

# Revised Performance plan for Reference Period 3

Consultation meeting  
Teams  
24 August 2021



## Agenda

- Introduction + tour de table
- Transport administration in Finland
- Legal background + timeframes
- Revised draft performance plan + targets on each Key Performance Area (EU/National)
  - Safety
  - Environment
  - Capacity
  - Forecasts for traffic, service units and inflation
  - Cost-efficiency
    - Total cost base (*en route* + terminal)
      - Cost evolution
      - Fintraffic ANS- costs by nature
      - Fintraffic ANS – cost allocation
      - WACC (Weighted average cost of capital)

## Agenda

- Charging policy & traffic risk sharing
  - Incentive schemes
  - Fintraffic ANS: Investments and cost justifications
  - Questions & Answers
  - Next steps
  - 2022 unit rates
- 
- Questions / Discussion on performance plan as necessary

# Transport administration in Finland

## Finnish Transport and Communications Agency Traficom

Transport and communications:

- regulation, licence, registration and approval matters
  - promoting safety
  - reducing environmental impact
- and
- developing the transport system and digital society

## Transport Infrastructure Agency

Road, rail and maritime transport infrastructure:

- maintaining service level
- development and automation
- coordinating transport and land use policies
- reducing environmental impact

## Traffic control company Fintraffic

Road, rail, aviation and maritime traffic:

- traffic management
- traffic control data systems



**Fintraffic ANS**

## Legal background and timeframes

- Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a **performance and charging scheme** in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013
  - Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on **exceptional measures for the third reference period** (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic
  - Commission Implementing Decision (EU) 2021/891 of 2 June 2021 **setting revised Union-wide performance targets** for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903
- 
- Initial revised cost data from NSA to Commission “December 2020”
  - PRB advice on revised RP3 Union-wide targets “2 March 2021”
  - Adoption of EU-wide targets (Commission) “2 June 2021”
  - Drawing up performance plans + consultation “June 2021 + today”

**Draft Performance Plan**  
**Key Performance Area - Safety**

## Draft performance plan - Safety

- Key Performance Indicator (KPI)
  - The minimum level of the effectiveness of safety management to be achieved by air navigation service providers certified to provide air traffic services. This KPI measures the level of implementation of the following safety management objectives:
    - (a) Safety policy and objectives
    - (b) Safety risk management
    - (c) Safety assurance
    - (d) Safety promotion
    - (e) Safety culture

Level A 'Informal arrangements'  
Level B 'Defined'  
Level C 'Managed'  
Level D 'Assured'

- NSA proposal for targets to be reached by the end of 2024:
  - At least level D in the safety management objective 'safety risk management'
  - At least level C in all other safety management objectives

## Draft performance plan – Safety

- There are also 5 safety performance Indicators (PIs) that will be monitored during RP3
  - The rate of runway incursions at airports located in a Member State;
  - The rate of separation minima infringements within the airspace of all controlling air traffic services unit in a Member State;
  - The rate of runway incursions at an airport calculated as the total number of runway incursions with any contribution from ATS or CNS services with a safety impact that occurred at that airport;
  - The rate of separation minima infringements within the airspace where the air navigation service provider provides air traffic services, calculated as the total number of separation minima infringements with any contribution from ATS or CNS services with a safety impact.;
  - Use of automated safety data recording systems by the air navigation service providers as a component of their safety risk management framework, if applicable

– NSA will monitor these indicators on a yearly basis

# **Draft Performance Plan**

## **Key Performance Area - Environment**

## Draft performance plan – Environment

- Key Performance Indicator (KPI):
  - The average horizontal *en route* flight efficiency of the actual trajectory (KEA)
- EU-wide target:
  - ... shall not exceed the following percentages: 2,37 % in 2021, 2,37 % in 2022, 2,40 % in 2023 and 2,40 % in 2024.

- NSA proposal for targets:
  - 0,88% in 2021 - 2024



# Horizontal en-route flight efficiency

EUROCONTROL area

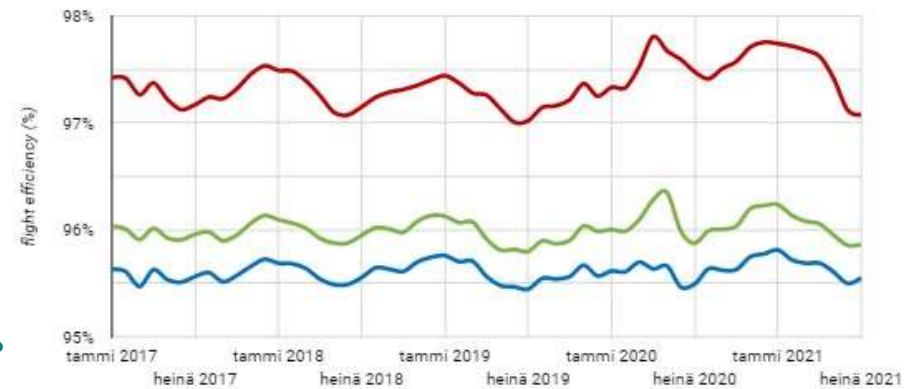
State View

EUROCONTROL Member States flight efficiency (%)	2021	July vs 2020	Jan-Jul 2021	vs 2020
Actual trajectory (CPF)	97,08 %	-0.4% ↓	97,37 %	-0.1% ↓
Flight plan (FTFM)	95,55 %	0.1% ↑	95,62 %	0.0% ↓
Shortest constrained (SCR)	95,86 %	0.0% ↓	95,98 %	0.0% ↓

## Horizontal en-route flight efficiency by State (Jan-Jul 2021 - actual trajectory)

ENTITY_NAME	flight efficiency (%)	% Δ	Tot add. distance (km)	% Δ	Avg. add. km per flight	% Δ
Finland	99,21 %	0.2% ↑	92,7 t.	-44.7% ↓	2,3	-13.5% ↓
Ireland	99,19 %	0.3% ↑	254,8 t.	-34.7% ↓	3,0	-21.2% ↓
Sweden	99,05 %	0.1% ↑	446,2 t.	-39.4% ↓	3,3	-12.8% ↓
Denmark	98,98 %	0.1% ↑	189,4 t.	-43.1% ↓	2,0	-13.0% ↓
Bosnia and Herzegovina	98,88 %	0.1% ↑	220,9 t.	-3.1% ↓	2,1	-12.4% ↓
Estonia	98,74 %	-0.1% ↓	139,0 t.	-11.5% ↓	3,0	10.4% ↑
Morocco	98,69 %	-0.1% ↓	637,3 t.	-9.2% ↓	7,7	3.4% ↑
Croatia	98,67 %	0.2% ↑	527,3 t.	9.0% ↑	3,2	-5.8% ↓
Norway	98,63 %	0.2% ↑	515,2 t.	-23.9% ↓	4,1	-6.8% ↓
Latvia	98,54 %	-0.3% ↓	189,9 t.	4.9% ↑	3,0	20.5% ↑
Hungary	98,48 %	0.0% ↓	706,2 t.	-1.8% ↓	3,5	0.2% ↑
Slovenia	98,46 %	0.0% ↑	152,7 t.	4.7% ↑	1,5	-1.1% ↓
Serbia and Montenegro	98,37 %	0.0% ↓	699,6 t.	9.6% ↑	3,8	-1.4% ↓
Portugal (Continental)	98,21 %	0.0% ↑	858,5 t.	-27.7% ↓	6,8	-12.3% ↓

## Evolution of horizontal en-route flight efficiency by trajectory type (%) (EUROCONTROL Member State Area)



## Year to date horizontal en-route flight efficiency by trajectory type (EUROCONTROL Member State Area - Jan-Jul)





# Horizontal en-route flight efficiency

EUROCONTROL area

State View

Vuosi (1)

- 2021 Vuosi
- 2020
- 2019
- 2018
- 2017

Kuukausi

- tammikuuta
- helmikuuta
- maaliskuuta
- huhtikuuta
- toukokuuta
- kesäkuuta
- heinäkuuta

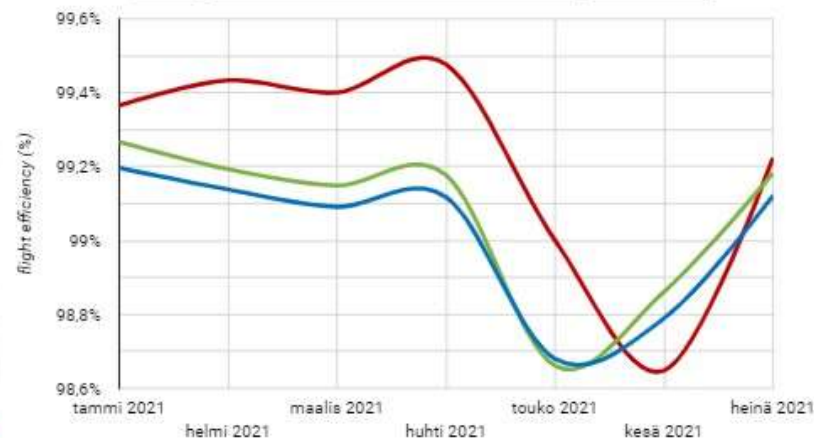
Please select State on the map

Map shows actual trajectory

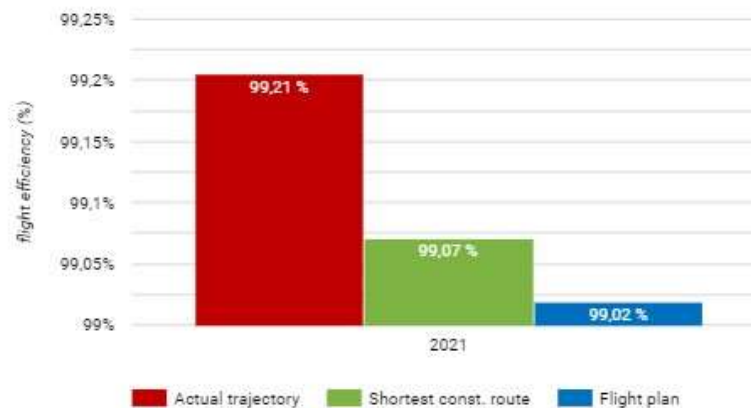
Aggregated horizontal en-route flight efficiency over the entire analysis period (actual trajectory)

State	flight efficiency (%) -	Tot add. distance (km)	Avg. add. km per flight
Finland	99,21 %	92,7 t.	2,3

Monthly evolution of horizontal en-route flight efficiency



Aggregated annual evolution of horizontal en-route flight efficiency



## Draft performance plan – Environment

- Performance indicators (PIs) for monitoring
  - The average horizontal en route flight efficiency of the last filed flight plan trajectory
  - The average horizontal en route flight efficiency of the shortest constrained trajectory
  - The additional time in the taxi-out phase
  - The additional time in terminal airspace
  - The share of arrivals applying Continuous Descent Operation (CDO)
  - The effective use of reserved or segregated local airspace
  - The rate of planning via available local airspace structures
  - The rate of using available local airspace structures

NSA will monitor these indicators on a yearly basis

# **Draft Performance Plan**

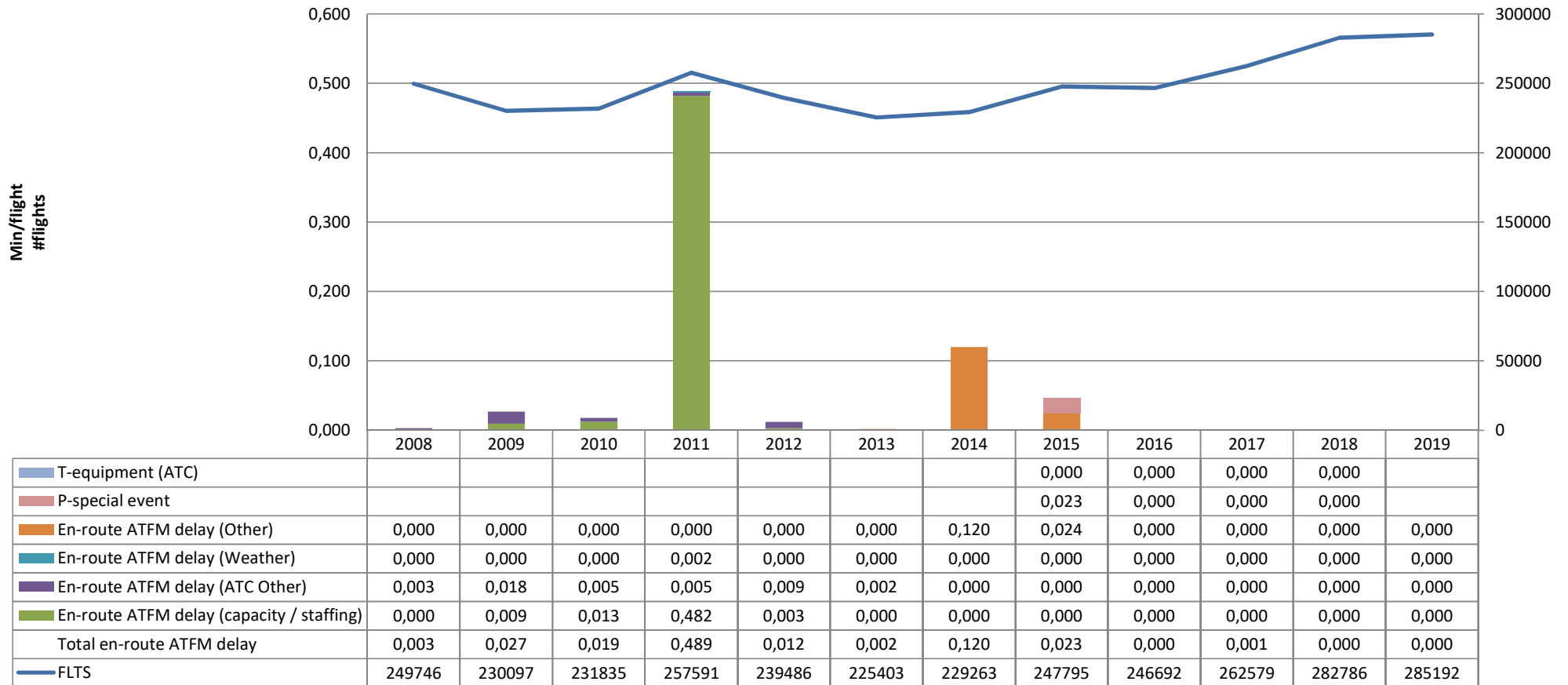
## **Key Performance Area - Capacity**

## Draft performance plan – Capacity

- The capacity key performance area includes two KPIs - en route air traffic flow management (ATFM) delay per flight, and terminal and airport ANS ATFM arrival delay per flight
  - a. The *en route* ATFM delay is the delay calculated by the Network Manager, expressed as the difference between the estimated take-off time and the calculated take-off time allocated by the Network Manager
  - b. Terminal and airport ANS ATFM arrival delay per flight means the average time, expressed in minutes, of arrival ATFM delay per flight attributable to terminal and airport air navigation services
  
- There are 3 performance indicators, which NSA will monitor throughout the reference period
  - The percentage of IFR flights adhering to their ATFM departure slots;
  - The average minutes of air traffic control pre-departure delay per flight caused by take-off restrictions at the departure airport;
  - The average time, expressed in minutes, of departure delay from all causes per flight
  
- Member states are also required to adopt financial incentives for the ANSPs in capacity KPA.

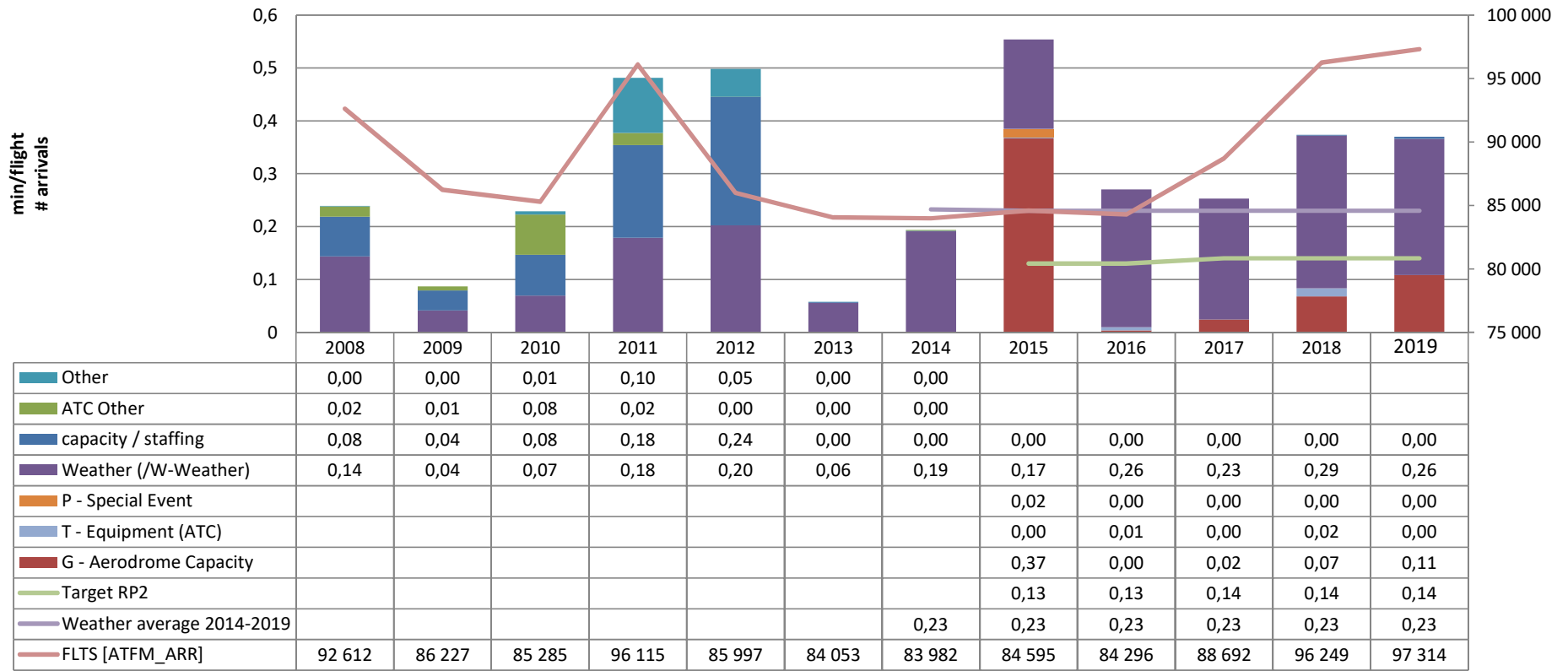
# En-route historical delays

## En route delays 2008-2019 (min/ft)



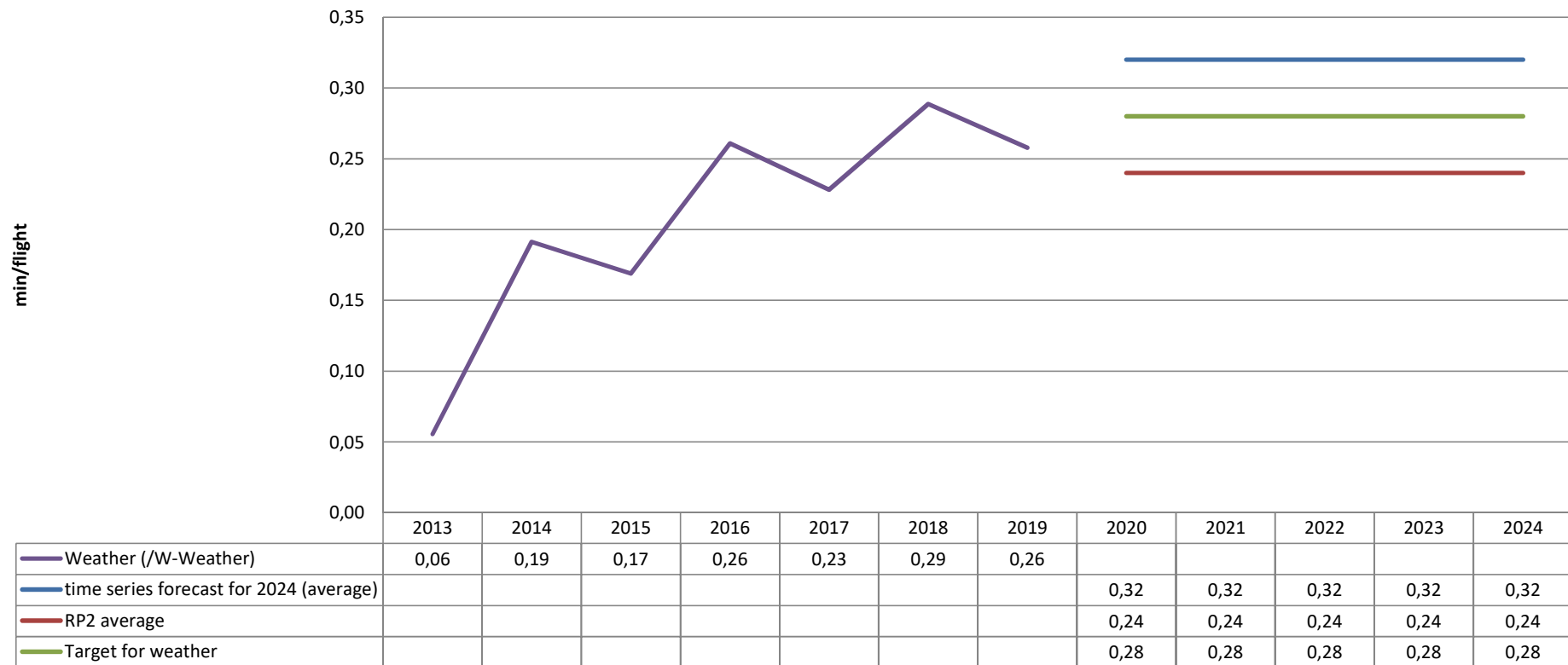
# Terminal navigation (TN) historical delays

Helsinki-Vantaa ATFM delays 2008-2019 (min/flight)



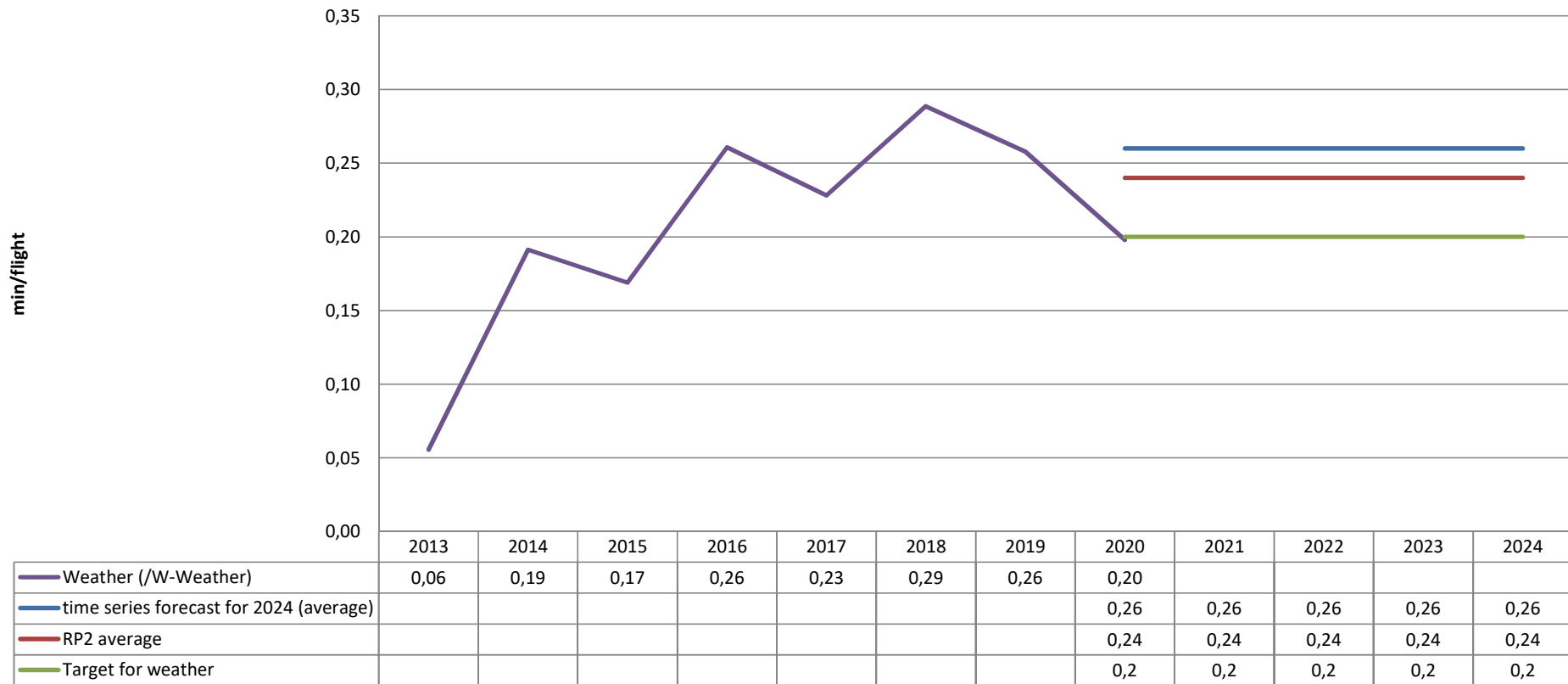
## TN weather delays and target setting

Helsinki-Vantaa ATFM weather delays 2014-2019 (min/flight) and target setting for RP3



# TN weather delays and target setting

Helsinki-Vantaa ATFM weather delays 2014-2019 (min/flight) and target setting for RP3



## Capacity targets

### – En route

ATFM delay minutes/ft	2020	2021	2022	2023	2024
EU wide target	N/A	0,35	0,5	0,5	0,5
National reference value	N/A	0,03	0,05	0,05	0,05
NSA proposal for targets	N/A	0,03	0,05	0,05	0,05

### – Terminal

ATFM delay minutes/ft	2020	2021	2022	2023	2024
EU wide target	N/A	N/A	N/A	N/A	N/A
NSA proposal for targets	N/A	0,21	0,28	0,32	0,77

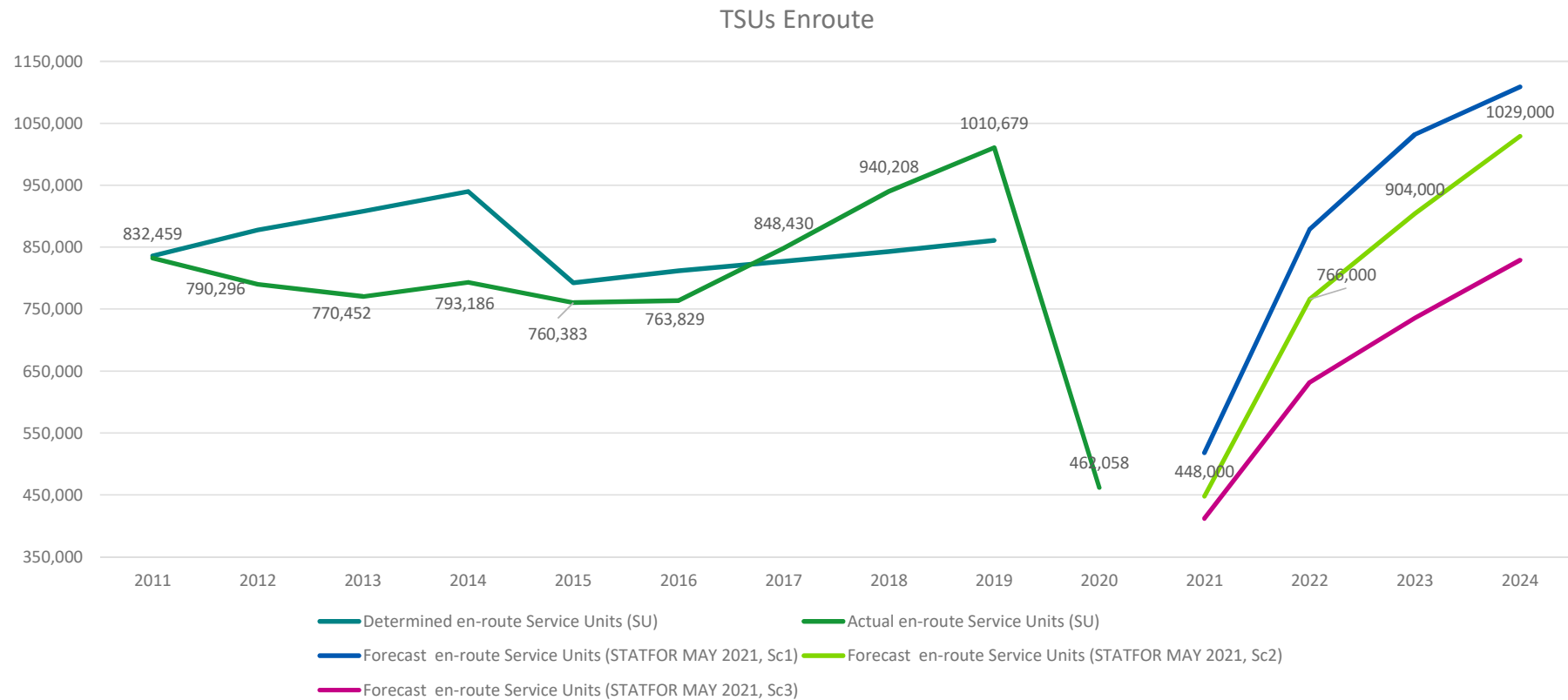
# **Draft Performance Plan**

**Forecasts for traffic, service units and  
inflation**

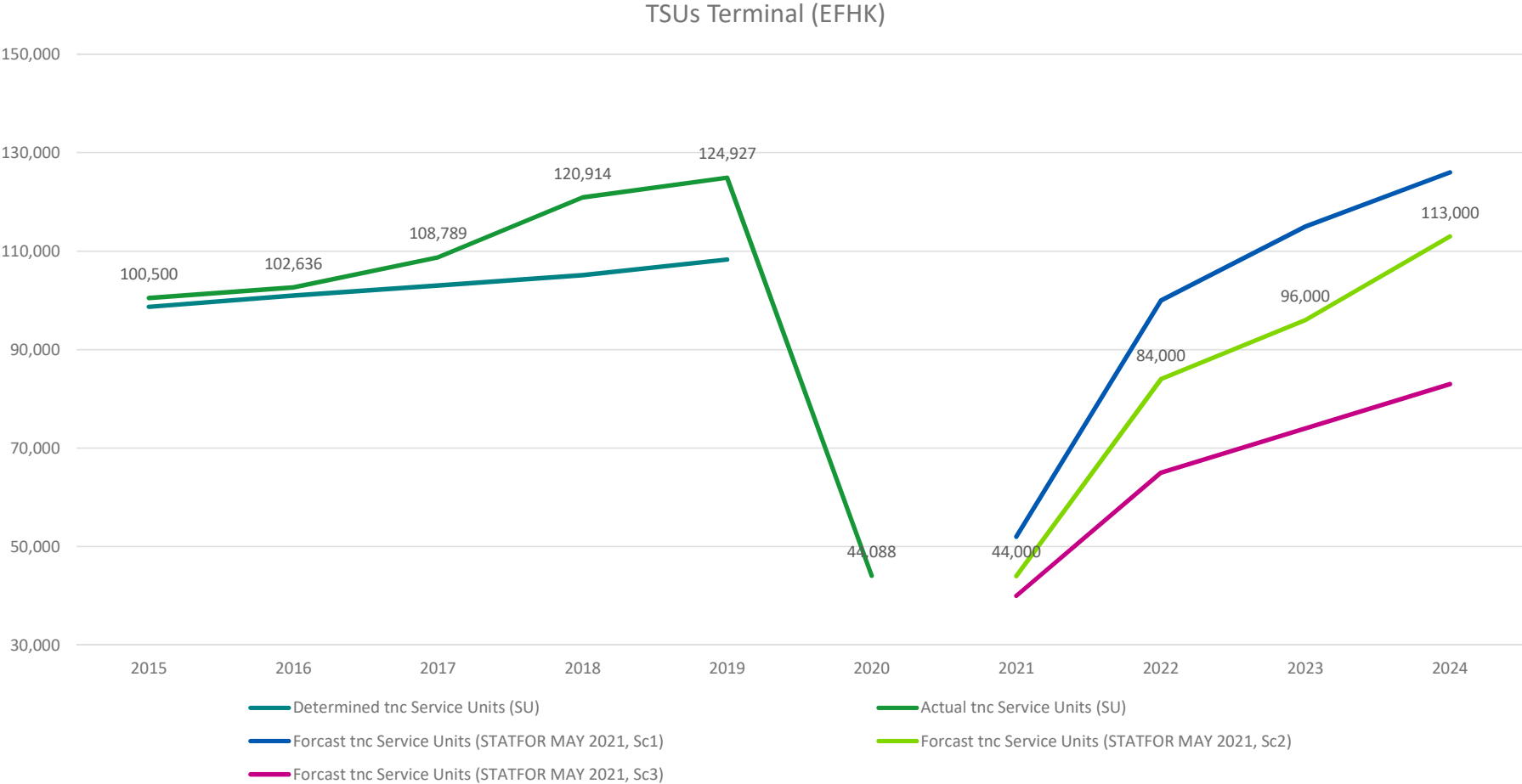
## Traffic forecasts

- STATFOR published 4-year-forecast in May; three different forecast scenarios
  - Sc1: Vaccine Summer 2021: Easing of travel constrains as of summer 2021
  - Sc2: Easing of travel constrains as of Q1 2022
  - Sc3: Lingering infection and low passenger confidence
- **Sc2** considered as 'base scenario' → used in Enroute and Terminal unit rate calculations (Any other detailed statistical "competing" forecasts not available)
- <https://www.eurocontrol.int/forecasting>

# Total Service Unit (TSU) forecast for En-route



# Total Service Unit (TSU) forecast for Terminal (EFHK)



## Updates for the local traffic forecasts

- Member states are allowed to revise the traffic assumptions with the October STATFOR traffic forecasts
  - In principle service units are updated with the most recent STATFOR forecasts
- The updates to be consulted with stakeholders in Oct/Nov

## Assumptions on traffic forecast updates

- Not any statistical assumptions on traffic evolution and updates on traffic forecasts
  - Enroute actual Jan-Jul 230.694 SUs (51 % of forecast 448.000 SUs)
  - EFHK actual *IFR arrivals* Jan-Jul 14.111 (37 % of forecast 37.800 IFR arrivals)
    - Difficult to predict if the same trend continues towards the end of the year
- Relatively small changes in traffic are not to be expected to cause changes to determined costs
- If something dramatic happens again in traffic volumes
  - Years 2020-2021 demonstrate the available savings potential

# Inflation forecast

- 'forecast inflation index' means the annual inflation index based on the third year before the start of a reference period and computed by using the latest available inflation forecast of average **Consumer Price Index** percentage change published by **the International Monetary Fund** for the Member State concerned at the time of drafting the performance plan.
- In case the percentage change published by the International Monetary Fund for a given year is negative, a zero value shall be used.
  
- Actual inflation 2020 and **IMF April forecast** 2021-2024

2020	2021	2022	2023	2024
0,40 %	1,42 %	1,50 %	1,60 %	1,76 %

# **Draft Performance Plan**

## **Key Performance Area – Cost-efficiency**

## Total en-route cost base including baseline and targets

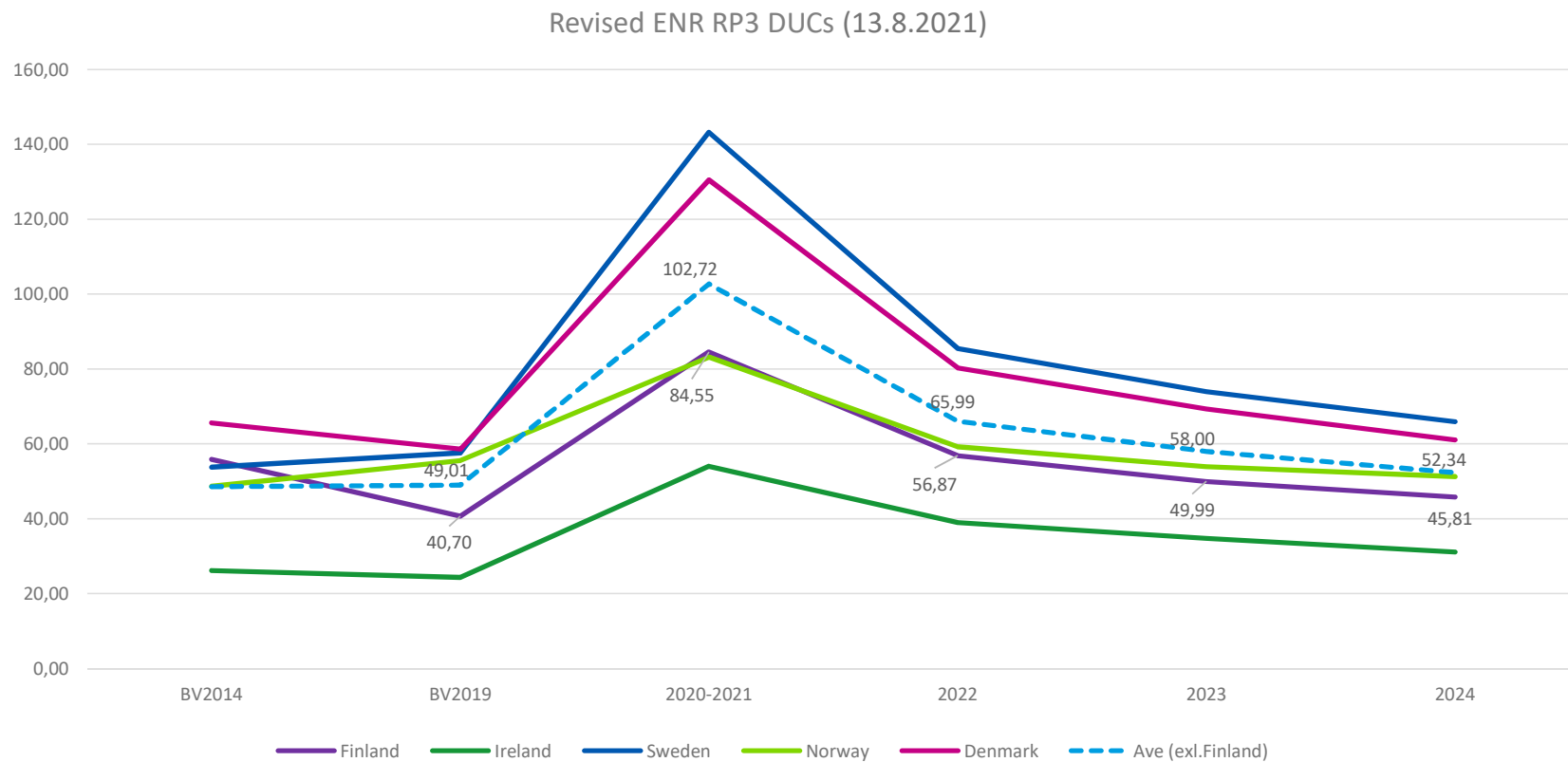
### Cost-efficiency targets

En route charging zone	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D	2024 D
Name of the CZ	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D	vs. 2014 B	vs. 2019 B
Total en route costs in nominal terms (EUR)	43 969 946	41 907 009	79 025 453	45 559 403	47 850 054	50 560 364	15,0%	20,6%
<b>Total en route costs in real terms (in EUR2017)</b>	<b>44 317 361</b>	<b>41 132 463</b>	<b>76 947 332</b>	<b>43 562 406</b>	<b>45 191 631</b>	<b>47 134 649</b>	<b>6,4%</b>	<b>14,6%</b>
Total en route costs in real terms (in EUR2017)	44 317 361	41 132 463	76 947 332	43 562 406	45 191 631	47 134 649	6,4%	14,6%
YoY variation			87,1%	-43,4%	3,7%	4,3%		
Total en route Service Units (TSU)	793 186	1 010 679	910 058	766 000	904 000	1 029 000	29,7%	1,8%
YoY variation			-10,0%	-15,8%	18,0%	13,8%		
Real en route unit costs (in EUR2017)	<b>55,87</b>	<b>40,70</b>	<b>84,55</b>	<b>56,87</b>	<b>49,99</b>	<b>45,81</b>	<b>-18,0%</b>	<b>12,6%</b>
YoY variation			107,8%	-32,7%	-12,1%	-8,4%		
<b>EU-wide targets</b>		<b>50,23</b>	<b>120,1%</b>	<b>-38,5%</b>	<b>-13,2%</b>	<b>-11,5%</b>		

### Adjustments to baseline values

En route charging zone	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline	2019 Baseline
Name of the CZ	2014 B	2019 B	2014 A	2019 A	adjustments	adjustments
Total en route costs in nominal terms (EUR)	43 969 946	41 907 009	43 969 946	42 772 708	0	-865 699
Total en route costs in real terms (in EUR2017)	<b>44 317 361</b>	<b>41 132 463</b>	<b>44 317 361</b>	<b>41 978 589</b>	0	-846 126
Total en route Service Units (TSU)	793 186	1 010 679	793 186	1 010 679	0	0

# The peer group determined unit costs



## En-route consistency to EU-wide targets

### Low baseline value 2019 and DUC costs for 2020-2021:

- Finland's 2019 baseline value (EUR 40,70) is considerably lower than the EU-target (EUR 50,23).
- The ANSP has taken remarkable cost-efficiency measures when comparing to the 2014 DUC.
- 2019 baseline value has been lowered as the result of the NSA baseline value cost verification for the baseline value.
- The ANSP has also made remarkable savings to staff and other operating costs in 2020-2021. These actions have made it possible to achieve the cost-efficiency target 12,3 %-units lower than the EU-wide target.

### The peer group review:

- When comparing the baseline value (2019) for the determined unit cost to the same values of the comparator group (Finland, Sweden, Norway, Denmark and Ireland) the value is considered as consistent with the Union-wide target.
- The 2019 baseline value is -15 % below the average (excl. Finland) of the comparator group, when using the latest available estimates (13.8.2021).
- With the same available estimates the DUC values for entire RP3 years are still well below the average of the comparator group for en-route services.

## Total Terminal (EFHK) cost base including baseline and targets

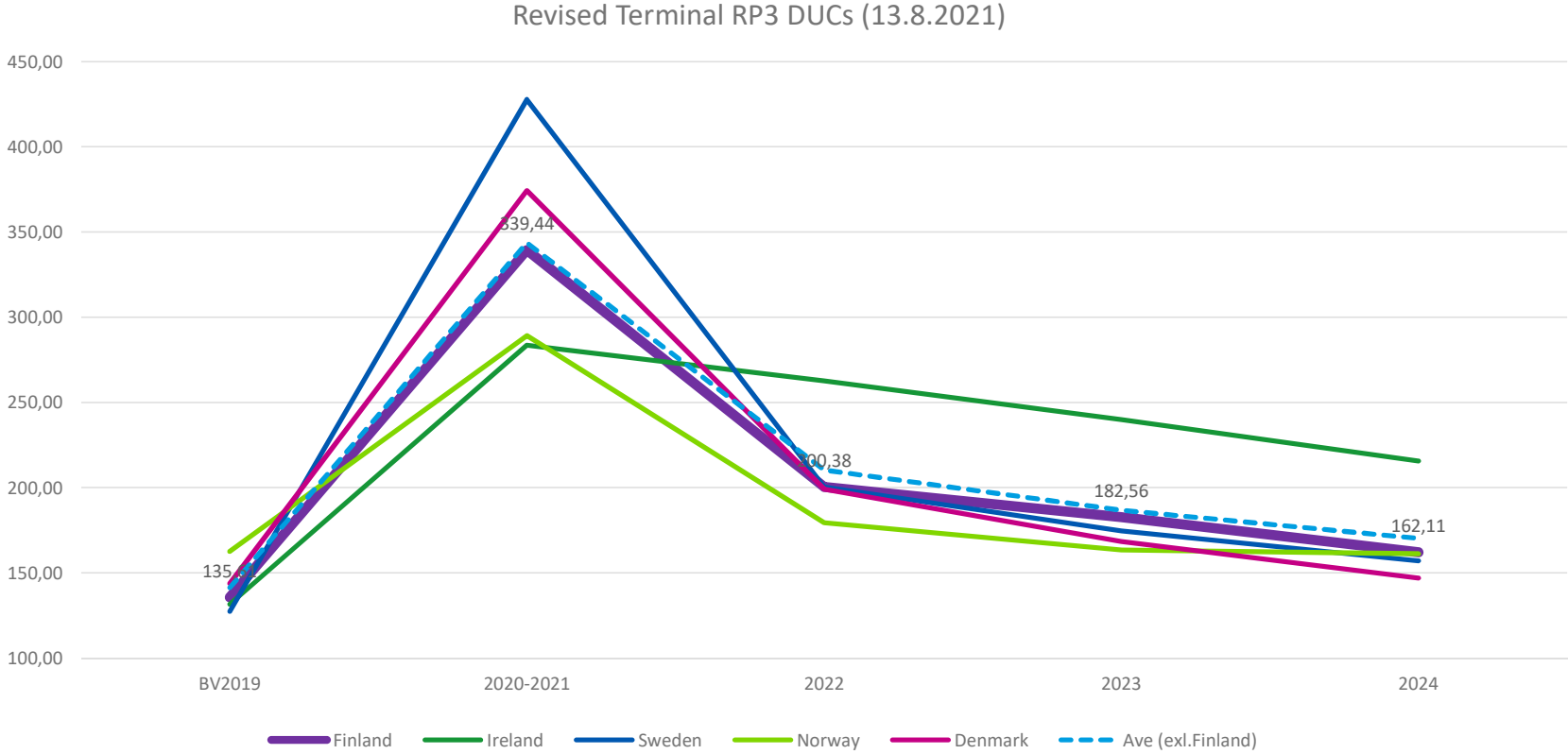
### Cost-efficiency targets

Terminal charging zone	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D
Name of the CZ	2019 B	2020/2021 D	2022 D	2023 D	2024 D	vs. 2019 B
Total terminal costs in nominal terms (EUR)	17 313 820	30 871 701	17 767 037	18 793 415	19 982 877	15,4%
<b>Total terminal costs in real terms (in EUR2017)</b>	<b>16 941 915</b>	<b>29 900 398</b>	<b>16 832 266</b>	<b>17 525 417</b>	<b>18 318 227</b>	<b>8,1%</b>
Total terminal costs in real terms (in EUR2017)	16 941 915	29 900 398	16 832 266	17 525 417	18 318 227	8,1%
YoY variation		76,5%	-43,7%	4,1%	4,5%	
Total terminal Service Units (TNSU)	124 927	88 088	84 000	96 000	113 000	-9,5%
YoY variation		-29,5%	-4,6%	14,3%	17,7%	
<b>Real terminal unit costs (in EUR2017)</b>	<b>135,61</b>	<b>339,44</b>	<b>200,38</b>	<b>182,56</b>	<b>162,11</b>	<b>19,5%</b>
Real terminal unit costs (in EUR2017)	135,61	339,44	200,38	182,56	162,11	19,5%
YoY variation		150,3%	-41,0%	-8,9%	-11,2%	

### Adjustments to baseline values

Terminal charging zone	Baseline 2019	Actuals 2019	2019 Baseline adjustments
Name of the CZ	2019 B	2019 A	
Total terminal costs in nominal terms (EUR)	17 313 820	17 405 400	-91 580
<b>Total terminal costs in real terms (in EUR2017)</b>	<b>16 941 915</b>	17 031 424	-89 510
Total terminal costs in real terms (in EUR2017) <sup>1</sup>	16 941 915	17 031 424	-89 510
Total terminal Service Units (TNSU)	124 927	124 927	0

# Determined unit costs compared to the peer group



## Contribution of the local Terminal targets to the performance of the European ATM network

- For RP2 Finland set the target as proposed by the PRB, which was to freeze the real total costs.
  - That led to DUC trend of -2,2 % p.a. between 2015 and 2019.
- For the RP3 the ANSP has made remarkable saving to staff and other operating costs in 2020-2021.
- The ANSP has also been able to cut the total costs comparing to the draft Performance Plan submitted in 2019.
- When comparing to the previous RP3 draft Performance Plan, the year to year cost efficiency ratios have been improved towards the end of the RP3 even if the traffic is not quite expected to be fully recovered.
- When compared the TN services with the same comparator group countries (where ANSPs have a similar operational and economic environment) that was set for en-route services, the baseline value is about -4 % below the average (excl. Finland) of the comparator group, when using the latest available estimates (13.8.2021). With the same available estimates the DUC values for the entire RP3 are below the average values.

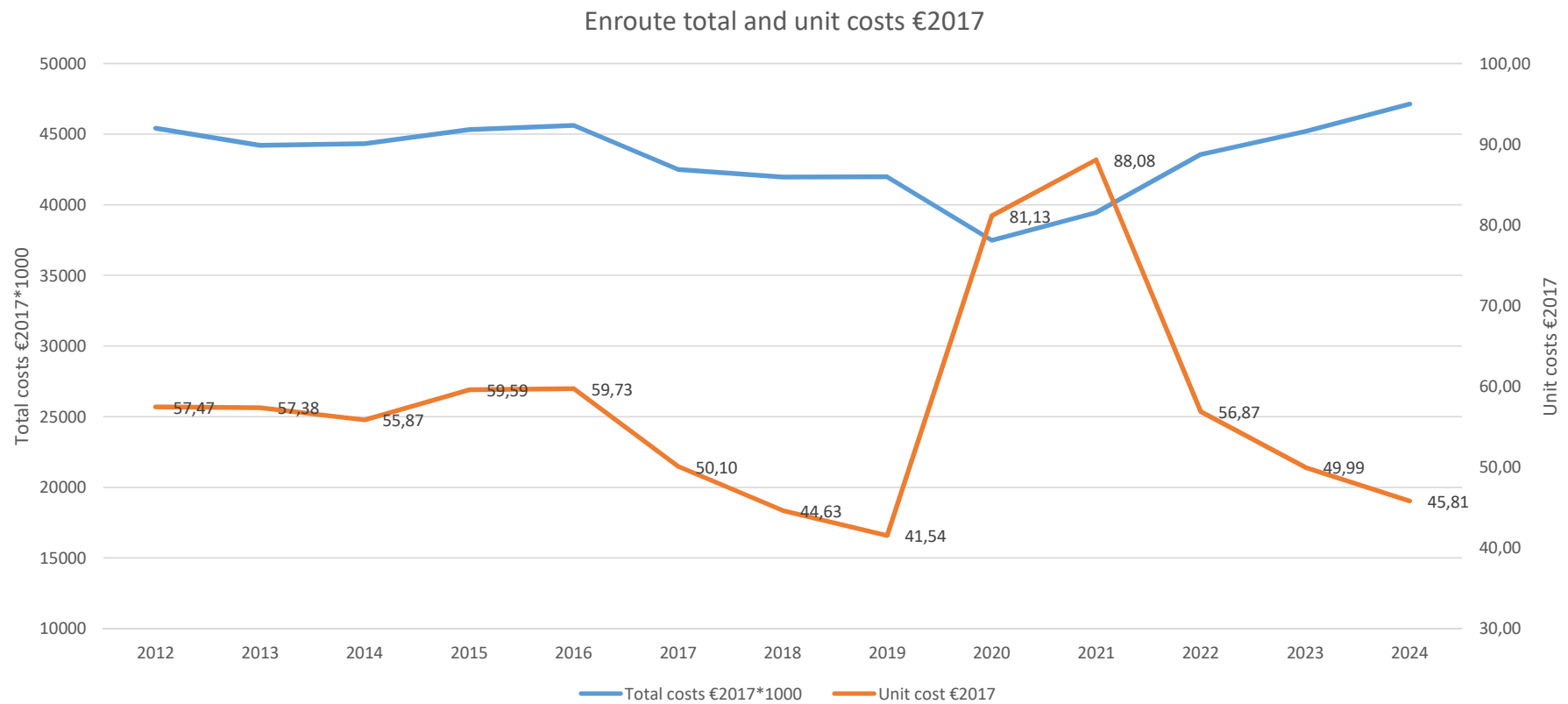
**Draft Performance Plan**  
**Cost evolution & Costs by nature**

## Cost evolution

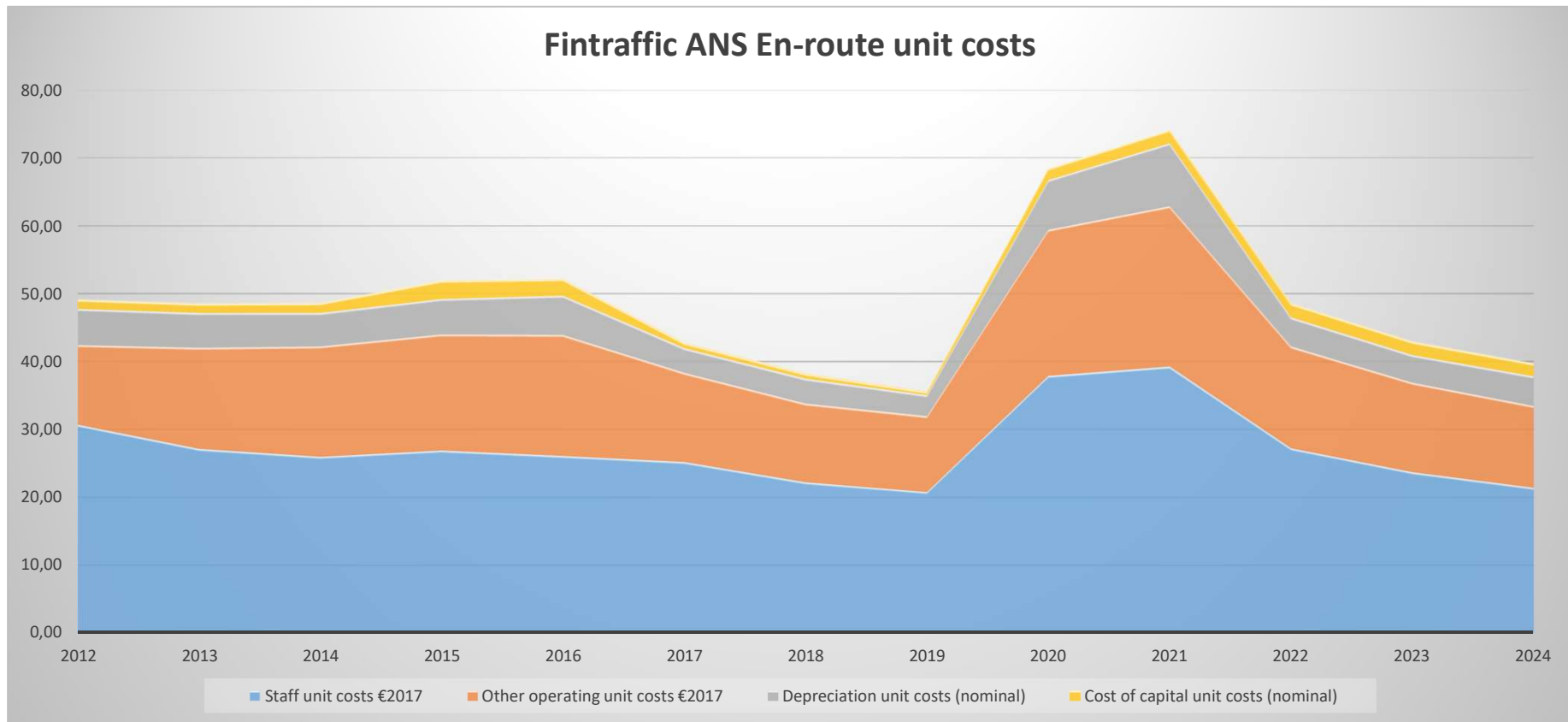
- Total costs including all entities (*en route* and terminal)
  - NSA – Finnish Transport and communications Agency
  - MET – Finnish Meteorological Institute
  - ANSP – Fintraffic ANS (~ 90 % of all costs)
- Fintraffic ANS – costs by nature

# Enroute - All entities

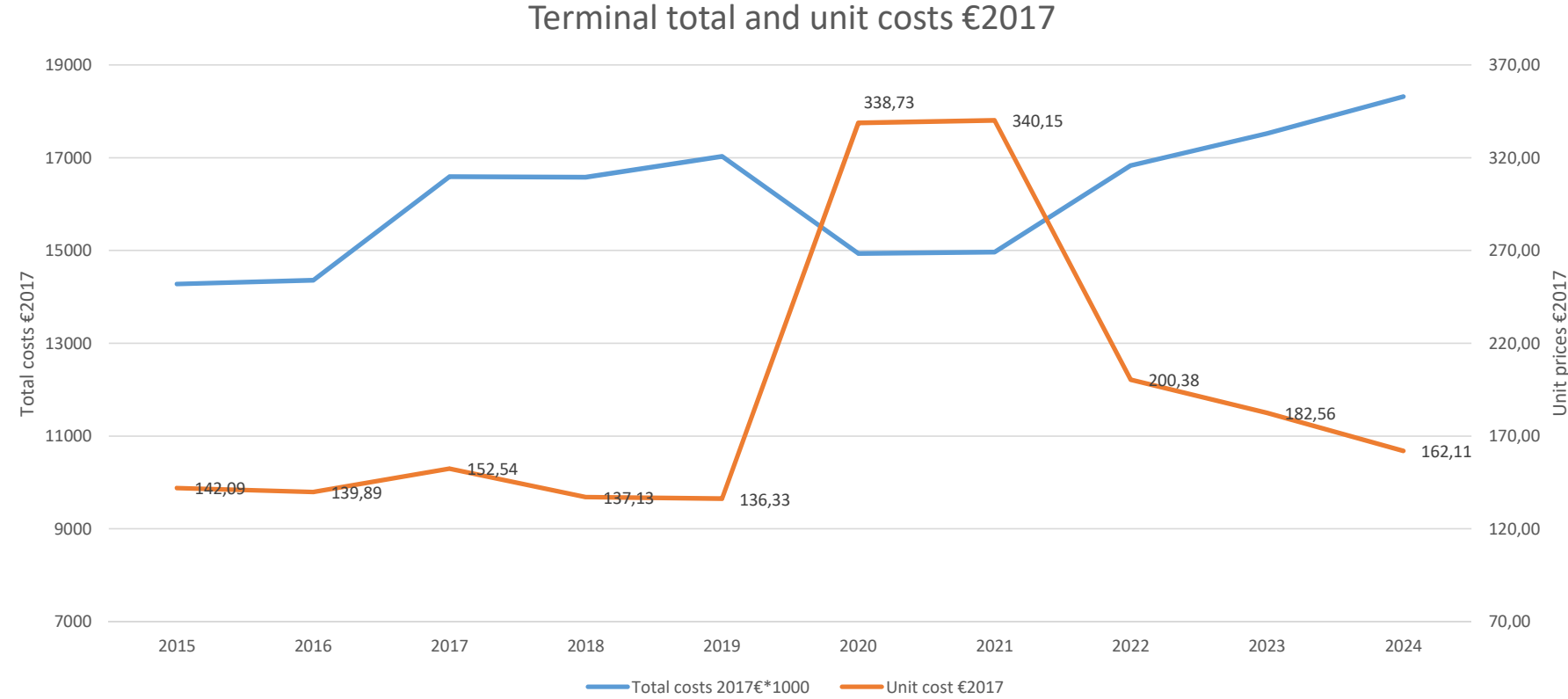
## - Cost evolution in real terms



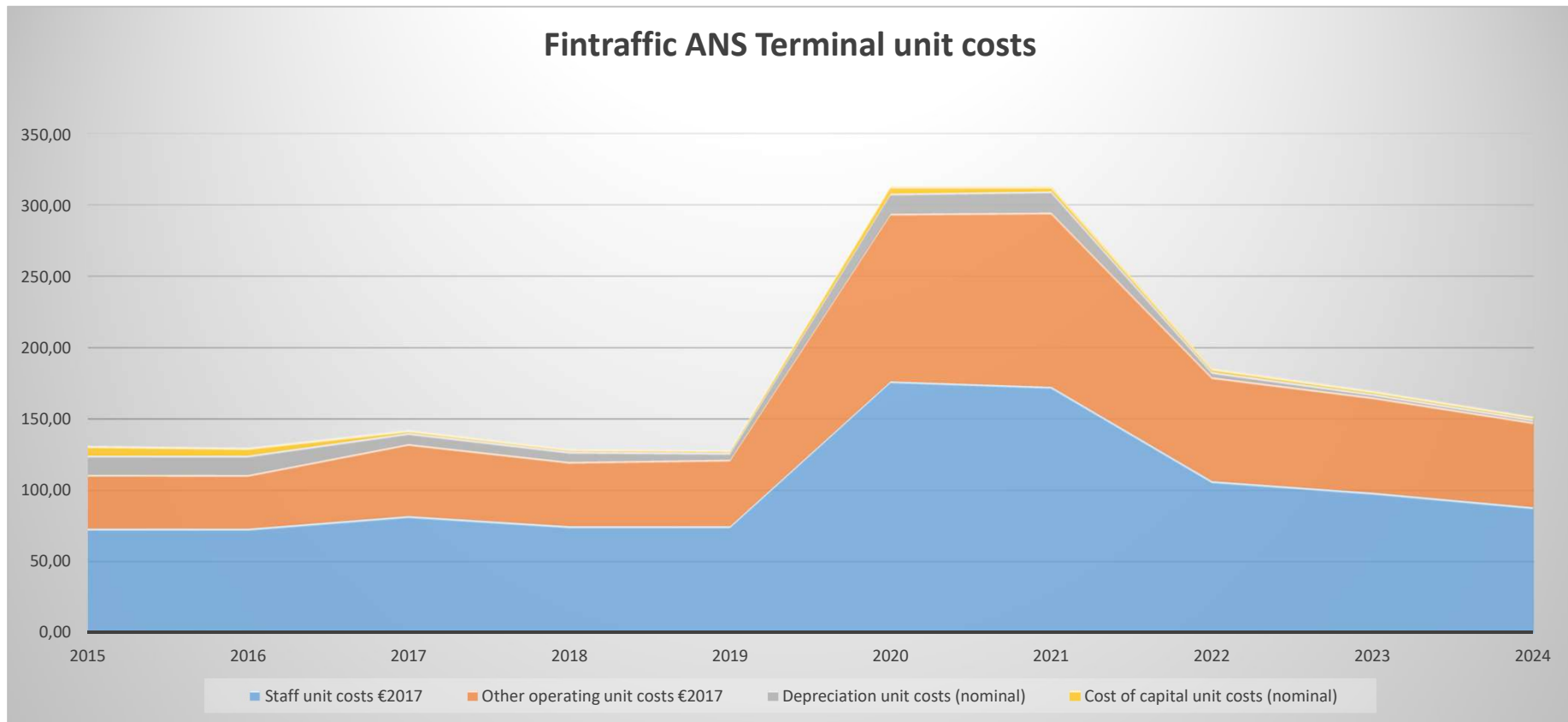
# Fintraffic ANS – Units cost evolution – *En route*



# All entities - Cost evolution in real terms – Terminal



# Fintraffic ANS – Units cost evolution - Terminal



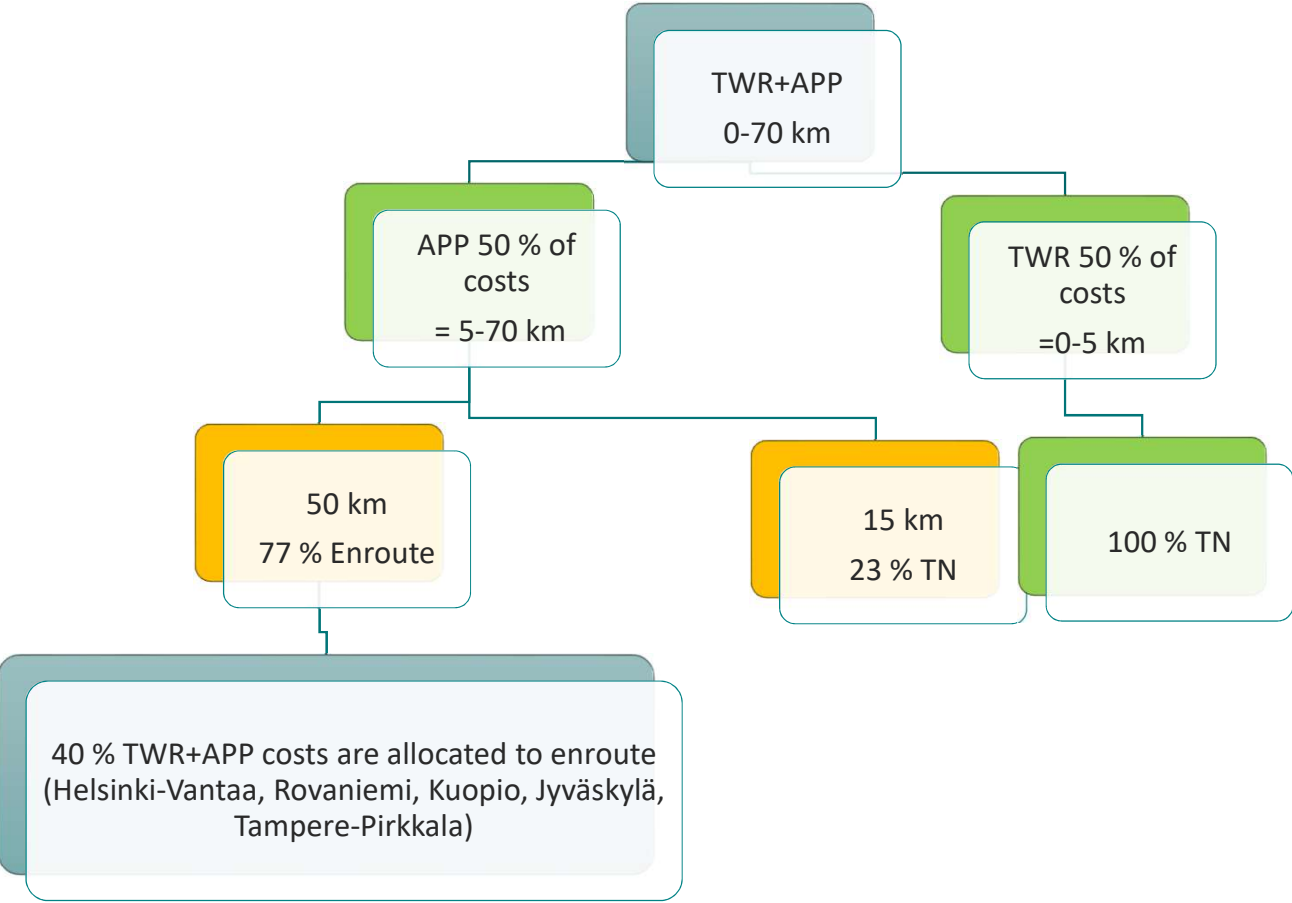
# **Draft Performance Plan**

## **Cost Allocation**

## Fintraffic ANS – Cost allocation principles

- All ACC cost are allocated to en route cost base
- All TWR cost are allocated to terminal cost base
- APP cost are allocated to en route and terminal cost bases according to distance based rule.
  - a) Costs related to flight 0-20km from the airport are in terminal cost base (=TWR cost)
  - b) Costs related to flight over 20km from airport are in en route cost base.
  - c) 20 km has been chosen because according to charging regulation 20km is deducted from chargeable en route flight in both ends of the flight
  - d) For practical reasons costs of APP and TWR are in the same cost center. 40% of total TWR/APP costs are allocated to en route and 60% to terminal
  - e) Costs of services common to both en route and terminal services are allocated in proportional way. These service include for example technical ANS, AIS and administration.

# TWR+APP cost allocation, 20 km rule



**Draft Performance Plan**

**Weighted Average Cost of Capital  
(WACC)**

## WACC.

- According to economic theory, setting the WACC at an appropriate level is essential in order to achieve economic efficiency, whereby resources across the economy are allocated optimally.
- From the service providers point of view WACC represents a fair return in a sense of reasonable compensation for the capital supporting the company's activities
- in economic terms, it reflects the opportunity cost of employing the capital to support another business with similar risk.

## WACC. Efficient model.

- During RP2 and RP3 the efficient model suggested by Steer Davies Gleave in their study on cost of capital, return on equity and pension costs of air navigation service providers was used as a guidance in WACC calculation.
- According to this study, this model will ensure cost reflective charges and align with the broad objectives mentioned in the previous slide.
- Application of this model would require the following:
  - The cost of equity to be calculated using the CAPM;
  - The cost of debt should be estimated by reference to market borrowing rates;
  - The assumed gearing should be the optimal level rather than the level actually prevailing when the calculation is made;
  - The assumed risk free rate should be set by reference to government bond yields providing financial markets are relatively stable, and by reference to an appropriate comparator such as ECB bond rates otherwise;
  - The asset beta should be within a recommended range of 0.3 to 0.5 unless the ANSP is able to justify a value outside the range; and
  - All components of the calculation should be identified transparently and justified.

## WACC. Parameters.

- Actual calculations have been made by KPMG based on guidance of the efficient model
- The efficient model is also used as a starting point for the period of 2022-24. The parameters have been updated and for two parameters (gearing and asset beta) the calculation method have been slightly changed (due to changes caused by Covid-19)
  - Optimal gearing have been calculated as a median observation of the peer group (selected by KPMG) instead of previously used assumed 60 % of debt. The new level of optimal debt is 22.94%.
  - The upper limit of 0.5 for asset beta (i.e. unlevered beta) has been relaxed and the median observation of 0.8 of the peer group asset beta has been applied to reflect the systematic risk.
  - Traficom is of the opinion that all parameters are in unison with the efficient model, they are justified, the model is transparent and therefore acceptable.
- Pre-tax WACC for 2020-21 was 4.78%
- Pre-tax WACC for 2022-24 is 6.16%

## WACC. Summary of updated results (2022-24)

WACC calculation			
	After-tax WACC	Pre-tax WACC	
<b>Cost of equity (Ke)</b>			
Asset beta	0.80	0.80	Industry median, Thomson Reuters
Debt to EV Ratio (D/EV)	22.94%	22.94%	Industry median, Thomson Reuters
Equity to EV Ratio (1-D/EV)	77.06%	77.06%	1 - D/EV
Tax rate	20.00%	20.00%	Corporate tax rate (Finland, 2021)
Equity beta (Be)	0.99	0.99	$Be = Ba * (1 + (1-t) * (D/EV) / (1-D/EV))$
Risk-free rate (i)	0.38%	0.38%	Long-term AAA-rated government bond yield (Germany), Thomson Reuters
Inflation differential ( $\Delta i$ )	0.00%	0.00%	Inflation differential to AAA-rate country, EIU
Market Risk Premium (Rm)	5.37%	5.37%	Market risk premium in AAA-rate country, Damodaran
Country Risk Premium (CRP)	0.38%	0.38%	Risk premium to AAA-rate country, Damodaran
Cost of equity (Ke), After-tax	6.09%		$Ke = i + \Delta i + Be * Rm + CRP$
Cost of equity, Pre-tax		7.62%	Pre-tax Cost of Equity = After-tax Cost of Equity / (1 - tax rate)
<b>WACC contribution of equity</b>	<b>4.69%</b>	<b>5.87%</b>	
<b>Cost of debt (Kd)</b>			
Credit spread	0.50%	0.50%	Credit spread, the Client
Country Risk Premium (CRP)	0.38%	0.38%	Risk premium to AAA-rate country, Damodaran
Pre-tax Required Return on Debt (Kd)	1.26%	1.26%	$Kd = i + \Delta i + \text{Credit spread} + CRP$
After-tax Required Return on Debt	1.01%		
<b>WACC contribution of debt</b>	<b>0.23%</b>	<b>0.29%</b>	
<b>WACC</b>	<b>4.93%</b>	<b>6.16%</b>	$WACC = (D/EV) * (1-t) * Kd + (1- D/EV) * Ke$

**Draft Performance Plan**  
**Charging policy & Traffic Risk Sharing**

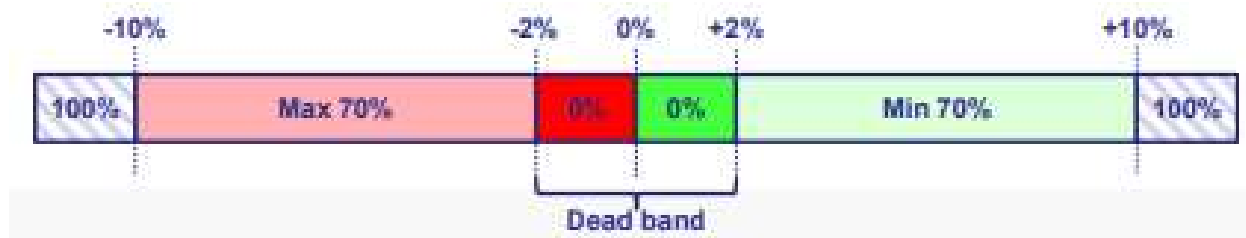
## Charging policy

Charging policy includes, e.g., the timing of adjustments to unit rates and cross-financing between terminal charging zones.

- Finland's policy has always been to make adjustments as soon as possible but to avoid big changes in prices. E.g. Finland has delayed underrecoveries from RP1 (due to traffic risk sharing) until as far as RP3.
- Most of the timings of the adjustments are determined in the regulation.
  - The adjustments made in year  $n+2$
  - In some cases flexibility to spread adjustments to following reference period(s) → to be decided during the preparation of 2023 unit rates
- Unit price for 2020-2021 set retroactively
  - Adjustments planned to spread over 5 years in the latest reporting tables
  - Possibility to extend up to 7 yrs → to be decided during the preparation of 2023 unit rates

## Traffic risk sharing

- The values of the parameters are not adapted
  - Applied as set in the regulation



- Carry-overs in year  $n+2$

## Unspent CAPEX in RP2

- Investment costs part of cost risk sharing in RP2
  - If spent more than planned → ANSP's loss
  - If spent less than planned → ANSP's gain
- Delayed investments during RP2 → unspent capital expenditure
  - Significant underspend in enroute depreciation costs and cost of capital
- ANSP is returning 1,2 mil. € in total during RP3 (240.000 €/year)

# **Draft Performance Plan**

## **Incentive Schemes**

## Incentive scheme (en-route)

### 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	0,00 %
Max penalty ( $\geq$ Max bonus)	% of DC	0,50 %
The pivot values for RP3 are	modulated	

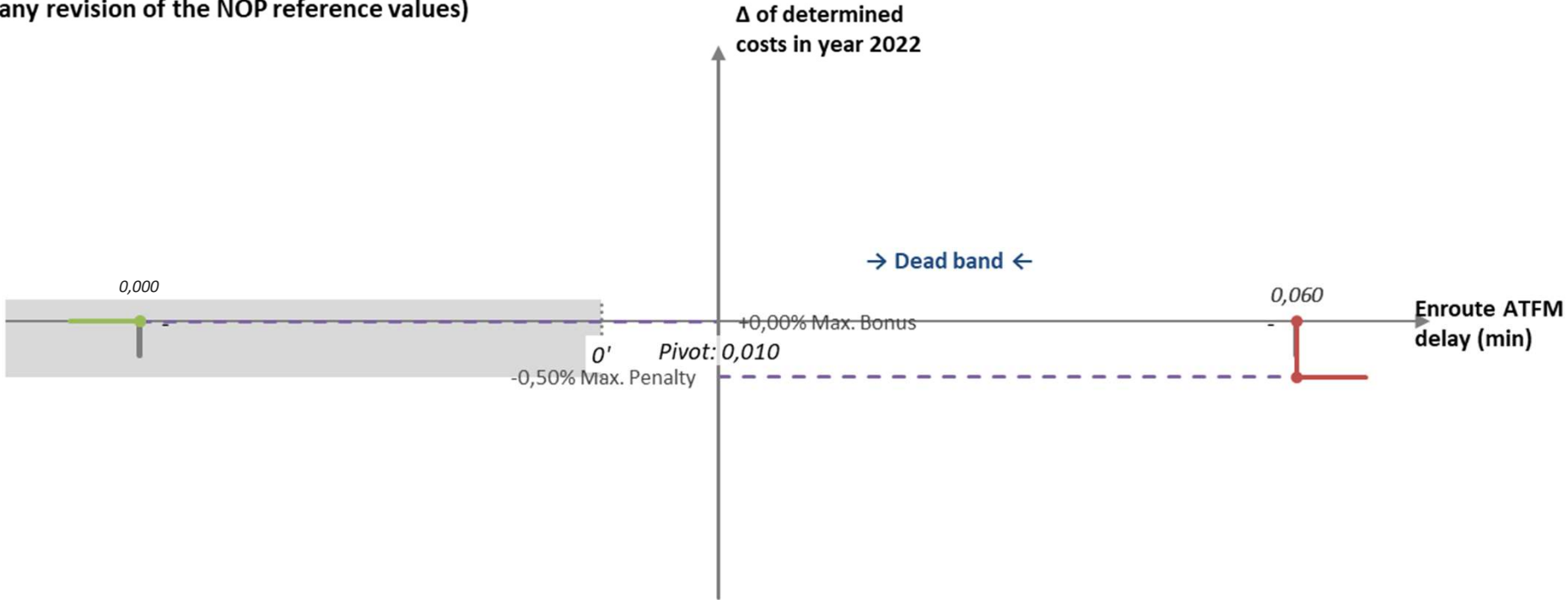
#### Fintraffic ANS

	2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)			0,05	0,05	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)			0,05	0,05	0,05
Pivot values for RP3 (mins of ATFM delay per flight)*			0,01	0,01	0,01
Financial advantages / disadvantages	Dead band range		[0-0,06]	[0-0,06]	[0-0,06]
	Bonus sliding range		n/a	n/a	n/a
	Penalty sliding range		[0,06-0,06]	[0,06-0,06]	[0,06-0,06]

\* When modulation applies, these figures are only indicative as they will be updated annually on the basis of the November n-1 NOP and the methodology described in 5.2.1.2.a2 below. The pivot values for year n have to be notified to the EC by 1 January n.

# Incentive scheme for en-route (2022)

Application of the en route incentive scheme in year 2022  
(before any revision of the NOP reference values)



## Incentive Scheme (TN)

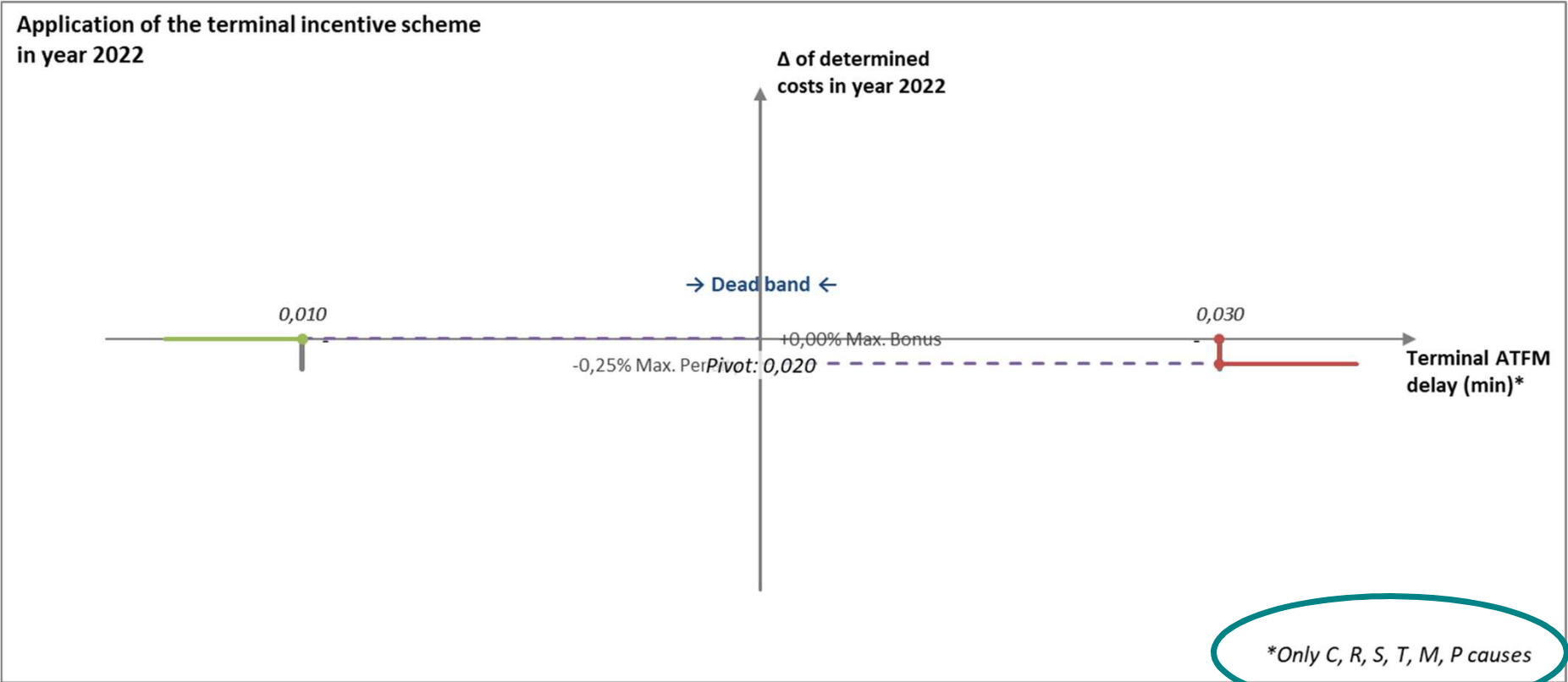
### 5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

Terminal	Expressed in	Value
Dead band $\Delta$	fraction of min	$\pm 0,010$ min
Bonus/penalty range (% of pivot value)	%	$\pm 50\%$
Max bonus	% of DC	0,00 %
Max penalty	% of DC	0,25 %
The pivot values for RP3 are	modulated	

	2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)			0,28	0,32	0,77
Bonus/penalty range $\Delta$ (in fraction of min)			$\pm 0,010$	$\pm 0,010$	$\pm 0,010$
Pivot values for RP3 (mins of ATFM delay per flight)*			0,02	0,02	0,02
Financial advantages / disadvantages	Dead band range		[0,01-0,03]	[0,01-0,03]	[0,01-0,03]
	Bonus sliding range		[0,01-0,01]	[0,01-0,01]	[0,01-0,01]
	Penalty sliding range		[0,03-0,03]	[0,03-0,03]	[0,03-0,03]

\* When modulation applies, these figures are only indicative as they will be updated annually on the basis of the methodology described in 5.2.1.2.a below. The pivot values for year  $n$  have to be notified to the EC by 1 January  $n$ .

# Incentive scheme for TN (2022)



**Fintraffic ANS:**  
**Investments and cost justifications**

# **Draft Performance Plan Questions & Answers**

## Next steps

- Consultation period ends on **3rd of September**
- Traficom will evaluate outcome of the consultation and adjust the plan as necessary
- Performance plans must be submitted to the Commission by the end of September
- By the end of October, the Commission will conduct a verification process on draft performance plans
- Consultation on the possible updates on traffic forecasts in November
- If all necessary elements are found in the draft plans, they will come into effect on 1 January 2022
- Formal assessment of performance plans and national targets by the Commission
- If the Commission's assessment is positive, a formal decision will be adopted formalising the performance plan and targets by *May 2022*



Finnish Transport and Communications Agency

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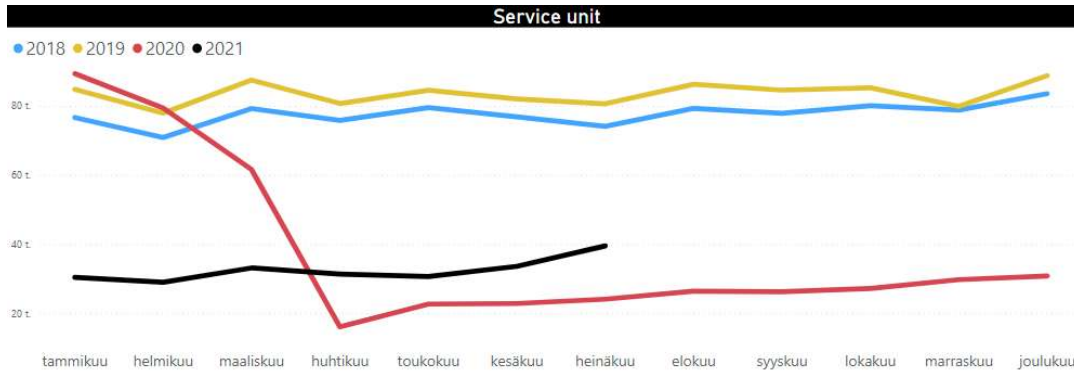


# RP3 TRAFFIC AND COST DEVELOPMENT

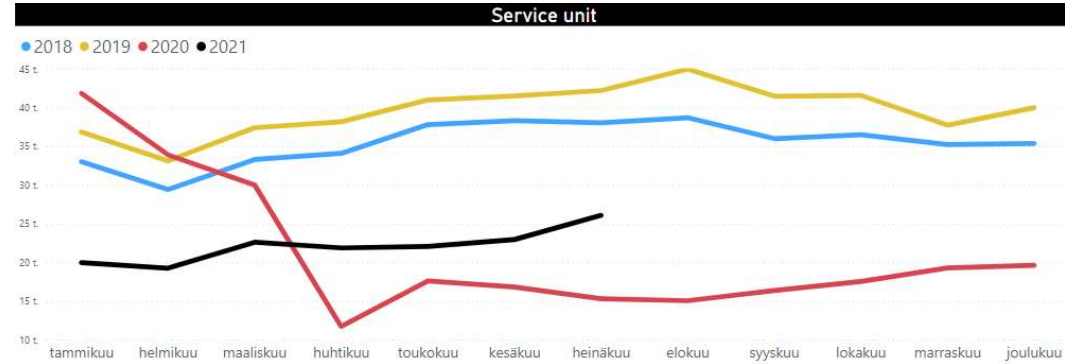
# Traffic development



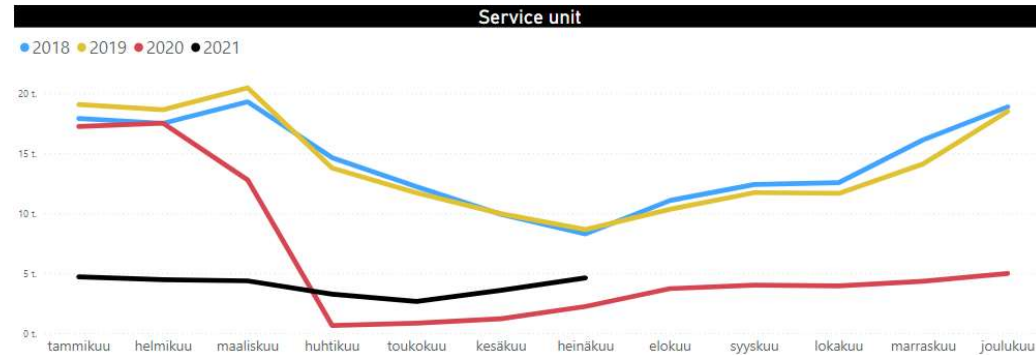
## All enroute services



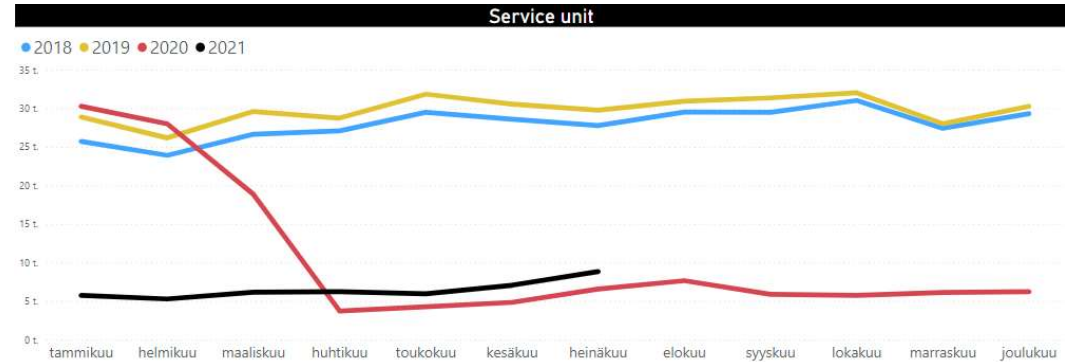
## Overflights



## Domestic traffic

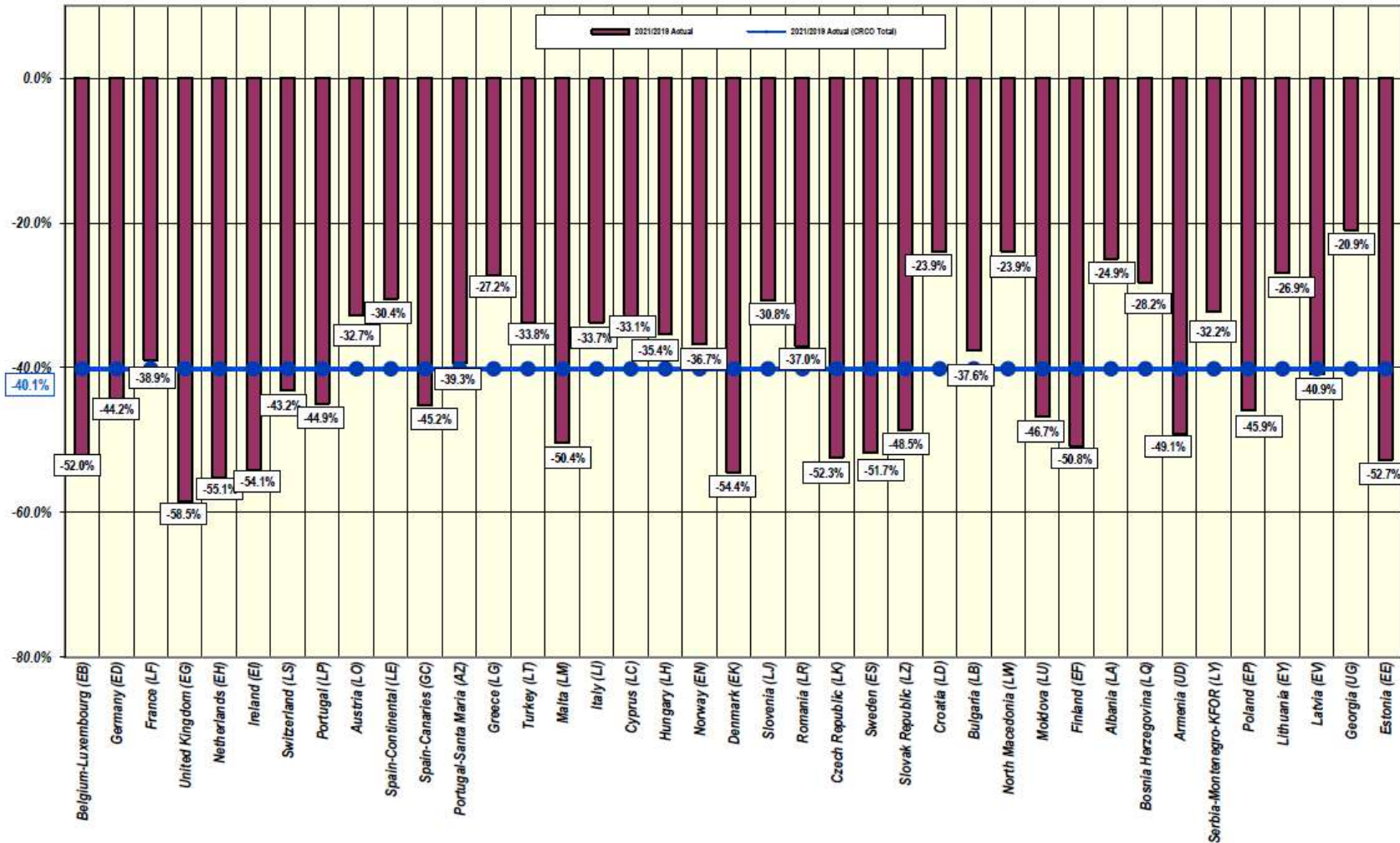


## International traffic



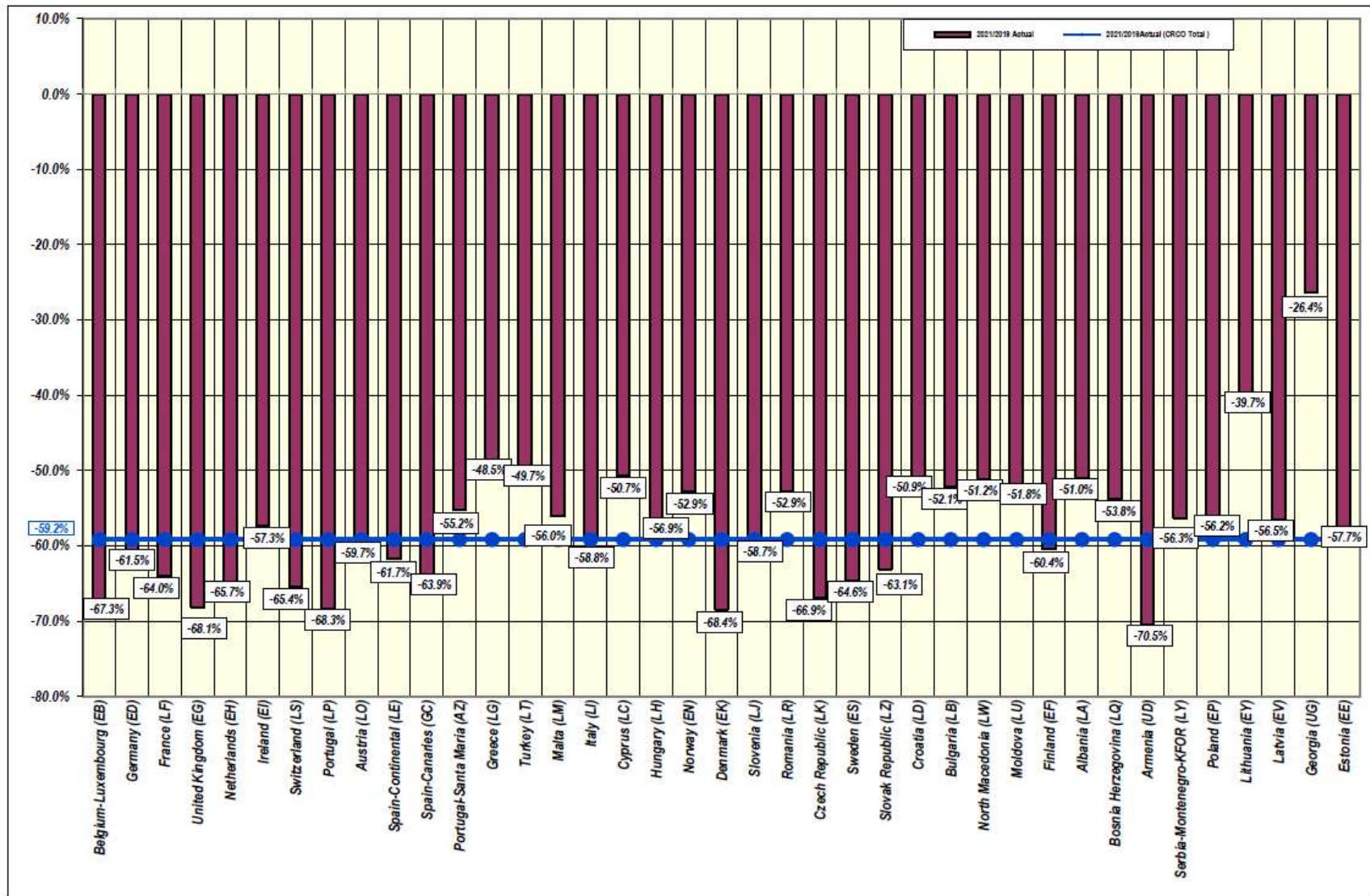
**Service Units follow-up - July 2021**  
**Actual 2021 / Actual 2019**

Chart 1

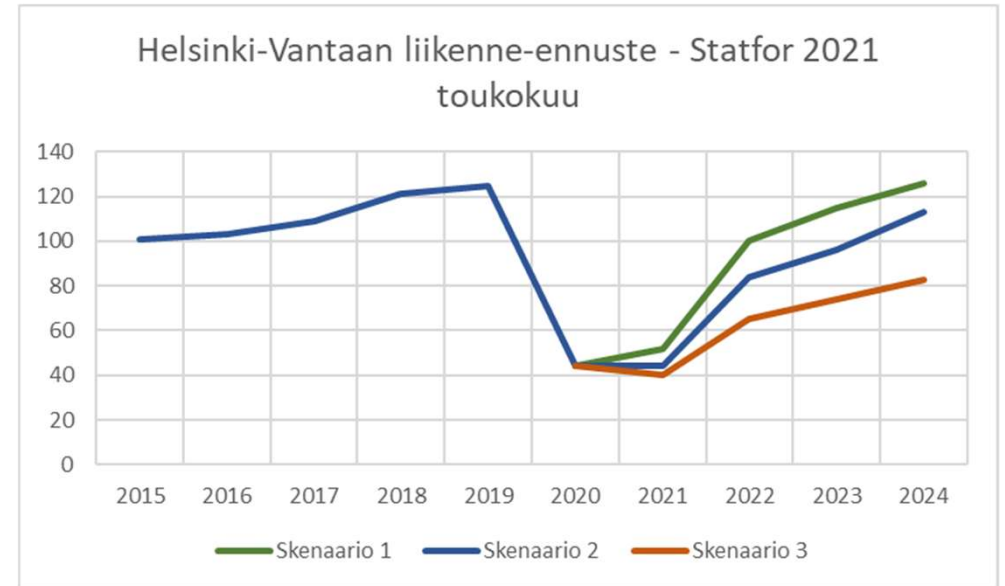
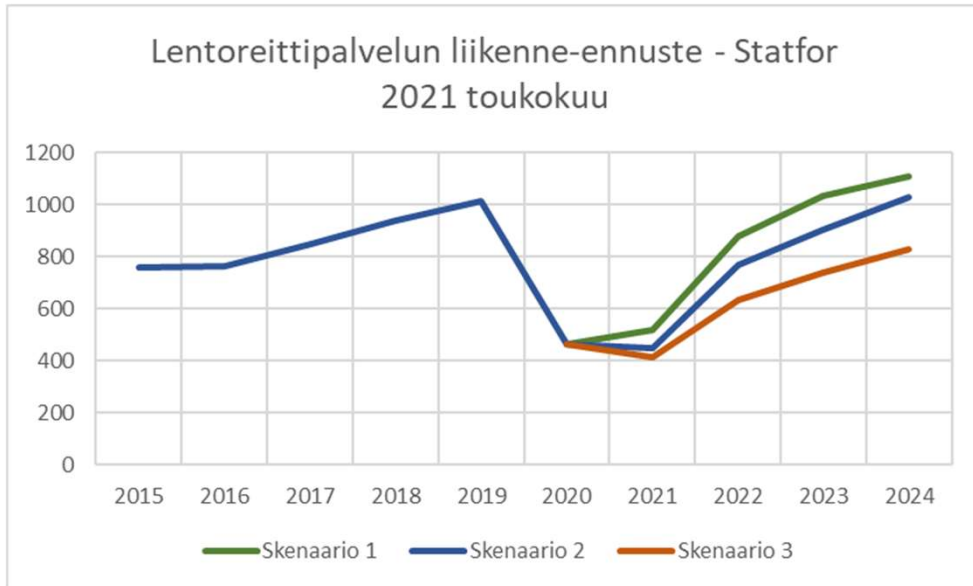


## Service Units follow-up - Situation after 7 months

Chart 2



# STATFOR TRAFFIC FORECAST FOR FINLAND – MAY 2021 (ENR AND TN)



# FINTRAFFIC ANS – Economic situation



# Fintraffic ANS – Economic situation

- In 2020 operating profit was -16,1M€. In 2021 profit is expected to be around 0M€ depending how regulative adjustments are taken into account
- Regulative adjustments effecting 2023-2027 unit rates
  - Under-recoveries from 2020 and 2021 according to article 29/5
  - It will be decided with auditors, how these "receivables" are taken into account in financial accounts in 2021
- Cash flow situation has worsened dramatically during COVID-pandemia due to decrease in traffic volumes
- Received financial aid
  - Fintraffic group gave 2,2M€ Group contribution (konserniavustus) in 2020 and owner strengthened equity (pääomitus) by 8M€ in spring 2021 to improve equity ratio
  - State has made decision to pay Eurocontrol membership fee in 2020 and 2021 on behalf of Fintraffic ANS (Parliament decision)
  - EU funding for INEA-projects received in 2021 will be deducted from the future enroute cost bases



<b>Key indicators</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017*</b>
Revenue (EUR million)	49.3	80.2	81.5	63.9
Operating profit (EUR million)	-16.1	5.9	6.8	9.3
Operating profit/revenue (%)	-32.6	7.3	8.4	14.5
Investments (EUR million)	1.9	5.3	2.1	4.0
Return on equity (%)	-107.6	14.5	31.2	45.1**
Equity ratio (%)	22.6	36.1	37.0	40.8
Personnel on average (FTE)***	355	405	408	402

\* operations began on 1 April 2017

\*\* calculated on the balance sheet values at the closing date

\*\*\* temporary layoffs reduce the FTE value for 2020



# **COST SAVINGS IN 2020 AND 2021**



# Cost savings in 2020-2021

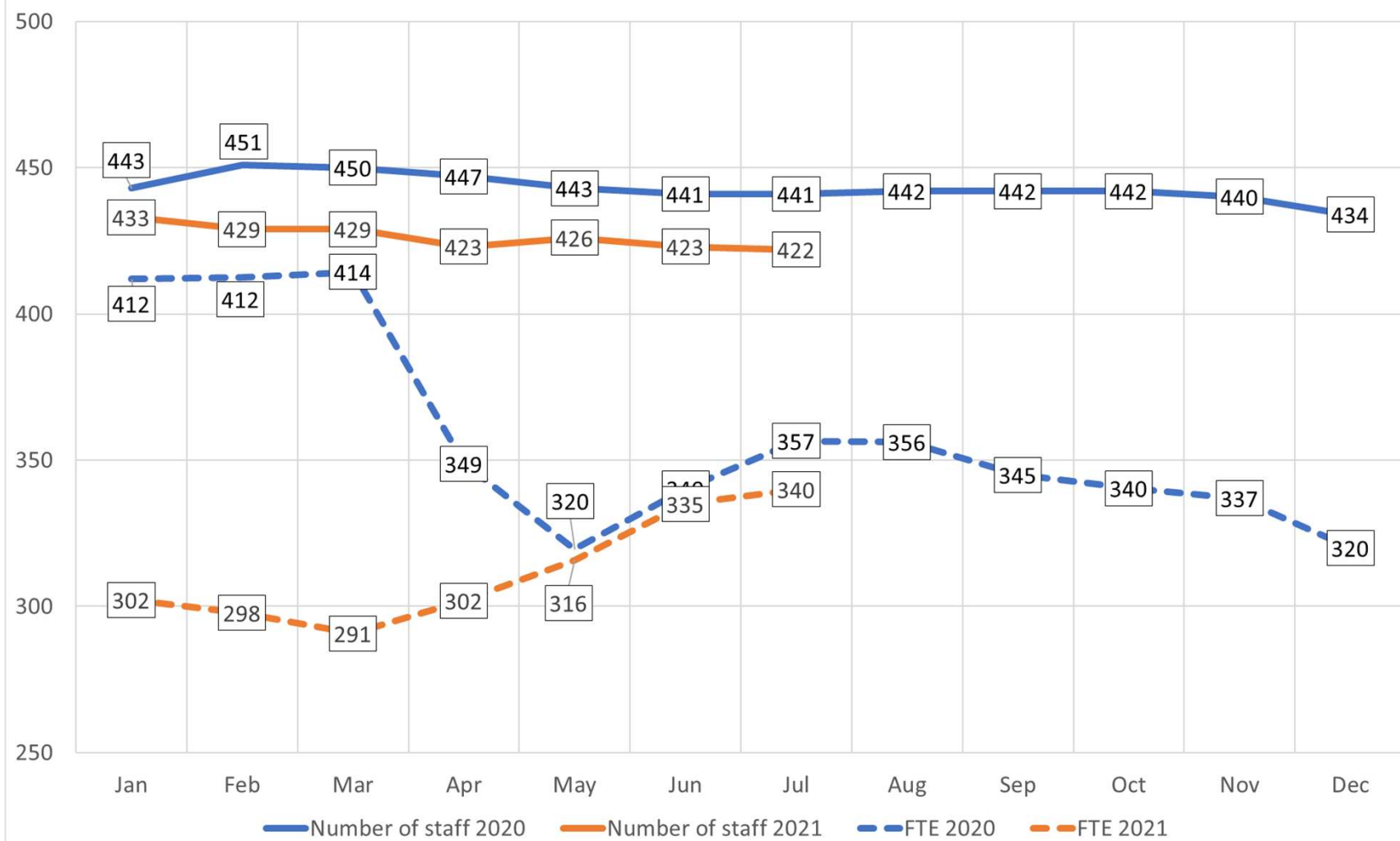
- Staff costs decreased by 15,8M€ (-17,7%) in 2020/2021 compared to 2019.
  - FTE in 2021 is 25% lower than before COVID-19 pandemia mainly due to temporary layoffs
  - Personnel fund and bonus system was not applied in 2020
- Other operating costs (adjusted) decreased by 3,2M€ (-5,3%)
  - Adjustments: Eurocontrol membership fee and MET cost effect eliminated
  - Payments to airport operator based on traffic volume decreased (marketing and development fee)
  - Payments to Luftfartsverket for handling Kvarken traffic and purchases from military (MIL ATCOs) decreased
  - Travel costs



<b>Fintraffic ANS Staff costs and other operating costs (M€)</b>								
	2021 Forecast	2020 Actual	2019 Actual		2021 savings	2020 savings	Total savings	Total savings %
Staff costs	36,4	37,0	44,6		-8,2	-7,6	-15,8	-17,7 %
Other operating costs	28,6	28,3	26,4		2,1	1,9	4,0	7,6 %
<b>Total costs</b>	<b>65,0</b>	<b>65,3</b>	<b>71,1</b>		<b>-6,1</b>	<b>-5,7</b>	<b>-11,8</b>	<b>-8,3 %</b>
* Eurocontrol membership fee increases other operating costs in 2020 and 2021 by 3M€								
** MET costs in 2019 were temporarily in lower level in 2019								
<b>Fintraffic ANS Staff costs and other operating costs (M€) - 2019 adjusted</b>								
	2021 Forecast	2020 Actual	2019 Actual (adjusted)		2021 savings	2020 savings	Total savings	Total savings %
Staff costs	36,4	37,0	44,6		-8,2	-7,6	-15,8	-17,7 %
Other operating costs	28,6	28,3	30,0		-1,5	-1,7	-3,2	-5,3 %
<b>Total costs</b>	<b>65,0</b>	<b>65,3</b>	<b>74,7</b>		<b>-9,7</b>	<b>-9,3</b>	<b>-19,0</b>	<b>-12,7 %</b>
* Adjustments:								
2019 Other operating costs increased to eliminate Eucontrol membership fee and MET cost effect								



## Fintraffic ANS - Number of staff and FTE in 2020-2021



# OPERATING COSTS IN 2022-24



# Aspects taken into account in 2022-24 ANSP costbases – Staff costs

- Stop temporary layoffs gradually due to forecasted increase in traffic
- Possibly recruiting more staff if needed depending on traffic development
- Personnel fund and bonus system back to normal (to be decided by board of directors)
- According to collective labour agreement ATCO salaries increase by 0% in 2022. For Other staff groups the salary negotiations are still ongoing.
- Years in office effect the ATCO salaries according to collective labour agreement

Changes (%) in ATCO salary due to years in office (ATCC)						
Years in office						
	Basic	4 years	8 years	12 years	16 years	20 years
Change %		11,1 %	4,4 %	3,6 %	4,1 %	3,0 %



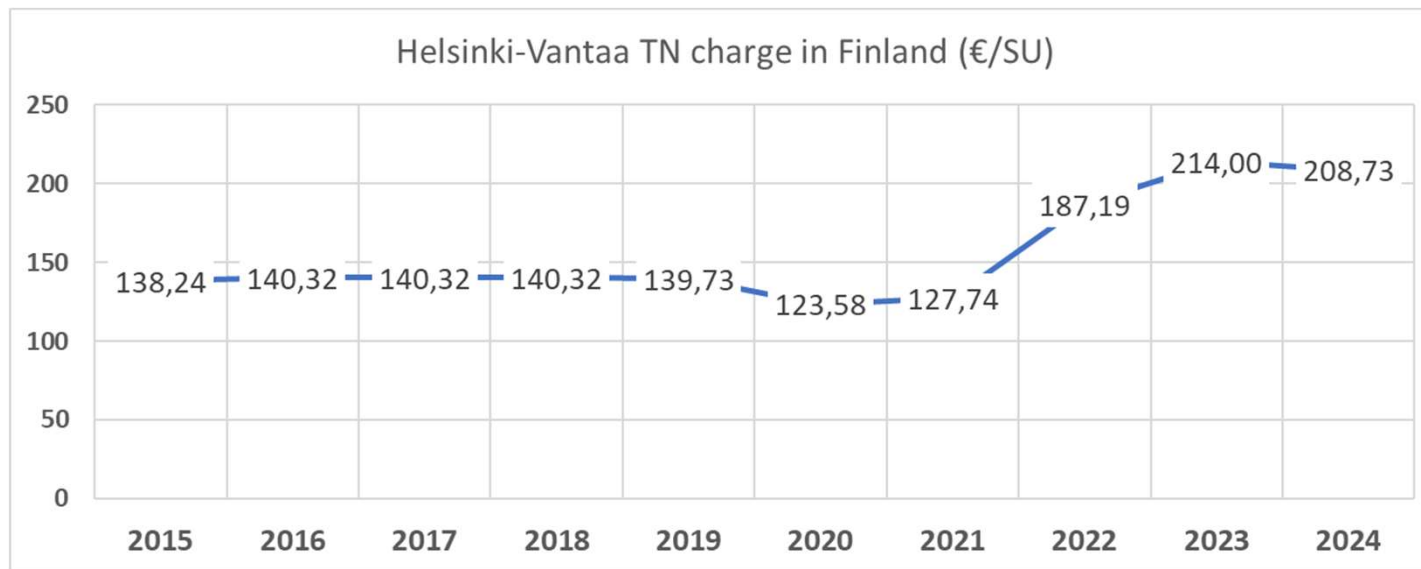
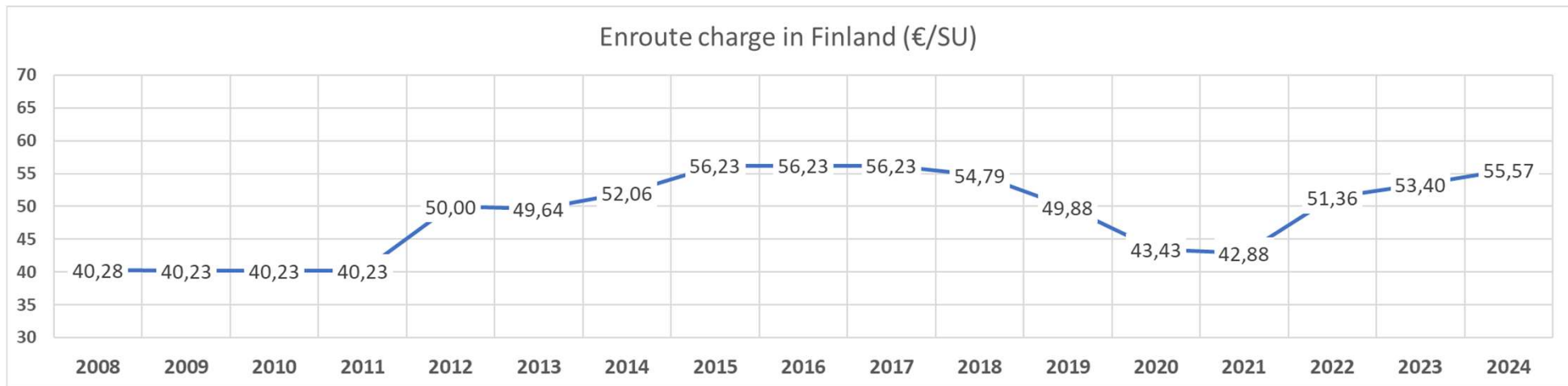
# Aspects taken into account in 2022-24 ANSP costbases – Other operating costs

- Cyber security improvements and datalink enlargement
- Fintraffic group costs allocated to Fintraffic ANS
- Increasing leasing costs (fixed assets fee) depending on Finavia's ANS investments in Helsinki-Vantaa and in 4 CIV/MIL airports
- Marketing and development fee paid to airport operator Finavia depending on traffic development
- Travel cost increase - back to pre-pandemic level?
- Possible rent increases
- Purchases from Luftfartsverket for handling the Kvarken area flights and purchases from military increase, when traffic increases.
- Inflation increases all costs



# ESTIMATED UNIT RATES





#### Why the increase?

- a) Statfor traffic forecast
- b) No more RP2 over-recoveries
- c) Staff is needed back to work





# Fintraffic ANS Revised RP3 performance plan consultation

Fintraffic ANS RP3 investment plan

# Fintraffic ANS investment

- Objectives for current and future investments are to:
  - Secure and optimise our ATM network to ensure continuity of safe operational service provision
  - Ensure the ATM infrastructure supports the required operational performance and cost-effective dynamic ATM service provision can be delivered in safe and environmentally friendly manner
  - Enabling digitalization of ATM
  - Comply with EU regulation



# Fintraffic ANS investment

- **SUR** domain capex/leasing investments in total – 14,5 M€
  - Replacement of 4 existing en-route conventional radars
  - Deployment of Wide Area Multilateration
  - SMR and MLAT system evolution and system upgrade due to end-of-life and changes in Helsinki-Vantaa airport infrastructure



# Fintraffic ANS investment

- **ATM** domain capex/leasing investments in total – 21,3 M€
  - IP-ATM network infrastructure with secured communication
  - Main ATM system evolution for dynamic cross-border service provision, safety nets and monitoring aids
  - ASM system upgrade to comply with effective and dynamic airspace management
  - Implementation of ADQ compliant AIM system
  - ATM system evolution for enhanced surface management, monitoring and runway safety
  - Hardware renewals due to end-of-life for main ATM system both in operational and training environment



# Fintraffic ANS investment

- **COM** domain capex/leasing investments in total 6,5 M€
  - Deployment of VoiP VCS system and radio equipment for new channel spacing requirement
  - IP-aviation network infrastructure with secured communication
  - DLS service extension
  - Services supporting the exchange of information over SWIM.



# Fintraffic ANS investment

- **NAV** domain capex/leasing investments in total 3,1 M€
  - CNS system renewals both in en-route and busy terminal areas, mainly conventional equipment
  - infrastructure evolution to comply with national NAV/SUR strategy



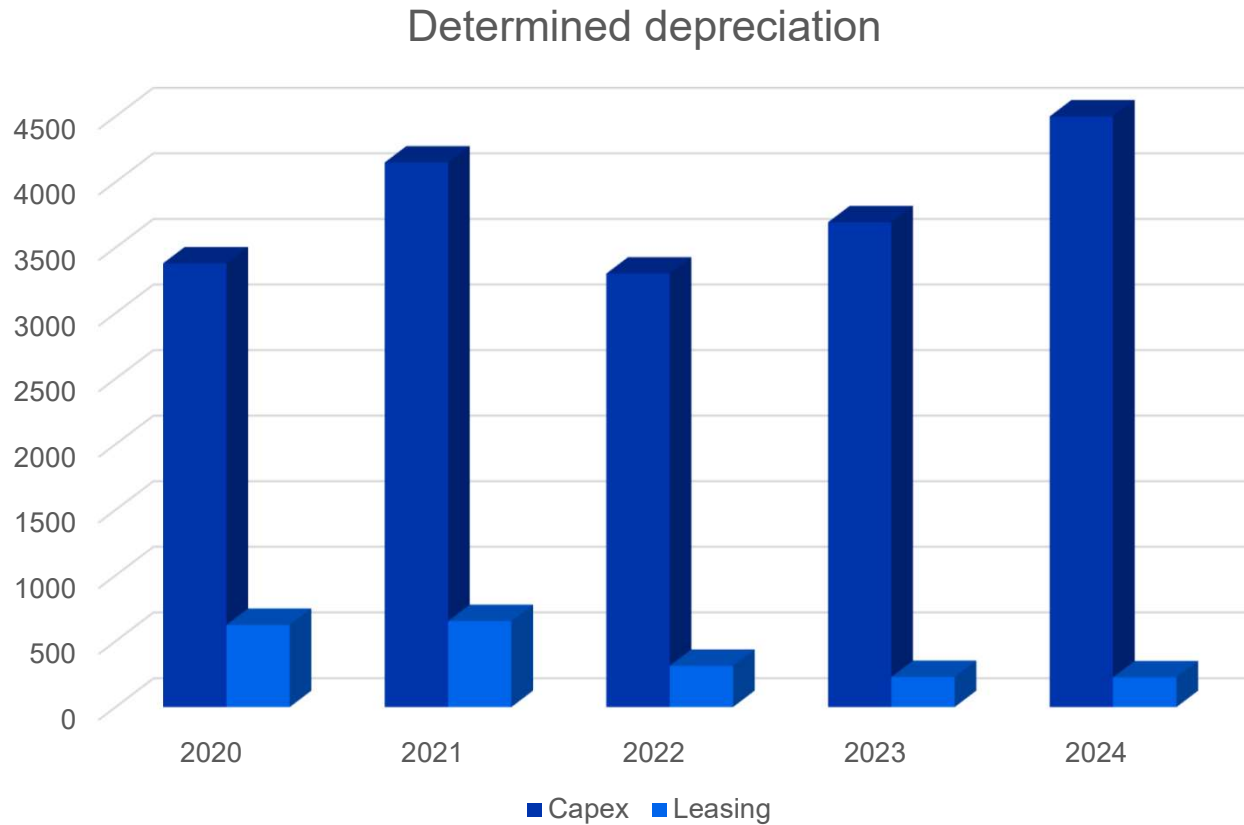
# Fintraffic ANS investment

- **TRG** domain capex/leasing investments in total 1,4 M€
- System evolutions and hardware lifecycle renewals to comply with training of operational and technical staff



# Fintraffic ANS investment

- **Determined depreciation capex/leasing**



# ATCC ACC capacity development 2004-2020

- **2004**                      **Capacity 50, number of ATCO's 84**
  - Investments/developments
    - new ATM system with interactive HMI, Monitoring Aids, Safety Nets, OLDI coordination...
- **2015**                      **Capacity 70, number of ATCO's 86**
  - Investments/evolution
    - Virtual Centre
    - Airspace evolution
    - Free Route Airspace
    - Datalink service
- **2020** →                      **Capacity 86, number of ATCOs 71**
  - Investments/evolution
    - Datalink extension
    - ATM system evolution
    - Dynamic cross-border service provision (Finland/Estonia)



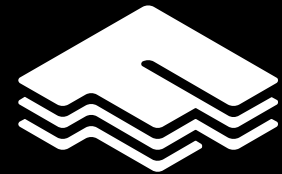
# Q&A

Fintraffic ANS RP3 investment plan

**Thank You for your  
attention!**

Kari Kerke, SVP CDO

[kari.kerke@fintraffic.fi](mailto:kari.kerke@fintraffic.fi)





2<sup>nd</sup> September 2021

## **Finnair's comments to the consultation on RP3 review**

The Finnish Transport and Communications Agency Traficom has published the revised Draft Performance Plan for Air Navigation Services for reference period 2020-2024 (RP3). The performance plan is a part of EU's Single European Sky (SES) performance scheme, which aims to improve performance of air navigation services across Europe. The performance plan includes targets in four key areas: safety, environment, capacity and cost-efficiency.

The COVID-19 pandemic has been very dramatic for the whole aviation industry and therefore it is essential to adjust the RP3 performance plan for air navigation services to reflect lower traffic volumes. Finnair supports the detailed comments made by IATA and agrees that the adjustments are necessary and would like to give following comments:

### **Cost efficiency and traffic forecast**

Operational expenses in general and staffing levels are increased a lot faster rate than traffic is expected to return. The revised plan should reflect better the traffic recovery especially because recovery has been slower in Finland than in many other countries. All the cost adjustment that can be made are vital to remain competitive in the coming years.

Finnair appreciates the support provided so far by the Finnish government, still it would be also important to consider the funding possibilities for state to cover COVID-19 related costs for air navigation services providers to support the recovery of the air transport in 2022.

### **Investment plan**

Investment plan needs to be reviewed very carefully. Investment plan shall only include absolutely necessary investments with explanation how it would be possible to measure the success rate.

Finnair supports investments into digitalization of Air Traffic Control and increased capability of better data sharing between different stakeholders. However, it would be important and necessary to find a way how to measure the implications of these investments in order to justify the priority.

Jari Paajanen  
VP Flight Operations  
Finnair Plc



**FINNAIR**

## Consultation meeting on RP3 draft performance plan

Date and time 24 August 2021

Place Teams

Participants Kari Siekkinen - Traficom  
Jani Luiro - Traficom  
Päivi Palokangas - Traficom  
Markku Tyynelä - Traficom  
Kimmo Lehtimäki - Fintraffic ANS  
Jarkko Luoma - Fintraffic ANS  
Kari Kerke - Fintraffic ANS  
Osmo Liimatainen - Fintraffic ANS  
Pasi Nikama - Fintraffic ANS  
Carita Nurmi - Fedex  
Heikki Isomaa - Finavia  
Jani Elasmaa - Finavia  
Pertti Määttänen - Finnair  
Riku Kohvakka - Finnair  
Timo Koskinen - Finnair  
Hendrik Stanch - IATA  
Ida-Reetta Virranjoki - Finnish Meteorological Institute  
Riikka Pusa - Finnish Meteorological Institute  
Krista Heinonen - Ministry of Transport and Communications  
Mika Sihvonen - Norwegian  
Ben Van Houtte - PRB  
Mark Scott - PRB  
Denis Huet - Eurocontrol

### Agenda

- Introduction + tour de table
- Transport administration in Finland
- Legal background + timeframes
- Revised draft performance plan + targets on each Key Performance Area (EU/National)
  - Safety
  - Environment
  - Capacity
  - Forecasts for traffic, service units and inflation
  - Cost-efficiency
    - Total cost base (en route + terminal)
    - Cost evolution
    - Fintraffic ANS- costs by nature
    - Fintraffic ANS – cost allocation
    - WACC (Weighted average cost of capital)
- Charging policy & traffic risk sharing
- Incentive schemes
- Fintraffic ANS: Investments and cost justifications
- Questions & Answers

- Next steps

**Outlines of the comments made during the consultations**

- IATA: Disagreement on WACC and KPMG's criteria and assumptions for the parameters; peer group (compared to airports), optimal gearing, asset beta, country risk premium.
- SAS: Supported IATA's comments and NSA's/member state's task to evaluate WACC calculations, raised up ANSP's risk sharing schemes compared to airlines.
- IATA: Comments on investments and asset base, especially assets under construction which leads to increase in the cost of capital.
- Fintraffic ANS: Explains that postponing of investments creates a burden in the future.
- Finnair: Also supports IATA's comments on investments and timing, reminding Finnair's low recovering due to strict travel restrictions and slow opening up of Asian markets.
- SAS: Supports IATA, would like to see some numbers of how the investments are paying off and the effect on ATCO-numbers.
- IATA: Comments the total costs that are increasing faster than traffic.
- SES: Asks Fintraffic ANS to provide some estimates of ATCO-figure development.
- Fintraffic ANS: Explains the ATCO layoffs and challenges with the forecasts.
- Finavia: Explains airport operator's point of view on required service level to enable commercial traffic.