2017/373.	
11.	5.2	Capacity incentive schemes	<p>Please provide additional information on how the incentive scheme will have a material impact on the revenues of the ANSP given the parameter of the maximum penalty is set lower than 1%.</p> <p>The 50% dead band does not correspond with the +/-0.049 min/flight mentioned in the rationale.</p> <p>Please clarify/complete.</p>	<p>The deadband mentioned in the rationale is updated to +/- 0,05 min. and information on how the incentive scheme will impact the revenues of the ANSP has been added.</p> <p>“The capacity target set for Denmark is quite low and although the level of delays is normally equally low in Denmark, the factors that affect capacity is usually outside the scope of the ANSP to resolve (weather and military activity). Therefore, although measures could be identified and taken, those would mostly be on the civil and military regulator to resolve, and not for the ANSP who in those cases deliver service within the frame agreed by national authorities.</p> <p>Given the low target value on capacity there is little room for improvement, and higher risk of single events triggering penalties the suggested penalty is viewed as having material impact”</p>
12.	Annex A;Annex B	Cost allocation	The cost allocation criteria description is not sufficient. Please provide further details.	Text has been expanded to reflect the allocation (positions, time measurements etc.).
13.	Annex A;Annex B	Return on equity	There is no explanation provided for the share of	Danish Met provider DMI is a state entity and thus not equity

			<p>financing through equity of the ANSP being above 100% (226.93%), which was submitted in the reporting table for 2021.</p> <p>Denmark reports that MET is not financed through equity, however it reports a percentage of return on equity.</p> <p>Also, the change in the return on equity over the years from reference period 2 to 3 is not explained in detail.</p> <p>Please clarify/provide more information.</p>	<p>financed. The reported return on equity is misleading and been removed. This has no effect on the calculations.</p> <p>The change in equity is covered in detail in the annex regarding the baseline adjustment of the cost of capital.</p>
14.	Annex A; Annex B	Cost of capital	<p>The cost of capital under 1.4 should be the weighted average cost of capital (WACC) times total assets, while the value under 3.11 should be the weighted average cost of capital rate (WACC) times the net book value of fixed assets.</p> <p>The weighted average cost of capital (WACC) of MET (DMI) is lower than its interest on debt.</p> <p>Please clarify/correct.</p>	<p>The calculation of MET (DMI) cost of capital has been updated to reflect that DMI is not financed by equity and the interest on debt has been corrected.</p>
15.	Annex A	Eurocontrol costs	<p>The Eurocontrol costs reported under items 3.13 and 3.15 of Table 1 for the NSA of the reporting tables are not in line with the latest figures provided by Eurocontrol for 2020 and 2021. The 2020 exchange rate is based on the average April 2021 instead of the actual 2020 rate</p>	<p>Items 3.13 and 3.15 have been updated according to the finding</p>

			(7.45255).	
			Please correct.	

IMPACT OF NEW OCTOBER STATFOR FORECAST

Naviairs draft performance plan reduced costs by 2020-2024 in line with the assumption of cost reductions in the RP3-targets (ref. 2021/891).

The recovery of traffic is accelerated by 1 year in the latest STATFOR forecast of October 2021 compared to the forecast of May 2021. The most predominantly increase expected already in the year 2022.

Given the short period of time to change the performance plan Naviair has pragmatically assessed the new traffic forecasts against the submitted RP3-planning in October with reference to the sensitivity-principles addressed during the user consultation.

The increased traffic requires Naviair to increase the utilisation of ATCOs by prioritizing operational duty and thereby increasing the resources originally reduced to a lower level of recovery. The ATCOs assigned to training and other necessary assignments requires replacement with additional costs consequently.

The result is an expected increase in variable costs to maintain the level of service needed. The increase in the overall determined costs are in the range of 18 MDKK in 2022, 13 MDKK in 2023, and 6 MDKK in 2024 corresponding to 0.8%-2.4% of the combined determined costs for En route and TNC CPH. Given Naviairs already planned recruitments the increase in costs diminishes accordingly by 2024.

Naviair further identifies a latent risk relating to the traffic risk sharing mechanism and setting a new reference point with the updated traffic forecast.

The revised determined costs, traffic & service units will significantly lower the user unit rates (-18%) thus mitigating otherwise expected increases and the determined unit cost trend will be compliant with the EU-target of DUC.

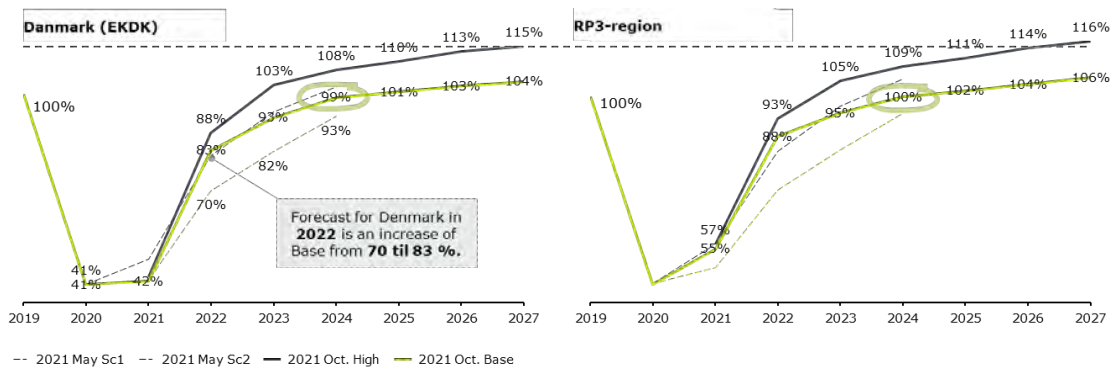
Details follows in the sections below.

a) Latest traffic forecast October 2021 expects quicker recovery  
The new traffic forecast has increased expectations for recovery to 2019-level and has accelerated this by a year.

For Denmark the increase compared to the May 2021 forecast is predominantly in the years 2022 and 2023, and from the STATFOR forecast the assumption of recovery in business travels assists in the recovery.

The difference between the May and October forecast exceeds the threshold values put forth by the 2021/891 and could otherwise have laid grounds for activation of a revision of the RP3-plan.

Figure 1: STATFOR October forecast – base & high compared to May 2021 Sc1&Sc2



It should be noted that the Scenario 2 from May 2021 was an increase +40 thousand operations in 2024 (May 2021) from that of the November 2020 scenario, which was the basis for the target values. This increase in traffic was absorbed by Naviair when submitting the draft plan in October 2021.

b) Naviair planned for reduction of costs in line with targets  
 As presented during the user consultation in August 2021 the key points for Naviairs determined costs were the following key points:

- Staff costs reduced by voluntary resignations (full effect 2022) and non-rehiring vacant positions – company total of 90 FTE.
- Increases in staff costs due training of operational staff (e.g. new ATCOs) in the end of RP3.
- Optimisation of procurement and effective administration offsets increased costs for training of operational staff.
- Depreciations: Depreciations increase during RP3 due to finished projects late RP2 and early RP3.
- Cost of capital: Reduced by expected change in interest on sub-ordinated loan to market conform level (9.0% -> 4,5%).
- Exceptional items reflect management decision to meet target on cost-reductions with further initiatives on cost-containment.

Due to the requirements of cost-efficiency a top-down approach has been applied to the total costs. The “negative” costs in exceptional items reflects the necessary cost-reduction beyond the initiatives implemented by Naviair to meet the requirement and ultimately the costs for the users. Naviair will not charge the users in 2020 more than 97% of the baseline (2019-level).

The final decision on where and how to implement the remaining cost reductions has not yet been decided – the users will however not be charged with total determined costs for the period of 2020-2024 above the required cost reduction, ref decision from the Appeal Committee.

Denmark was still able to achieve the cost-efficiency target on the DUC for the period.

c) Marginally increase in variable costs to manage quicker recovery  
 The process of updating the revised RP3-plan within a short timeframe sets a demanding task for the ANSP. The October submission of the RP3-plan includes recruitment and necessary use of ATCO-resources to train recruits and an expected lower need for extra shifts aligned with the traffic volume of the May 2021 forecast.



As presented at the User Consultation Naviair stressed that the recruitment effort is necessary to handle increases in traffic starting 2022 rising to 2019-level in 2024/2025 (STATFOR May 2021) and the demographic composition of the operational staff, where many will be eligible for retirement in the short term.

With the new October forecast this effort must be accelerated by 1 year. An increase in traffic will result in increased costs given the need to accelerate recruitment while keeping the same level of capacity. The %-increase in costs is significantly lower than the increase in traffic.

Naviair has used a pragmatic approach and assessed the amount of variable costs needed to accelerate the previous planned resources matching a traffic level in 2022 at 70% upwards to 83% of 2019.

Identified variable costs for this assessment are related to increasing the utilisation of ATCOs by prioritizing operational duty and thereby increasing the resources originally reduced to a lower level of recovery. The ATCO-resources otherwise assigned to training new ATCOs and performing other necessary assignments requires replacement with additional costs consequently.

The relationship between variable costs associated with handling increased traffic a year earlier than planned throughout the period amounts to a company total of 10 MDKK (a mix corresponding to 7 FTE and other operating costs) for an increase in traffic of 10 percent. The table below provides the overall increases in costs.

*Table 1: Relationship between determined costs and traffic (MDKK)*

	2022	2023	2024
Traffic deviation (%)	17,9%	12,9%	6,3%
Increased costs (MDKK)	17.9	12.9	6.3
Change in total costs	2.4%	1.6%	0.8%

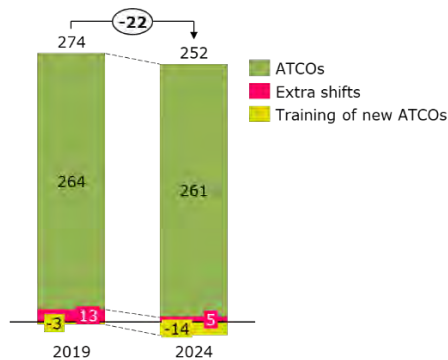
The split of costs between En route and TNC CPH are approx. 6/7 and 1/7 based on the needed resources – it should be noted that distribution assumes that En route, includes needed resources for APP performed in ACC-areas, ref. Additional information.

The increased cost amount is lowered at the end of the period as the difference between the Oct. and May forecasts are decreasing and as Naviairs already planned recruitment takes effect.

In the years 2018 and 2019 Naviair provided service with no delay and high performance in the environmental KPI's under a period of all time high traffic figures. Internally years of low/postponed recruitment and use of extra shifts were necessary to provide this level of service.

In the coming years the ATCO resources will be directed more towards activities related to training of new ATCOs but with efficiency gains still servicing a 2019-traffic level while lowering the need for extra shifts. The composition is shown in the figure below.

Figure 2: Composition of ATCOs and resources related to extra shifts and training



The RP3-targets for Capacity and Environment are demanding targets for Naviair with no more room for improvement, and the exposure to single events (system break-down for a few hours on a busy Tuesday) could tap into several months of the yearly allowance. Even at the May 2021 forecast the operational staff was tightly scaled for the targets - Both financially in terms of traffic risk sharing and incentive scheme on capacity, but also on the robustness of the business. The accelerated recovery increases the risk of a negative impact on meeting these values in the years to come. Consequently, exemplified by year 2022, capacity was previously planned to the delivery of an index 70 of 2019 traffic levels. Actual capacity correlates to available sector openings in the operational environment, which is defined by available resources. Hence, failing to increase the number of available resources, will lead to capacity restrictions, when demand rises above the defined capacity. The precise level of capacity restriction varies depending on seasonal and daily fluctuations.

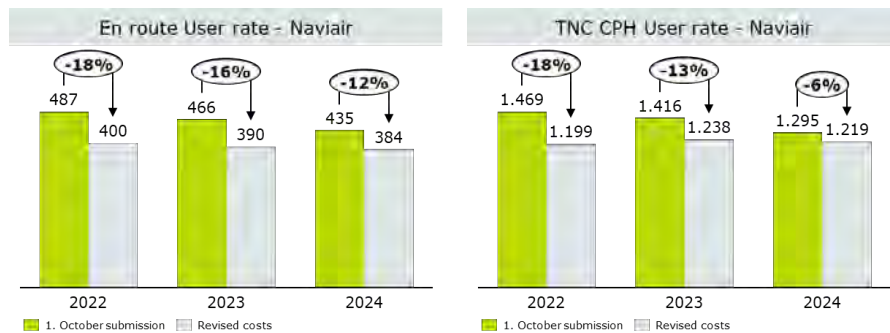
d) More risk exposure with traffic risk sharing based on new forecast Naviair identifies major concerns by extraordinarily introducing a new forecast with traffic levels exceeding the high case from May 2021. There is still uncertainty regarding the COVID-19 effect on recovery and the willingness to travel which increases the exposure of risk that the actual traffic will be lower.

Should the new forecast materialise in a traffic level below the Base scenario but still higher than the May forecast traffic risk sharing will be triggered. Naviair can then face a situation where the traffic levels are higher but where revenue at the same time is reduced below the determined total costs.

Further cost reductions are deemed difficult for Naviair. A maximum trigger of traffic risk sharing with a deviation of service units +/-10% corresponds to 4.4% of the determined costs which is approx. 35 MDKK yearly for En route and TNC CPH.

e) Significantly lowered unit rates with new costs & traffic  
The scale of increase in traffic will ultimately lower the user rates significantly with approx. -18% in year 2022. The costs are driven by the increases in movements. The service units however are expected to recover at a faster rate in the short term.

Figure 3: Naviair user rates are significantly lowered (DKK)



The temporary unit rate applied in 2020/2021 were set with higher traffic and reductions related to traffic risk sharing and inflation adjustment from RP2.

f) EU-trend in DUC is outperformed in all years  
 Based on material from the PRB there is a difference of 6-7% at union-wide level in the revised determined costs compared to that of the target on determined costs. The PRB further notes that “The costs included in the draft performance plans provide, a priori, for a sufficient margin for ANSPs to cope the higher traffic forecast and should thus not be modified.”

As presented in the draft performance plan and at the user consultation this is not the case for Naviair where determined costs were set to match the embedded target on Determined costs, and the plan was able to meet the target on Determined Unit Costs over the RP3-period.

With a revision of costs and updated traffic Naviair will outperform the En route DUC-trend in all years by approx. 300 MDKK2017 for the period.

Figure 4: Determined Unit Costs (€2017) and difference in Determined costs (M€2017)

