

Enlarged Committee for Route Charges

17.11.23 ITEM 5

Information paper CER/121/2023/3812

FINAL ESTIMATES OF THE ROUTE CHARGES COST-BASES AND UNIT RATES

OVERVIEW – FINAL FIGURES (NOVEMBER 2023)

Submitted by the CRCO

This subject does not require a CER decision

KEY ELEMENTS

The final average unit rate for 2024 is equal to 56.76 EUR, increasing by 3.0% compared to 2023:

- The EUROCONTROL Member States traffic forecast is 2% lower compared to the STATFOR Base Scenario published in October 2023.
- For the calculation of their final forecast costs, the EUROCONTROL Member States estimated inflation at 6.6% on average in 2024.

The average unit rate of determined cost States will increase by 2.0% in 2024 compared to the 2023 unit rates presented in November 2022.

The average unit rate for States applying the full cost recovery method will increase by 18.6% in 2024 compared to the 2023 unit rates.







CRCO Overview – Final data November 2023

The CRCO overview on en-route charges, service units and unit rates covers the period 2019-2024. The final figures for 2024 are being presented by Member States at the 121st Session of the enlarged Committee, in line with the EUROCONTROL Principles.

SES States are presenting the 2024 unit rates based on their latest / submitted Performance Plans and in accordance with Commission Implementing Regulation 2020/1627 on "Exceptional Measures for the third reference period due to the Covid-19 pandemic".

The States applying the full cost recovery method have submitted their reporting tables according to the latest developments they foresee in the 2021-2028 timeframe.

- Ukraine has submitted Reporting Tables to present the provisional 2022 Actual costs for its two charging zones and notified the CRCO to use as their national unit rates for 2024 the 2022 national unit rates which were submitted at the 117th Session of the enlarged Committee. Due to the war, Ukraine cannot provide the data related to future years.
- Türkiye presented their final figures in euro instead of Turkish liras according to Paragraph 3.8 (High Inflation) of the EUROCONTROL Principles.
- The United Kingdom is the only EUROCONTROL Member State that applies the determined costs method under the EUROCONTROL Principles but is not subject to the EU SES rules on performance and charging. The United Kingdom notified that following a reference to the UK Competition and Markets Authority (CMA) of the UK RP3 performance plan decision and subsequent impact of covid-19, the UK RP3 performance plan was adopted covering the period 2020 to 2022. The UK performance plan for the following period, 2023 to 2027, known as NR23, has now been adopted, albeit after the start of the period. The Reporting Tables have been submitted according to this new plan and applied methodologies explained in the Additional Information.

PART I - Aggregated Data

1. TRAFFIC OVERVIEW

STATFOR has released a long-term forecast in October, which covers an updated forecast of En-route Service Units for 2023 and 2024.

The Autumn 2023 forecast is an update of previous 7-year forecast published in Spring 2023. The number of flights in 2023 and 2024 has been slightly revised downwards, reflecting a slight decrease in traffic compared to previous base scenario for 2023.

Some observations

Chart 1 below presents the actual service units 2019-2022 and the forecast service units 2023-2024.

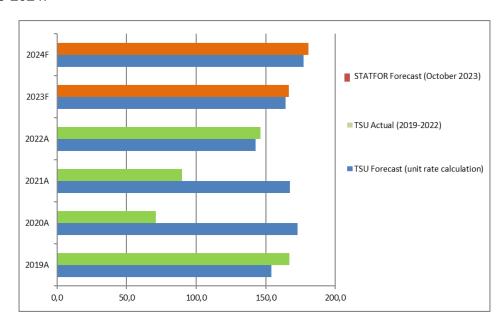


Chart 1: Total Service Units – All States (in million service units)

STATFOR forecasts (October 2023) is 2% higher compared to the service unit forecasts used by the States in the calculation of the 2024 unit rates.

Table 1 here below shows:

- a) The actual service units from 2019 until 2022 and the forecast service units as per STATFOR Base Scenario for the following years until 2024,
- b) The service units that the EUROCONTROL States have used for the calculation of their unit rates, i.e. the final unit rates 2019-2023 and the final figures for 2024.

Total Service Units - All States (in million)	2019A	2020A	2021A	2022A	2023F	2024F
TSU Actual (2019-2022) - STATFOR October Forecast (a)	167,0	70,8	89,9	146,4	166,8	180,9
% variation compared to 2019	100%	-58%	-46%	-12%	0%	8%
TSU - used in unit rate calculation (b)	154,0	172,8	167,3	142,6	164,2	177,4
(a)/(b)	8%	-59%	-46%	3%	1,6%	2,0%

Table 1: Total Service Units - All States

The EUROCONTROL Member States calculated their final unit rates for 2024 with service unit forecasts increased by 8% compared to the 2019 actual traffic (167 million in 2019 -180.9 million in 2024). The 2022 actual service units are 3% above the service units which were used for the calculation of the unit rates.

Tables 2 (a) and (b) display the same figures as in Table 1, respectively for the States applying the determined costs method (SES States and the United Kingdom) and for the States applying the full cost recovery method.

States applying the determined costs method

Total Service Units (Determined Costs)	2019A	2020A	2021A	2022A	2023F	2024F
TSU Actual (2019-2022) - STATFOR October Forecast (a)	143,3	57,7	72,5	119,3	134,4	145,2
% variation compared to 2019	100%	-60%	-49%	-17%	-6%	1%
TSU - used in unit rate calculation (b)	129,2	142,4	145,8	117,6	132,7	142,2
(a)/(b)	11%	-59%	-50%	1%	1%	2%

Table 2 (a): Total Service Units – States (Determined)

States applying the full cost recovery method

Total Service Units (Full Costs)	2019A	2020A	2021A	2022A	2023F	2024F
TSU Actual (2019-2022) - STATFOR October Forecast (a)	23,7	13,1	17,4	27,1	32,3	35,6
% variation compared to 2019	100%	-45%	-27%	14%	36%	50%
TSU - used in unit rate calculation (b)	24,8	30,4	21,5	25,0	31,5	35,2
(a)/(b)	-5%	-57%	-19%	8%	2%	1%

Table 2 (b): Total Service Units - States (Full Costs)

For the preparation of their 2024 final figures, the States applying the full costs recovery method are using similar forecast as STATFOR (Base Scenario). The forecast of States applying the determined cost method is slightly lower than the STATFOR Forecast.

2. EXCHANGE RATE VARIATIONS

States calculate their national cost bases and unit rates in national currency. For establishing a single EUROCONTROL bill in euros, national unit rates are converted into euros and adjusted monthly. Therefore, exchange rates variations have an impact on the euro amounts charged to users.

Table 3 below shows the variations in exchange rates between September 2022 (exchange rates used to establish the 2023 unit rates as approved in November 2022) and September 2023 (exchange rates used to establish the 2024 final rates).

Charging Zones	Sep-22	Sep-23	%	2023 UR National Approved	2023 UR National Adjusted
Appreciating Currency				прріотоц	rajactou
Albania	116,435	106,332	9,5%	50,27	55,05
Hungary	404,556	386,286	4,7%	33,68	35,27
Poland	4,74077	4,59894	3,1%	44,29	45,66
United Kingdom	0,874368	0,861581	1,5%	86,17	87,45
Czech Republic	24,5473	24,3528	0,8%	68,08	68,62
Sw itzerland	0,96316	0,95950	0,4%	120,15	120,61
Depreciating Currency					
Türkiye	18,1151	28,7568	-37,0%	36,53	23,01
Norw ay	10,1648	11,4432	-11,2%	53,41	47,44
Sw eden	10,7784	11,8272	-8,9%	79,89	72,81
Ukraine	36,4830	39,3572	-7,3%	51,55	47,79
Armenia	402,953	411,704	-2,1%	49,58	48,53
Romania	4,90607	4,96400	-1,2%	46,46	45,92
Georgia	2,78206	2,79556	-0,5%	32,37	32,21

Table 3: Exchange rates of September 2022 and September 2023

In six charging zones, the national currency appreciated against the euro between September 2022 and September 2023. Everything else being equal, higher amounts in euro should be billed in 2023 as compared to the November 2022 forecasts (approved unit rates for 2023).

In seven charging zones, the national currency depreciated against the euro between September 2022 and September 2023. Everything else being equal, lower amounts in euro should be billed in 2023 as compared to the November 2022 forecasts (approved unit rates for 2023).

3. <u>VARIATIONS IN UNIT RATES, SERVICE UNITS AND CHARGES BETWEEN 2023</u> <u>AND 2024</u>

Table 4 below shows the variations in States' unit rates expressed in national currencies between 2023 and 2024. In order to allow for comparisons between charging zones and for the calculation of averages, the CRCO converted the 2023 and the 2024 unit rates into euro at September 2023 exchange rates.

Charges displayed in Table 4 are equal to the product of the respective unit rates and forecast service units. Charges are in million euros, total service units in millions and unit rates in euro. The 2023 inflation rates have been updated according to the latest submissions of the States.

The average inflation in the EUROCONTROL area (6.6% in 2024) is the weighted average of inflation rates (average weighted by route charge amounts expressed in euro) as communicated by the States.

			Comparisor	1 2023 and 202	4 based on € ra	ates at Septem	ber 2023 exc	hange rate:	S		
	2023 FIN	N (XR Septembe	er 2023)	2024 FI	N (XR Septembe	er 2023)	Varia	ations 2024/2	2023	Inflatio	on rate
	Charges	TSU	Rates	Charges	TSU	Rates	Charges	TSU	Rates	2023	2024
Determined Costs											
Austria	218.4	3.27	66.82	230.7	3.50	65.83	6%	7%	-1%	2.0%	2.0%
Belgium-Luxembourg	276.5	2.44	113.12	286.9	2.56	112.08	4%	5%	-1%	4.7%	2.1%
Bulgaria	136.1	3.71	36.69	126.8	4.13	30.74	-7%	11%	-16%	2.0%	2.0%
Croatia	89.0	1.95	45.74	81.3	2.25	36.10	-9%	16%	-21%	1.9%	2.2%
Cyprus	60.5	2.13	28.42	77.8	2.24	34.82	29%	5%	23%	2.3%	2.0%
Czech Republic	150.7	2.20	68.62	166.0	2.51	66.04	10%	15%	-4%	2.0%	2.0%
Denmark	101.1	1.66	60.91	120.3	1.78	67.45	19%	7%	11%	1.5%	1.6%
Estonia	31.1	0.87	35.95	46.1	0.91	50.53	48%	5%	41%	2.1%	1.9%
Finland	47.6	1.09	43.83	66.7	1.17	57.13	40%	7%	30%	1.6%	1.8%
France	1,547.1	21.02	73.60	1,592.2	22.46	70.88	3%	7%	-4%	1.3%	1.4%
Germany	1,084.2	14.86	72.95	1,270.9	15.86	80.14	17%	7%	10%	1.5%	1.7%
Greece	167.6	6.58	25.45	198.5	6.78	29.27	18%	3%	15%	1.3%	1.6%
Hungary	101.6	2.88	35.27	89.7	3.18	28.19	-12%	10%	-20%	3.3%	3.0%
Ireland	128.8	4.88	26.37	140.8	4.89	28.78	9%	0%	9%	2.0%	2.0%
Italy	755.8	10.46	72.28	775.6	11.28	68.77	3%	8%	-5%	1.2%	1.2%
Latvia	23.7	0.55	43.30	25.3	0.57	44.42	7%	4%	3%	3.9%	3.1%
Lithuania	29.4	0.42	70.73	27.4	0.43	63.06	-7%	5%	-11%	8.5%	3.0%
Malta	24.6	1.01	24.41	29.1	1.04	27.87	18%	4%	14%	2.8%	2.1%
Netherlands	283.2	3.08	91.91	313.4	3.29	95.15	11%	7%	4%	1.6%	1.6%
Norway	109.9	2.32	47.44	116.8	2.47	47.24	6%	7%	0%	2.0%	2.0%
Poland	217.5	4.76	45.66	278.9	5.13	54.38	28%	8%	19%	2.5%	2.5%
Portugal Lisboa	169.4	3.58	47.30	171.5	3.88	44.15	1%	8%	-7%	1.3%	1.4%
Romania	254.0	5.53	45.92	261.8	5.83	44.95	3%	5%	-2%	4.0%	3.0%
Slovak Republic	68.8	0.95	72.23	65.1	1.09	59.47	-5%	15%	-18%	2.0%	2.1%
Slovenia	37.2	0.57	65.23	40.6	0.61	67.04	9%	6%	3%	1.6%	1.8%
Spain Canarias	73.9	1.61	45.88	89.3	1.78	50.27	21%	10%	10%	1.5%	1.6%
1 '	635.6	11.64	54.62	777.8	12.42	62.62	21%	7%	15%		1.6%
Spain Continental	236.5	3.25	72.81	251.0		74.55	6%	4%	2%	1.5% 2.2%	1.7%
Sweden	236.5	1.69	120.61	251.0	3.37 1.81	119.43	6%	7%	-1%	0.8%	0.9%
Switzerland United Kingdom	1,024.5	11.72	87.45	1,128.7	12.93	87.29	10%	10%	0%	6.1%	0.9%
-											
Determined Costs	8,288.1	132.7	62.48	9,063.4	142.2	63.75	9.4%	7.2%	2.0%	5.2%	4.6%
Full Costs											
Albania	31.0	0.56	55.05	33.8	0.69	48.86	9%	23%	-11%	6.5%	6.5%
Armenia	8.3	0.17	48.53	8.4	0.18	47.44	2%	4%	-2%	3.5%	4.0%
Bosnia-Herzegovina	41.2	1.34	30.69	42.7	1.63	26.22	3%	21%	-15%	6.0%	3.0%
Georgia	31.7	0.98	32.21	31.4	1.33	23.70	-1%	35%	-26%	5.9%	3.2%
Moldova	5.2	0.02	227.55	5.2	0.02	227.55	0%	0%	0%	15.7%	5.3%
North Macedonia	20.6	0.41	49.65	23.1	0.49	47.40	12%	18%	-5%	10.0%	4.3%
Portugal Santa Maria	55.2	5.55	9.94	51.1	6.10	8.38	-7%	10%	-16%	5.7%	3.1%
Serbia/Montenegro/KFOR	113.2	2.87	39.43	123.1	3.33	37.00	9%	16%	-6%	12.2%	5.3%
Türkiye	451.2	19.61	23.01	684.5	21.44	31.93	52%	9%	39%	67.2%	44.9%
Ukraine	0.0	0.00	47.79	0.0	0.00	47.79	0%	0%	0%	N/A	N/A
Ukraine South	0.0	0.00	18.73	0.0	0.00	18.73	0%	0%	0%	N/A	N/A
Full Cost Recovery	757.6	31.5	24.03	1,003.4	35.2	28.51	32.4%	11.6%	18.6%	39.1%	43.1%
2023 Charging Zones	9,045.7	164.2	55.09	10,066.8	177.4	56.76	11.3%	8.0%	3.0%	7.9%	6.6%

Table 4: Comparison between 2023 and 2024 forecast charges, total service units and unit rates

The weighted average unit rate for the EUROCONTROL area will reach EUR 56.76 in 2024, increasing by 3.0% in nominal terms compared to 2023:

- For the determined costs States, the weighted average unit rate will reach EUR 63.75 in 2024, increasing by 2.0% in nominal terms compared to 2023;
- For the full cost recovery States, the weighted average unit rate will reach EUR 28.51 in 2024, increasing by 18.6% in nominal terms compared to 2023.
 The variation in Turkish Liras (37% depreciation) is remarkable in one year.

4. 2024 ADJUSTMENTS AND OTHER REVENUES

2024 Unit Rate Calculation

The following tables show the calculation of the unit rate taking into account the adjustments as indicated on the reporting tables.

Charging Zones	Determined /Forecast Costs	Adjustments /Carry Overs	Other rev.	Grand Total (1+2-3)	Service Units	National Unit Rates	Forecast/ Det. Unit Cost
	(1)	(2)	(3)	(4)	(5)	(4/5)	(1/5)
Determined Costs	7,922,890 100%	1,225,596 15%	-84,585 1%	9,063,901 114%	142,169	63.75	55.73
Full Costs	935,743 100%	67,561 7%	-779 0%	1,003,359 107%	35,198	28.51	26.58
All charging zones	8,858,632 100%	1,293,157 15%	-85,364 1%	10,067,261 114%	177,367	56.76	49.95

Table 5 (a) – Overview of 2024 Unit Rate Calculation

Table 5 (a) above shows the forecast/determined costs, the sum of carry-overs and other adjustments as well as the other revenues taken into account for the calculation of the 2024 unit rates. For the charging zones subject to the determined costs method, adjustments and other revenues represent in total 15% of the determined costs (7% of the forecast costs for the full costs recovery charging zones).

Adjustments Breakdown

Charging Zones	Inflation adjus. (13.2)	Traffic Risk Sharing (13.3) and Traffic (13.7)	Cost exempt from risk sharing and Modulation of Charges and incentives	Difference in revenue from temp (13.10)	Carryovers (under/over recov.)	Total Adjustments	Total adj./National Costs
Determined Costs	424,361 35%	-155,754 -13%	38,966 -3%	918,024 75%	0	1,225,596 100%	15%
Full Costs	0	0	0	0	67,561	67,561 100%	7%
All charging zones	424,361 33%	-155,754 -12%	38,966 -3%	918,024 71%	67,561 -5%	1,293,157 100%	15%

Table 5 (b) – Detailed adjustments taken into account in the 2024 unit rates

Table 5 (b) presents the breakdown of the total adjustments and carry-overs as reported in column (2) of Table 5 (a) and taken into account in the calculation of the 2024 unit rates.

5. NOVEMBER SUBMISSION

Almost all States met the reporting deadline, all the States have successfully transferred the data via the new ETNA Common Portal. States and Users Associations have received the published reporting tables at the same time.

6. ANNEXES

<u>Annex I</u> shows the determined costs, forecast total service units, forecast chargeable costs and unit rates of all States for the 2020-2024 period. Costs and unit rates have been converted into euro at the September 2023 exchange rates.

The maps at **Annex II** present the unit rates and service units.

PART II - ADJUSTMENTS

1. **DETAILS OF ADJUSTMENTS**

Table 6 shows the forecast/determined costs, the sum of carry-overs and other adjustments as well as the other revenues taken into account for the calculation of the 2024 unit rates. Amounts have been converted into euro at the September 2023 exchange rates.

Charging Zones	Forecast/ Determined Costs	Adjustments	Cross- financing between charging zones	Other revenues	Grand Total (1+2+3- 4)	Service Units	Reduction in Unit Rate	National Unit Rates (5/6)	Forecast/ Det. Unit Cost (1/6)	Adjust. /SU (2+3+4)/6
	1	2	3	4	5	6	7	8	9	10
Austria	195,740	38,160		-3,200	230,700	3,505		65.83	55.85	9.98
BelgLuxembourg	252,086	36,045		-1,198	286,933	2,560		112.08	98.47	13.61
Bulgaria	128,892	-415		-1,626	126,851	4,127		30.74	31.24	-0.49
Croatia	97,081	-10,098		-5,724	81,258	2,251		36.10	43.13	-7.03
Cyprus	70,838	6,984		0	77,823	2,235		34.82	31.70	3.12
Czech Republic	138,599	28,445		-671	166,373	2,514	-0.13	66.04	55.12	11.05
Denmark	99,061	22,816		-1,537	120,341	1,784		67.45	55.52	11.93
Estonia	29,614	16,499		-15	46,098	912		50.53	32.46	18.07
Finland	50,404	20,489		-4,217	66,675	1,167		57.13	43.19	13.94
France	1,407,431	190,647		-5,841	1,592,237	22,464		70.88	62.65	8.23
Germany	1,033,552	253,817		-16,486	1,270,883	15,858		80.14	65.18	14.97
Greece	204,268	-474		-5,291	198,502	6,781		29.27	30.12	-0.85
Hungary	105,821	-13,471		-2,659	89,691	3,182		28.19	33.26	-5.07
Ireland	129,584	12,878		-1,648	140,814	4,893		28.78	26.48	2.30
Italy	689,088	88,800		-2,313	775,575	11,278		68.77	61.10	7.67
Latvia	22,829	2,488		0	25,317	570		44.42	40.05	4.36
Lithuania	26,083	1,469		-128	27,423	435		63.06	59.97	3.08
Malta	25,626	3,465		0	29,091	1,044		27.87	24.55	3.32
Netherlands	259,058	61,665		-7,288	313,435	3,294		95.15	78.65	16.51
Norway	110,849	6,093		-163	116,778	2,472		47.24	44.84	2.40
Poland	206,643	78,472		-6,179	278,937	5,130		54.38	40.29	14.09
Portugal Lisboa	154,573	16,939		0	171,512	3,884		44.15	39.79	4.36
Romania	243,459	19,269		-873	261,856	5,825		44.95	41.80	3.16
Slovak Republic	63,499	1,618		-43	65,073	1,094		59.47	58.03	1.44
Slovenia	36,617	5,784		-1,789	40,612	606		67.04	60.44	6.59
Spain Can.	101,565	8,487	-20,484	-322	89,246	1,775		50.27	57.20	-6.94
Spain Con.	633,678	128,457	20,484	-4,820	777,800	12,421		62.62	51.02	11.60
Sweden	188,896	69,152		-7,023	251,024	3,367		74.55	56.10	18.45
Switzerland	185,302	30,973		0	216,275	1,811		119.43	102.32	17.10
United Kingdom	1,032,153	100,145		-3,529	1,128,768	12,930		87.29	79.83	7.47
Determined Costs	7,922,890	1,225,596		-84,585	9,063,901	142,169		63.75	55.73	8.03
All :	100%	-15%		1%	114%	004		40.00	E4 00	2.04
Albania	35,868	-2,084		0.0	33,772	691		48.86	51.89	-3.01
Armenia	8,420	0		0.0	8,421	178		47.44	47.44	0.00
Bosnia Herzegovina	44,429	-1,775		0.0	42,657	1,627		26.22	27.31	-1.09
Georgia	33,447	-2,047.35		0.0	31,403	1,325		23.70	25.24	-1.55
Moldova	5,234	0		0.0	5,234	23		227.55	227.55	0.00
North Macedonia	23,131	0		0.0	23,131	488		47.40	47.40	0.00
Portugal Santa Maria	60,894	-5,086		0.0	51,133	6,102		8.38	9.98	-0.83
Serbia/Montenegro/KFOR	121,308	2,530		-779	123,062	3,326		37.00	36.47	0.53
Türkiye	608,247	76,022		0.0	684,547	21,439		31.93	28.37	3.55
Ukraine								47.79	47.79	0.00
Ukraine South								18.73	18.73	0.00
Full Costs	935,743 100%	67,561 7.2%	0	-779 -0.1%	1,003,359 107.2%	35,198		28.51	26.58	1.92
All charging zones	8,858,632	1,293,157		-85,364	10,067,261	177,367		56.76	49.95	7.29
	100%	-14.6%		1.0%	113.6%					

Table 6 – Overview of the 2024 unit rate calculation

2. <u>DETAIL OF ADJUSTMENTS AND CARRY-OVERS</u>

Table 7 details the carry-overs and bonuses/penalties as shown in Column 2 of Table 6. This table only shows States applying the determined costs method, references are the row numbers in Reporting Table 2.

Charging Zones	13.2 Inflation adjustment	13.3 Traffic risk sharing adjustment	13.4 Differences in costs	13.5 Financial incentives + 13.6 Modulation of charges	13.7 Traffic adjustments	Over(-) or under(+) recoveries : amounts carried over to year n	13.8 Other revenues	Costs of Exempted Flights	13.9 Cross- financing between charging zones	Difference in revenue from temporary application of unit rate (Art.	Total (Exc.Other revenues)
	1	2	3	4	5	6	7	8	9	10	11
Austria	10,395	-7,585	13,166	0	-2,052	0	-3,200	0	0	24,236	38,160
BelgLuxembourg	5,154	0	-1,359	0	-51	0	-1,198	0	0	32,301	36,045
Bulgaria	10,717	-20,351	-955	0	-2,341	0	-1,626	0	0	12,514	-415
Croatia	7,747	-27,201	-216	0	-2,324	0	-5,724	0	0	11,896	-10,098
Cyprus	1,074	190	-816	0	502	0	0	0	0	6,035	6,984
Czech Republic	11,239	0	-2,379	0	303	0	-671	0	0	19,282	28,445
Denmark	5,246	6,022	-406	0	-1,716	0	-1,537	0	0	13,671	22,816
Estonia	3,100	7,375	-168	0	1,516	0	-15	0	0	4,677	16,499
Finland	2,351	11,200	-11	0	94	0	-4,217	0	0	6,855	20,489
France	60,961	-82,254	3,392	0	-4,079	0	-5,841	0	0	212,626	190,647
Germany	70,834	39,719	598	0	-4,793	0	-16,486	0	0	147,459	253,817
Greece	6,773	-7,404	-992	0	1,325	0	-5,291	0	0	-176	-474
Hungary	9,501	-23,831	-1,935	0	-8,445	0	-2,659	0	0	11,239	-13,471
Ireland	6,774	-2,938	4	0	-810	0	-1,648	0	0	9,848	12,878
Italy	33,337	-42,963	-6,244	0	-12,952	0	-2,313	0	0	117,622	88,800
Latvia	925	0	-154	0	-511	0	0	0	0	2,227	2,488
Lithuania	136	0	-43	0	-404	0	-128	0	0	1,779	1,469
Malta	228	2,667	-1,986	0	661	0	0	0	0	1,896	3,465
Netherlands	24,119	0	366	0	-12	0	-7,288	0	0	37,192	61,665
Norway	4,765	0	1,446	0	-119	0	-163	0	0	0	6,093
Poland	17,815	29,066	148	0	2,908	0	-6,179	0	0	28,536	78,472
Portugal Lisboa	7,736	-8,720	903	0	-1,898	0	0	0	0	18,918	16,939
Romania	4,332	-2,641	-873	0	-2,639	0	-873	0	0	21,090	19,269
Slovak Republic	5,636	-9,190	-229	0	-450	0	-43	0	0	5,850	1,618
Slovenia	2,495	-2,061	-452	0	-220	0	-1,789	0	0	6,023	5,784
Spain Can.	6,851	-17,515	3,774	0	3,543	0	-322	0	-20,484	11,833	8,487
Spain Con.	42,373	0	10,244	0	-13,367	0	-4,820	0	20,484	89,207	128,457
Sweden	4,807	8,524	15,010	0	2,165	0	-7,023	0	0	38,647	69,152
Switzerland	4,290	1,297	-2,292	0	107	0	0	0	0	27,570	30,973
United Kingdom	52,650	20,966	11,423	0	17,935	0	-3,529	0		-2,829	100,145
Determined Costs	424,361	-127,628	38,966	0	-28,126	0	-84,585	0	0	918,024	1,225,596

<u>Table 7 – Detail of carry-overs and bonuses or penalties</u>

ANNEX I to 3812

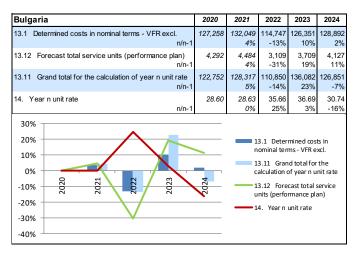
Albania	2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR costs	26,165	20,844	25,482	31,059	35,868
n/n-1		-20%	22%	22%	15%
1.7 Total service units (Forecast)	535	355	463	564	691
n/n-1		-34%	30%	22%	23%
1.6 Chargeable costs - total	26,341	21,033	26,328	30,934	33,618
n/n-1		-20%	25%	17%	9%
1.9 Unit rate	49.50	59.52	57.11	55.05	48.86
n/n-1		20%	-4%	-4%	-11%
30% 20% 10% 0% -10% -20% -30% -40%	2024		ded.of V 1.6 Cha total 1.7 Tota (Forecas	argeable o	costs -

Armenia		2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR cos	ts	8,205	3,639	5,452	8,249	8,420
	n/n-1		-56%	50%	51%	2%
1.7 Total service units (Forecast)		202	70	101	170	178
	n/n-1		-65%	44%	68%	4%
1.6 Chargeable costs - total		8,060	3,636	5,957	8,237	8,409
	n/n-1		-55%	64%	38%	2%
1.9 Unit rate		39.92	52.07	59.04	48.53	47.4
	n/n-1		30%	13%	-18%	-2%
50%				1.6 Cha	argeable o	osts -
0% 50 50 50 50 50 50 50 50 50 50 50 50 50	2023	2024	_	1.7 Tota (Forecas	al service t)	units
-50%	7		_	•1.9 Uni	it rate	
-100%						

Austria	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	218,420	232,272 6%	201,741 -13%		195,740 0%
13.12 Forecast total service units (performance plan) n/n-1	3,403	3,480 2%	3,004 -14%	3,269 9%	3,505 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	202,315	214,683 6%	202,258 -6%		230,700 6%
14. Year n unit rate n/n-1	59.45	61.69 4%	67.33 9%		
15% 10% 5% 0% -5% 8 8 8 8	2024		nominal te 13.11 Gra calculation 13.12 For	ermined cos erms - VFR e and total fo n of year n u ecast total for mance pi n unit rate	r the unit rate service

Belgium- Luxembourg	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	249,314	266,927 7%	250,216 -6%	262,100 5%	252,086 -4%
13.12 Forecast total service units (performance plan) n/n-1	2,759	2,811 2%	2,108 -25%	2,404 14%	2,560 6%
13.11 Grand total for the calculation of year n unit rate n/n-1	251,100	279,048 11%	248,869 -11%	269,153 8%	286,933 7%
14. Year n unit rate n/n-1	91.01	99.26 9%	118.09 19%	111.96 -5%	112.08 0%
30% 20% 10% 0% -10% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2024	13 ca ———————————————————————————————————	ominal terr 3.11 Gran Ilculation of 3.12 Fored	mined cost ms - VFR ex d total for of year n ur cast total s mance pla unit rate	cl. the hit rate ervice

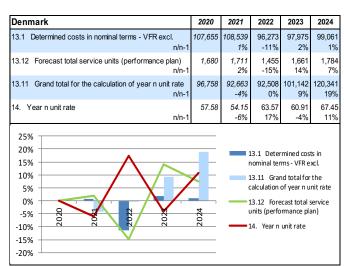
Bosnia Herzegovina	2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR costs		34,643 -12%	37,704 9%	40,731 8%	44,429 9%
1.7 Total service units (Forecast)	1,251	860	1,007	1,343	1,627
	n-1	-31%	17%	33%	21%
1.6 Chargeable costs - total n/r	39,305	32,959	40,217	41,193	42,620
	n-1	-16%	22%	2%	3%
1.9 Unit rate n/r	31.46	38.37	39.97	30.69	26.22
	n-1	22%	4%	-23%	-15%
40% 30% 20% 10% -10% -20% -30% -40%	2023	t	1.6 Ch	ital costs prio VFR costs largeable cost tal service ur st) nit rate	sts - total



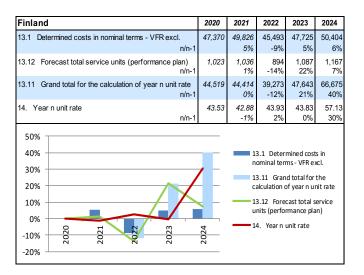
Croatia	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl.	102,137	104,828	86,364		97,081
n/n-1		3%	-18%	8%	4%
13.12 Forecast total service units (performance plan) n/n-1	2,223	2,294 3%	1,582 -31%	,	2,251 16%
13.11 Grand total for the calculation of year n unit rate n/n-1	91,480	86,275 -6%	79,517 -8%	89,015 12%	81,258 -9%
14. Year n unit rate	41.15	37.61	50.26		36.10
n/n-1		-9%	34%	-9%	-21%
40% 30% 20% 10% -10% -20%	2024	13.: calc	ninal term 11 Grand ulation of 12 Forec	nined cost ns - VFR e: d total for f year n u ast total s mance pla init rate	the nit rate ervice
-30%					

Cyprus	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	60,342	64,501 7%	60,181 -7%	67,188 12%	70,838 5%
13.12 Forecast total service units (performance plan) n/n-1	2,129	2,219 4%	1,837 -17%	2,129 16%	2,235 5%
13.11 Grand total for the calculation of year n unit rate n/n-1	42,687	42,202 -1%	49,454 17%	60,502 22%	77,823 29%
14. Year n unit rate n/n-1	20.05	19.02 -5%	26.92 42%	28.42 6%	34.82 23%
50% 40% 30% 20% 10%	=	nom	Determinal term Grand	s - VFR ex	cl.

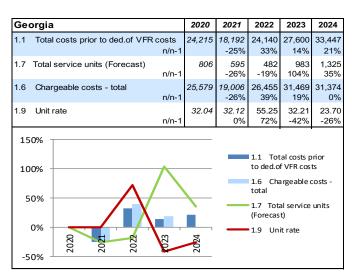
Czech Republic	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	159,434	169,137 6%	127,017 -25%	136,051 7%	138,599 2%
13.12 Forecast total service units (performance plan) n/n-1	3,119	3,345 7%	1,841 -45%	2,196 19%	2,514 15%
13.11 Grand total for the calculation of year n unit rate n/n-1	148,553	164,150 10%	118,536 -28%	150,671 27%	166,373 10%
14. Year n unit rate n/n-1	47.63	49.07 3%	64.39 31%	68.62 7%	66.04 -4%
20% 0% -20% -40%	2024	1 c:	ominal ter 3.11 Grar alculation of 3.12 Fore	mined cost ms - VFR e. d total for of year n u cast total s mance pla unit rate	the nit rate service



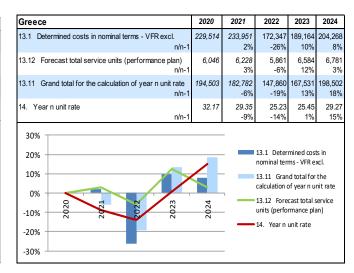
Estonia	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	32,677	34,597 6%	26,786 -23%	28,336 6%	29,614 5%
13.12 Forecast total service units (performance plan) n/n-1	937	954 2%	727 -24%	865 19%	912 5%
13.11 Grand total for the calculation of year n unit rate n/n-1	29,399	31,950 9%	23,818 -25%	31,102 31%	46,098 48%
14. Year n unit rate n/n-1	31.38	33.49 7%	32.77 -2%	35.95 10%	50.53 41%
60% 40% 20% -20% -20% -40%		13.1 calcumits	inal term 1 Grand ulation of 2 Foreca	ined costs s - VFR ex total for t year n ur ist total so nance pla nit rate	cl. :he it rate ervice



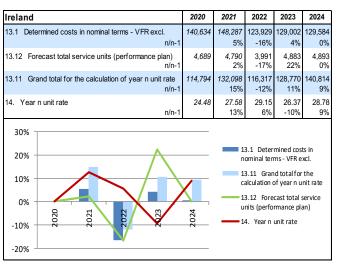
France	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	1,382,371	1,410,874 2%		1,382,095 2%	1,407,431 2%
13.12 Forecast total service units (performance plan) n/n-1	22,569	23,021 2%	16,990 -26%	21,020 24%	22,464 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	1,324,569	1,355,335 2%			1,592,237 3%
14. Year n unit rate n/n-1	58.69	58.87 0%	73.02 24%	73.60 1%	
30% 20% 10% -10% -20% -30%	2024	:	nominal tem 13.11 Grand calculation o		e rate



Germany	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	1,100,887	1,170,924 6%	977,378 -17%	1,010,116 3%	
13.12 Forecast total service units (performance plan) n/n-1	15,367	15,653 2%	13,644 -13%	14,863 9%	15,858 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	977,465	1,045,585 7%	850,607 -19%	1,084,159 27%	
14. Year n unit rate n/n-1	63.61	66.80 5%	62.35 -7%		
30% 20% 10% 0% -10%	2024	- 11 C	nominal tern 13.11 Grand alculation o		e rate



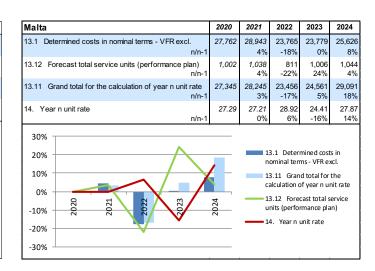
Hungary		2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl.	n/n-1	108,739	121,236 11%	99,561 -18%		
13.12 Forecast total service units (performance plan)	n/n-1	3,597	3,751 4%	2,419 -35%		3,182 10%
13.11 Grand total for the calculation of year n unit rate	n/n-1	84,966	103,761 22%	99,781 -4%		89,69 -129
14. Year n unit rate	n/n-1	23.62	27.66 17%	41.23 49%		28.19 -20%
60% 40% 20% 0% -20%		2024	13 ca ———————————————————————————————————	ominal ter 3.11 Gran alculation 3.12 Fore	mined cost ms - VFR end total for of year n u cast total s rmance pla unit rate	the nit rate



Italy	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	689,162	698,831 1%		673,862 4%	689,088 2%
13.12 Forecast total service units (performance plan) n/n-1	10,417	10,657 2%	8,507 -20%	10,457 23%	11,278 8%
13.11 Grand total for the calculation of year n unit rate n/n-1	687,706	667,965 -3%		755,877 18%	775,575 3%
14. Year n unit rate n/n-1	66.02	62.68 -5%	75.42 20%	72.28 -4%	68.77 -5%
30% 20% 10% 0% -10% 20 20 20 20 20 20 20 20 20 20 20 20 20	2024	1 c	3.1 Deter ominal ten 3.11 Grar alculation of 3.12 Fore nits (perfo 4. Year n	ms - VFR e nd total for of year n u cast total : rmance pla	the nit rate service

Latvia	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	28,775	30,743 7%	20,051 -35%	22,708 13%	22,829 1%
13.12 Forecast total service units (performance plan) n/n-1	971	985 1%	466 -53%	548 18%	570 4%
13.11 Grand total for the calculation of year n unit rate n/n-1	26,482	28,723 8%	18,654 -35%	23,727 27%	25,317 7%
14. Year n unit rate n/n-1	27.27	29.16 7%	40.03 37%	43.30 8%	44.42 3%
60% 40% 20% 0% -20% -20% -40% -60%	2024	13 ca	ominal ten 3.11 Gran alculation of 3.12 Fore	mined cost ms - VFR e: d total for of year n u cast total s rmance pla unit rate	xcl. the nit rate service

Lithuania		2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl.	n/n-1	27,242	28,302 4%	21,945 -22%	24,906 13%	26,083 5%
13.12 Forecast total service units (performance plan)	n/n-1	660	670 1%	372 -44%	416 12%	435 5%
13.11 Grand total for the calculation of year n unit rate	n/n-1	24,278	25,909 7%	19,693 -24%	29,406 49%	27,423 -7%
14. Year n unit rate	n/n-1	36.81	38.70 5%	52.91 37%	70.73 34%	63.06 -11%
60% 40% 20% 0% -20% -20% -40%	2024		13.1 calc rate 13.1 unit	Determinal terminal t	total for year n ui ast total s	the nit ervice



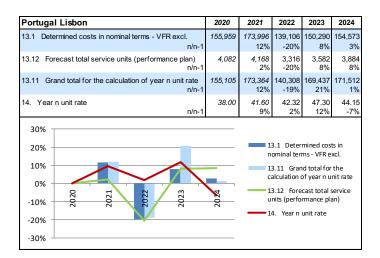
Moldova		2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR	costs n/n-1	6,134	<i>4,218</i> -31%	3,858 -9%	5,234 36%	5,234 0%
1.7 Total service units (Forecast)	n/n-1	96	61 -37%	72 19%	23 -68%	23 0%
1.6 Chargeable costs - total	n/n-1	6,134	<i>4,218</i> -31%	3,858 -9%	5,234 36%	5,234 0%
1.9 Unit rate	n/n-1	63.90	69.59 9%	53.58 -23%	227.55 325%	227.55 0%
400%			_	■ 1.1 To	tal costs p	rior to
300%			_	ded.of \	/FR costs	
200%		/	-	1.6 Ch total	a rgeable o	osts -
100%				1.7 Tot (Fore cas	tal service st)	units
0%	22	ξij.	_	- 1.9 Ur	nit rate	
-100%	202	2023	_			

Netherlands	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	252,880	256,434 1%		253,428 3%	259,058 2%
13.12 Forecast total service units (performance plan) n/n-1	3,418	3,466 1%	2,593 -25%		3,294 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	229,871	238,243 4%	212,930 -11%		313,435 11%
14. Year n unit rate n/n-1	67.26	68.74 2%	82.12 19%		95.15 4%
40% 30% 20% 10% -10% -20% -30%	2024	1 c	ominal ter 3.11 Grar alculation 3.12 Fore	mined cos ms - VFR e nd total for of year n u ecast total s irmance pla unit rate	the nit rate service

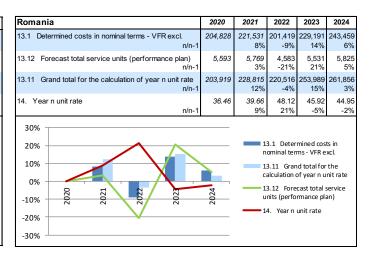
Norway	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	111,680	124,657 12%	106,135 -15%	108,147 2%	110,849 2%
13.12 Forecast total service units (performance plan) n/n-1	2,462	2,484 1%	2,048 -18%	2,316 13%	2,472 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	114,824	131,092 14%	108,743 -17%	109,903 1%	
14. Year n unit rate n/n-1	46.64	52.77 13%	47.74 -10%		47.24 0%
20% 15% 10% 5% 0% -5% -5% -10% -10% -15% -20%	2024	1 c	3.1 Deter ominal ten 3.11 Gran alculation of 3.12 Fore nits (perfo 4. Year n	ms - VFR e nd total for of year n u cast total rmance pl	the init rate

North Macedonia	2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR costs n/n-1	18,595	13,594 -27%	17,173 26%	20,596 20%	23,131 12%
1.7 Total service units (Forecast) n/n-1	400	250 -37%	322 29%	415 29%	488 18%
Chargeable costs - total n/n-1	17,932	12,720 -29%	17,276 36%	20,588 19%	23,107 12%
1.9 Unit rate n/n-1	44.83	50.88 13%	53.70 6%	49.65 -8%	47.40 -5%
20% 0% -20% -40% -60%	7073	40244	1.6 total 1.7 (Fore	Total costs of VFR costs Chargeable Fotal service cast) Unit rate	costs -

Poland	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	221,434	231,355 4%	190,448 -18%	198,748 4%	206,643 4%
13.12 Forecast total service units (performance plan) n/n-1	5,124	5,271 3%	3,991 -24%	4,763 19%	5,130 8%
13.11 Grand total for the calculation of year n unit rate n/n-1	217,012	224,306 3%	182,462 -19%	217,453 19%	278,937 28%
14. Year n unit rate n/n-1	42.35	42.55 0%	45.72 7%	45.66 0%	54.38 19%
40% 30% 20% 10% 0% -10% 20% 20% 20% 20% 20% 20% 20% 2	2024	1 c ——1	ominal ter 3.11 Grar alculation 3.12 Fore	mined cos ms - VFR e nd total for of year n u cast total : mance pl: unit rate	the nit rate service



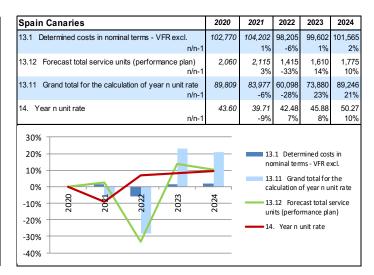
Portugal Santa Maria	2020	2021	2022	2023	2024
1.1 Total costs prior to ded.of VFR cos n/n-		48,402 -11%	48,374 0%	54,640 13%	60,894 11%
1.7 Total service units (Forecast) n/n-	5,783	2,470 -57%	3,865 56%	5,554 44%	6,650 20%
1.6 Chargeable costs - total n/n-	44,390	37,623 -15%	50,218 33%	54,391 8%	54,955 1%
1.9 Unit rate n/n-	7.78	15.73 102%	13.39 -15%		8.38 -16%
150% 100% 50% 0% -50%	2024		to ded.o 1.6 Cha total 1.7 Tot (Forecas	tal costs p f VFR cos arge able o al service tt) it rate	ts costs -



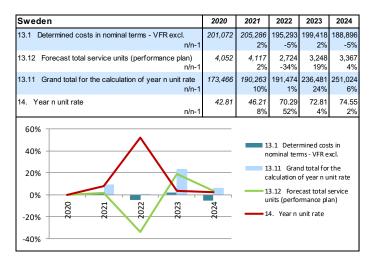
94,737 2,795 86,663	90,617 -4% 2,006 -28%	90,855 0% 2,202 10%	17% 2,871	121,308 14% 3,326
· ·	2,006 -28%	2,202	2,871	
06 663		. 0 , 0	30%	16%
00,003	83,077 -4%	92,915 12%	113,071 22%	122,938 9%
31.03	41.45 34%	42.25 2%	39.43 -7%	37.00 -6%
2024		1.6 Ch total 1.7 To (Foreca	VFR costs nargeable of tal service st)	costs -
		31.03 41.45 34%	31.03 41.45 42.25 34% 2% 1.1 To ded of total 1.7 To (Foreca	31.03 41.45 42.25 39.43 34% 2% -7% 1.1 Total costs p ded.of VFR costs 1.6 Chargeable total 1.7 Total service (Forecast)

Slovak Republic	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	69,356	71,044 2%	59,384 -16%	62,056 5%	63,499 2%
13.12 Forecast total service units (performance plan) n/n-1	1,452	1,491 3%	798 -46%	953 19%	1,094 15%
13.11 Grand total for the calculation of year n unit rate n/n-1	66,365	71,041 7%	54,687 -23%	68,811 26%	65,073 -5%
14. Year n unit rate n/n-1	45.72	47.66 4%	68.53 44%	72.23 5%	59.4 -18%
60% 40% 20% 0% 0% 0% 0% 0% 0% 0% 0% 0%	2024		nominal te 13.11 Gra calculation 13.12 For	ermined cos erms - VFR e and total for n of year n u recast total formance pl	r the init rate service

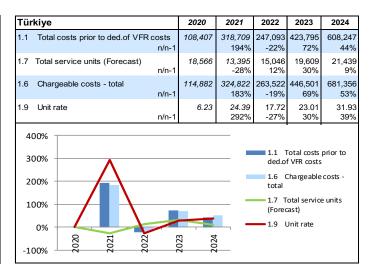
Slovenia	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	36,017	36,582 2%	34,865 -5%	36,235 4%	36,617 1%
13.12 Forecast total service units (performance plan) n/n-1	630	642 2%	536 -17%	571 7%	606 6%
13.11 Grand total for the calculation of year n unit rate n/n-1	32,601	30,762 -6%	32,753 6%	37,234 14%	40,612 9%
14. Year n unit rate n/n-1	51.79	47.89 -8%	61.11 28%	65.23 7%	67.04 3%
30% 20% 10% -10%	2024	11 ca	ominal ten 3.11 Gran alculation of	mined cost ms - VFR ex d total for of year n ur cast total s rmance pla unit rate	ccl. the nit rate ervice



Spain Continental	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	669,403	672,463 0%			
13.12 Forecast total service units (performance plan) n/n-1	12,172	12,436 2%	11,190 -10%	11,638 4%	12,421 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	620,127	561,478 -9%	550,699 -2%	635,603 15%	
14. Year n unit rate n/n-1	50.95	45.15 -11%	49.21 9%	54.62 11%	62.62 15%
25% 20% 15% 10% 5% 0% -5% 80 80 80 80 80 80 80 80 80 80 80 80 80	2024	11 cc	ominal ter 3.11 Gran alculation 3.12 Fore	mined cos ms - VFR e nd total for of year n u cast total : mance pla unit rate	xcl. the nit rate service



Switzerland	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	207,451	206,381 -1%		185,651 -4%	
13.12 Forecast total service units (performance plan) n/n-1	1,801	1,836 2%	1,594 -13%		1,811 7%
13.11 Grand total for the calculation of year n unit rate n/n-1	186,084	188,231 1%	173,600 -8%	203,698 17%	
14. Year n unit rate n/n-1	103.33	102.54 -1%	98.34 -4%	120.61 23%	ı
25% 20% 15% 10% 5% 0% -5% 00% -5% 20 20 20 20 20 20 20 20 20 20 20 20 20 2	2024	11 ca	ominal ter 3.11 Gran alculation (3.12 Fore	mined cos ms - VFR e nd total for of year n u cast total s rmance pla unit rate	the nit rate



United Kingdom	2020	2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. n/n-1	889,147	901,448 1%	927,955 3%	1,013,817 9%	1,032,153 2%
13.12 Forecast total service units (performance plan) n/n-1	12,648	12,891 2%	13,183 2%	11,956 -9%	12,930 8%
13.11 Grand total for the calculation of year n unit rate n/n-1	797,522	800,068 0%	901,494 13%	1,044,055 16%	1,128,768 8%
14. Year n unit rate n/n-1	63.06	62.06 -2%	68.38 10%	87.21 28%	87.29 0%
30% 20% 10% 0% 00 10 20 20 20 20 20 20 20 20 20 20 20 20 20	2024	- - - - -	nominal to 13.11 Gr calculatio 13.12 Fo (performa	ermined costs erms - VFR ex and total for t n of year n un recast total se ance plan) n unit rate	cl. he it rate

66.04

67.04

27:87

65.83

68.77

70.88

62.62

59.47

28.19

26.22

37.00

48.86

47.40

44.95

30.74

Azores: 8.38

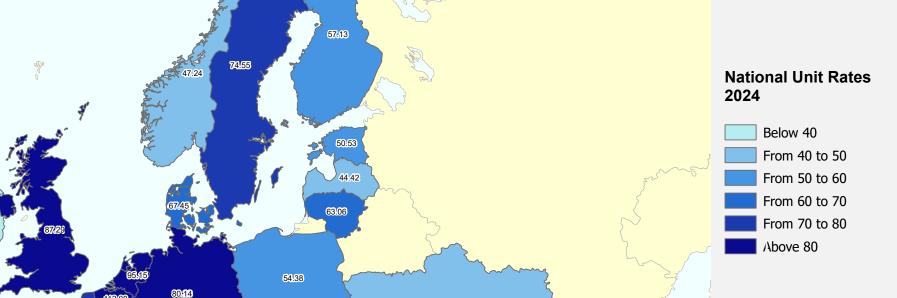
Canarias: 50.27

Ukraine: 18.73

South



ANNEX II to 3812



47.79

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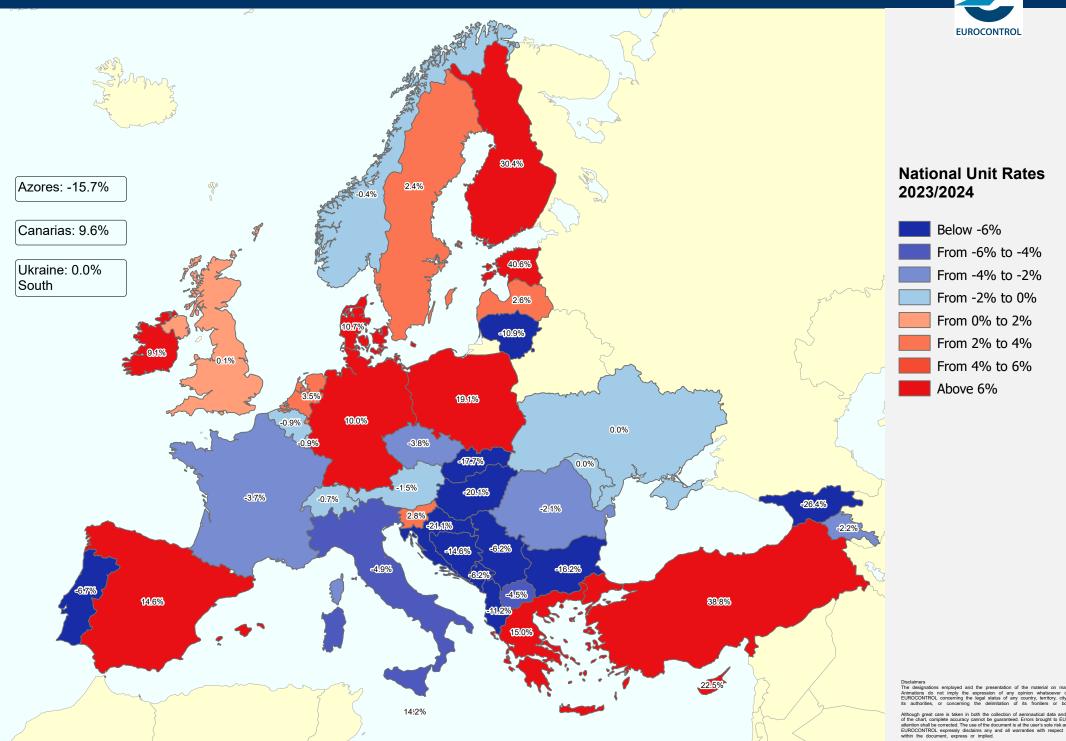
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23.70

31.93

34.82

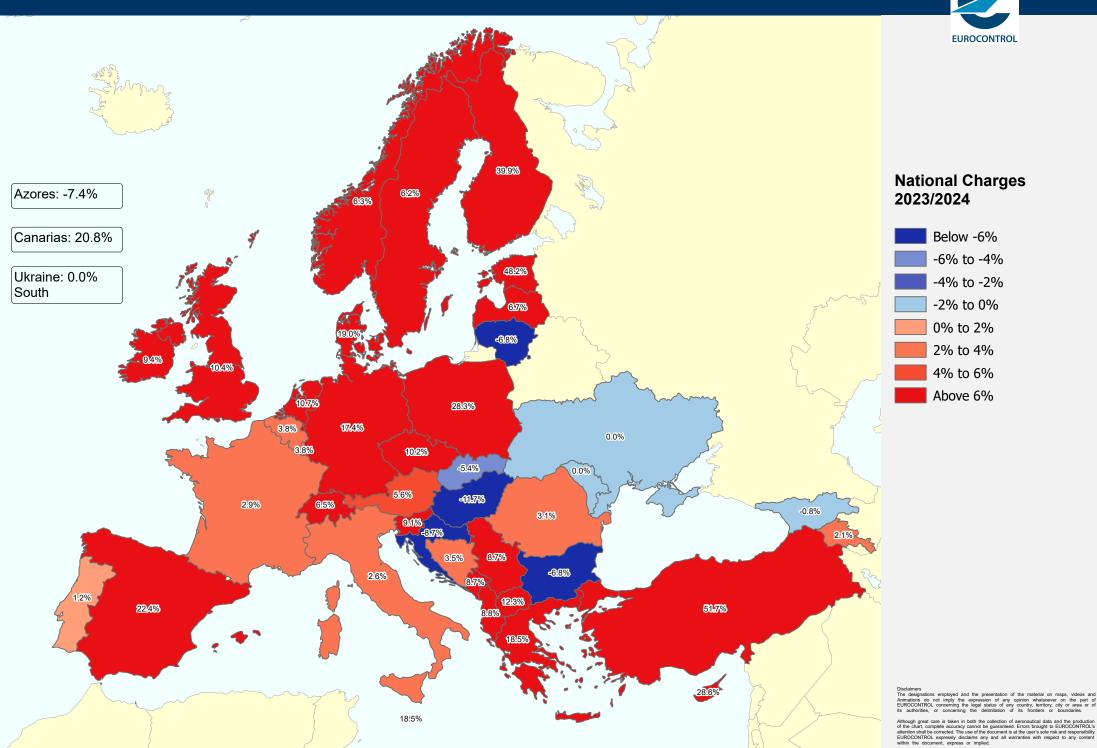




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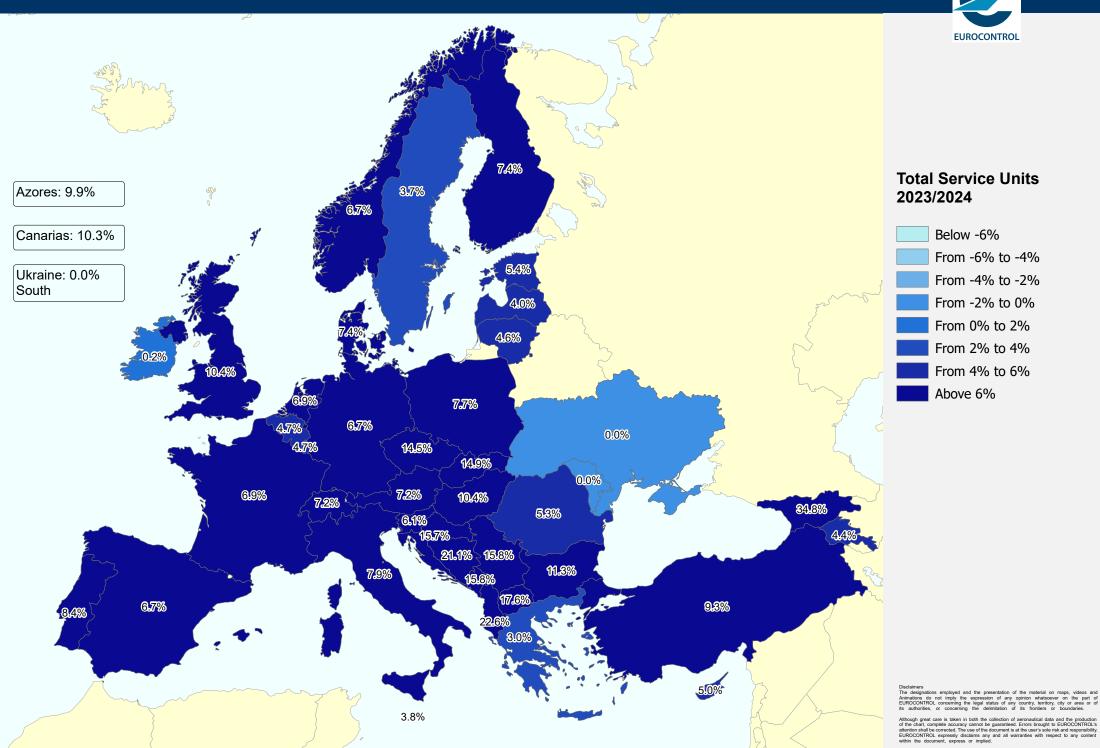
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