

NETWORK STATEMENT 2023



10

CATALOGUES

CATALOGUE 1 / Descriptive Leaflet Catalogue

CATALOGUE 2 / Capacity Offer at Service Facilities

CATALOGUE 3 / Sidings attached to Coordinated Stations

CATALOGUE 4 / General Interest Rail Network Capacity Restrictions

CATALOGUE 5 / Traction Power Supply Cost Tables

CATALOGUE 5

Traction Power Supply Cost Tables



SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN SEPTEMBER 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc_m^{ca} (Wh/TKB)	Freight rg_m^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	90.67917376	17.90173523	45.16954036	5.87204025	16.13197870	2.09715723
jun-23	112.46453884	22.04184023	44.38236622	5.76970761	15.85084508	2.06060986
jul-23	108.51220145	34.75694683	46.11244021	5.99461723	16.46872864	2.14093472
aug-23	114.88418100	19.24208170	46.57388236	6.05460471	16.63352942	2.16235882
sep-23	124.67230022	19.16209732	45.53472686	5.91951449	16.26240245	2.11411232
oct-23	117.57*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	125.80*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	134.85*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 10/20/2023 are not binding to invoice. The energy cost estimate from October 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 October 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN SEPTEMBER 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE_{cc}^{cc} €/MWh net**	$TATR_{cc}^{cc}$ €/MWh net**	Freight rc_{cc}^{cc} (Wh/TKB)	Freight rg_{cc}^{cc} (Wh/TKB)	Long distance rc_{ld}^{cc} (Wh/TKB)	Long distance rg_{ld}^{cc} (Wh/TKB)	Medium Distance rc_{md}^{cc} (Wh/TKB)	Medium Distance rg_{md}^{cc} (Wh/TKB)	Commuter rc_{cc}^{cc} (Wh/TKB)	Commuter rg_{cc}^{cc} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	96.11163925	27.62834983	19.04080026	1.90408003	30.46528041	3.04652804	34.27344046	3.42734405	49.50608067	4.95060807
jun-23	117.62878721	32.01700067	18.94797395	1.89479739	30.31675831	3.03167583	34.10635310	3.41063531	49.26473226	4.92647323
jul-23	114.28483016	46.63550214	19.59911535	1.95991154	31.35858456	3.13585846	35.27840763	3.52784076	50.95769991	5.09576999
aug-23	120.10760225	33.37337452	19.80696332	1.98069633	31.69114131	3.16911413	35.65253397	3.56525340	51.49810463	5.14981046
sep-23	129.22795901	33.47636259	19.46260817	1.94626082	31.14017308	3.11401731	35.03269471	3.50326947	50.60278125	5.06027813
oct-23	121.16*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	129.69*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	139.11*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 10/20/2023 are not binding to invoice. The energy cost estimate from October 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 October 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN SEPTEMBER 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.22793441	26.59758610	52.27281186	5.22728119	20.10492764	2.01049276
jun-23	116.11350035	29.68456744	52.25126272	5.22512627	20.09663951	2.00966395
jul-23	112.80057400	47.19136793	52.86298002	5.28629800	20.33191539	2.03319154
aug-23	118.95995893	29.45692783	53.79409895	5.37940989	20.69003806	2.06900381
sep-23	127.85556522	31.12339978	54.09862127	5.40986213	20.80716203	2.08071620
oct-23	121.80*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	130.37*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	139.80*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 10/20/2023 are not binding to invoice. The energy cost estimate from October 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 October 2023

SC-2 TRACTION CURRENT SUPPLY

PREVIOUS MONTHLY AND ANNUAL
PUBLICATIONS OF THE FORECAST OF
THE RATES OF THE SUPPLY COSTS IN
ELECTRIFIED LINES IN ALTERNATE AND
DIRECT CURRENT



/ 1. GRAL.INF.

/ 2. INFRASTR.

/ 3. ACCES.COND.

/ 4. CAPACITY
ALLOCATION

/ 5. SERVICES
AND CHARGES

/ 6. OPERATIONS

/ 7. SERVICE
FACILITIES

/ 8. ANNE.

/ 9. MAPS

/ 10. CATALOG.

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN AUGUST 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc_m^{ca} (Wh/TKB)	Freight rg_m^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	90.67917376	17.90173523	45.16954036	5.87204025	16.13197870	2.09715723
jun-23	112.46453884	22.04184023	44.38236622	5.76970761	15.85084508	2.06060986
jul-23	108.51220145	34.75694683	46.11244021	5.99461723	16.46872864	2.14093472
aug-23	114.88418100	19.24208170	46.57388236	6.05460471	16.63352942	2.16235882
sep-23	120.19*	20.36*	48.28*	6.28*	17.24*	2.24*
oct-23	120.11*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	131.81*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	137.95*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 09/20/2023 are not binding to invoice. The energy cost estimate from September 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 September 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JULY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	90.67917376	17.90173523	45.16954036	5.87204025	16.13197870	2.09715723
jun-23	112.46453884	22.04184023	44.38236622	5.76970761	15.85084508	2.06060986
jul-23	108.51220145	34.75694683	46.11244021	5.99461723	16.46872864	2.14093472
aug-23	115.73*	21.00*	48.28*	6.28*	17.24*	2.24*
sep-23	115.46*	20.36*	48.28*	6.28*	17.24*	2.24*
oct-23	120.87*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	139.84*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	145.49*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 08/24/2023 are not binding to invoice. The energy cost estimate from August 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 28 August 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JUNE 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	90.67917376	17.90173523	45.16954036	5.87204025	16.13197870	2.09715723
jun-23	112.46453884	22.04184023	44.38236622	5.76970761	15.85084508	2.06060986
jul-23	110.39*	33.49*	48.28*	6.28*	17.24*	2.24*
aug-23	112.36*	21.00*	48.28*	6.28*	17.24*	2.24*
sep-23	114.17*	20.36*	48.28*	6.28*	17.24*	2.24*
oct-23	122.69*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	146.45*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	157.98*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 07/24/2023 are not binding to invoice. The energy cost estimate from July to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 July 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MAY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc_m^{ca} (Wh/TKB)	Freight rg_m^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	90.67917376	17.90173523	45.16954036	5.87204025	16.13197870	2.09715723
jun-23	115.47*	19.90*	48.28*	6.28*	17.24*	2.24*
jul-23	131.47*	33.49*	48.28*	6.28*	17.24*	2.24*
aug-23	129.40*	21.00*	48.28*	6.28*	17.24*	2.24*
sep-23	133.61*	20.36*	48.28*	6.28*	17.24*	2.24*
oct-23	134.05*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	146.45*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	157.34*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 06/21/2023 are not binding to invoice. The energy cost estimate from June to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 June 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN APRIL 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc_m^{ca} (Wh/TKB)	Freight rg_m^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	89.60993382	16.68956965	45.74209924	5.94647290	16.33646401	2.12374032
may-23	91.41*	18.45*	48.28*	6.28*	17.24*	2.24*
jun-23	101.48*	20.56*	48.28*	6.28*	17.24*	2.24*
jul-23	103.03*	34.89*	48.28*	6.28*	17.24*	2.24*
aug-23	106.33*	21.47*	48.28*	6.28*	17.24*	2.24*
sep-23	113.87*	21.13*	48.28*	6.28*	17.24*	2.24*
oct-23	130.91*	17.50*	48.28*	6.28*	17.24*	2.24*
nov-23	130.92*	25.27*	48.28*	6.28*	17.24*	2.24*
dec-23	130.93*	35.00*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 05/24/2023 are not binding to invoice. The energy cost estimate from May to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 30 May 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MARCH 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc_m^{ca} (Wh/TKB)	Freight rg_m^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	138.70949326	26.17228847	46.86160410	6.09200853	16.73628718	2.17571733
apr-23	92.13*	17.17*	48.28*	6.28*	17.24*	2.24*
may-23	118.52*	18.45*	48.28*	6.28*	17.24*	2.24*
jun-23	128.84*	20.56*	48.28*	6.28*	17.24*	2.24*
jul-23	140.20*	34.89*	48.28*	6.28*	17.24*	2.24*
aug-23	137.84*	21.47*	48.28*	6.28*	17.24*	2.24*
sep-23	137.10*	21.13*	48.28*	6.28*	17.24*	2.24*
oct-23	153.62*	17.50*	48.28*	6.28*	17.24*	2.24*
nov-23	153.63*	25.27*	48.28*	6.28*	17.24*	2.24*
dec-23	153.65*	35.00*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 04/24/2023 are not binding to invoice. The energy cost estimate from April to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 April 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN FEBRUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	164.11947310	37.87818892	48.18288397	6.26377492	17.20817285	2.23706247
mar-23	139.89*	25.69*	48.28*	6.28*	17.24*	2.24*
apr-23	113.36*	17.17*	48.28*	6.28*	17.24*	2.24*
may-23	129.18*	18.45*	48.28*	6.28*	17.24*	2.24*
jun-23	136.15*	20.56*	48.28*	6.28*	17.24*	2.24*
jul-23	139.58*	34.89*	48.28*	6.28*	17.24*	2.24*
aug-23	135.97*	21.47*	48.28*	6.28*	17.24*	2.24*
sep-23	135.71*	21.13*	48.28*	6.28*	17.24*	2.24*
oct-23	147.43*	17.50*	48.28*	6.28*	17.24*	2.24*
nov-23	147.44*	25.27*	48.28*	6.28*	17.24*	2.24*
dec-23	147.45*	35.00*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 03/22/2023 are not binding to invoice. The energy cost estimate from March to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 24 March 2023

SC-2_SUPPLY COSTS ON ALTERNATING CURRENT POWER LINES

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JANUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	137.19428181	34.53217285	49.00866226	6.37112609	17.50309366	2.27540218
feb-23	160.84*	30.47*	48.28*	6.28*	17.24*	2.24*
mar-23	144.04*	25.69*	48.28*	6.28*	17.24*	2.24*
apr-23	124.62*	16.72*	48.28*	6.28*	17.24*	2.24*
may-23	140.63*	17.79*	48.28*	6.28*	17.24*	2.24*
jun-23	150.82*	19.90*	48.28*	6.28*	17.24*	2.24*
jul-23	155.23*	33.49*	48.28*	6.28*	17.24*	2.24*
aug-23	155.23*	21.00*	48.28*	6.28*	17.24*	2.24*
sep-23	155.24*	20.36*	48.28*	6.28*	17.24*	2.24*
oct-23	164.53*	16.88*	48.28*	6.28*	17.24*	2.24*
nov-23	164.54*	23.87*	48.28*	6.28*	17.24*	2.24*
dec-23	164.55*	33.24*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 02/20/2023 are not binding to invoice. The energy cost estimate from February to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 23 February 2023

SC-2 ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR ELECTRIFIED LINES IN ALTERNATING CURRENT FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	176.88*	31.53*	48.28*	6.28*	17.24*	2.24*
feb-23	181.31*	36.31*	48.28*	6.28*	17.24*	2.24*
mar-23	184.91*	32.57*	48.28*	6.28*	17.24*	2.24*
apr-23	178.01*	29.51*	48.28*	6.28*	17.24*	2.24*
may-23	205.78*	28.18*	48.28*	6.28*	17.24*	2.24*
jun-23	214.21*	27.17*	48.28*	6.28*	17.24*	2.24*
jul-23	233.70*	38.32*	48.28*	6.28*	17.24*	2.24*
aug-23	233.70*	25.69*	48.28*	6.28*	17.24*	2.24*
sep-23	233.70*	26.15*	48.28*	6.28*	17.24*	2.24*
oct-23	255.65*	23.71*	48.28*	6.28*	17.24*	2.24*
nov-23	255.66*	28.09*	48.28*	6.28*	17.24*	2.24*
dec-23	255.66*	36.79*	48.28*	6.28*	17.24*	2.24*

* Reference Prices/Ratios estimated as of 16/12/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 28 December 2022

SC-2 ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR ELECTRIFIED LINES IN ALTERNATING CURRENT FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios *			
Month of Service	TES^{ca} €/MWh net**	$TATRS^{ca}$ €/MWh net**	Passengers rc^{ca} (Wh/TKB)	Passengers rg^{ca} (Wh/TKB)	Freight rc^{ca} (Wh/TKB)	Freight rg^{ca} (Wh/TKB)
jan-23	192.85*	36.51*	52.15*	6.78*	18.63*	2.42*
feb-23	192.85*	41.33*	52.15*	6.78*	18.63*	2.42*
mar-23	192.85*	37.57*	52.15*	6.78*	18.63*	2.42*
apr-23	244.16*	34.50*	52.15*	6.78*	18.63*	2.42*
may-23	244.16*	33.16*	52.15*	6.78*	18.63*	2.42*
jun-23	244.16*	32.16*	52.15*	6.78*	18.63*	2.42*
jul-23	253.23*	43.36*	52.15*	6.78*	18.63*	2.42*
aug-23	253.23*	30.69*	52.15*	6.78*	18.63*	2.42*
sep-23	253.23*	31.16*	52.15*	6.78*	18.63*	2.42*
oct-23	264.63*	28.72*	52.15*	6.78*	18.63*	2.42*
nov-23	264.64*	33.08*	52.15*	6.78*	18.63*	2.42*
dec-23	264.64*	41.76*	52.15*	6.78*	18.63*	2.42*

* Reference Prices/Ratios estimated as of 05/09/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 7 December 2022

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN AUGUST 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE_{m}^{cc} €/MWh net**	$TATR_{m}^{cc}$ €/MWh net**	Freight rc_m^{cc} (Wh/TKB)	Freight rg_m^{cc} (Wh/TKB)	Long distance rc_{ld}^{cc} (Wh/TKB)	Long distance rg_{ld}^{cc} (Wh/TKB)	Medium Distance rc_{md}^{cc} (Wh/TKB)	Medium Distance rg_{md}^{cc} (Wh/TKB)	Commuter rc_c^{cc} (Wh/TKB)	Commuter rg_c^{cc} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	96.11163925	27.62834983	19.04080026	1.90408003	30.46528041	3.04652804	34.27344046	3.42734405	49.50608067	4.95060807
jun-23	117.62878721	32.01700067	18.94797395	1.89479739	30.31675831	3.03167583	34.10635310	3.41063531	49.26473226	4.92647323
jul-23	114.28483016	46.63550214	19.59911535	1.95991154	31.35858456	3.13585846	35.27840763	3.52784076	50.95769991	5.09576999
aug-23	120.10760225	33.37337452	19.80696332	1.98069633	31.69114131	3.16911413	35.65253397	3.56525340	51.49810463	5.14981046
sep-23	123.88*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	123.79*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	135.94*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	142.33*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 09/20/2023 are not binding to invoice. The energy cost estimate from September 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 September 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JULY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	96.11163925	27.62834983	19.04080026	1.90408003	30.46528041	3.04652804	34.27344046	3.42734405	49.50608067	4.95060807
jun-23	117.62878721	32.01700067	18.94797395	1.89479739	30.31675831	3.03167583	34.10635310	3.41063531	49.26473226	4.92647323
jul-23	114.28483016	46.63550214	19.59911535	1.95991154	31.35858456	3.13585846	35.27840763	3.52784076	50.95769991	5.09576999
aug-23	119.24*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	118.96*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	124.59*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	144.29*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	150.18*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 08/24/2023 are not binding to invoice. The energy cost estimate from August 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 28 August 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JUNE 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	96.11163925	27.62834983	19.04080026	1.90408003	30.46528041	3.04652804	34.27344046	3.42734405	49.50608067	4.95060807
jun-23	117.62878721	32.01700067	18.94797395	1.89479739	30.31675831	3.03167583	34.10635310	3.41063531	49.26473226	4.92647323
jul-23	113.69*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	115.74*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	117.62*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	126.48*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	151.16*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	163.16*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 07/24/2023 are not binding to invoice. The energy cost estimate from July to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 July 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MAY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	96.11163925	27.62834983	19.04080026	1.90408003	30.46528041	3.04652804	34.27344046	3.42734405	49.50608067	4.95060807
jun-23	118.97*	32.00*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	135.60*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	133.46*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	137.83*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	138.29*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	151.16*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	162.50*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 06/21/2023 are not binding to invoice. The energy cost estimate from June to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 June 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN APRIL 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE_{cc}^{cc} €/MWh net**	$TATR_{cc}^{cc}$ €/MWh net**	Freight rc_m^{cc} (Wh/TKB)	Freight rg_m^{cc} (Wh/TKB)	Long distance rc_{ld}^{cc} (Wh/TKB)	Long distance rg_{ld}^{cc} (Wh/TKB)	Medium Distance rc_{md}^{cc} (Wh/TKB)	Medium Distance rg_{md}^{cc} (Wh/TKB)	Commuter rc_c^{cc} (Wh/TKB)	Commuter rg_c^{cc} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	95.89919883	28.22591127	19.25391818	1.92539182	30.80626909	3.08062691	34.65705272	3.46570527	50.06018727	5.00601873
may-23	93.99*	27.64*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jun-23	104.47*	32.00*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	106.08*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	109.50*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	117.35*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	135.07*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	135.06*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	135.09*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 05/24/2023 are not binding to invoice. The energy cost estimate from May to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 30 May 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MARCH 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE_{cc}^{cc} €/MWh net**	$TATR_{cc}^{cc}$ €/MWh net**	Freight rc_{cc}^{cc} (Wh/TKB)	Freight rg_{cc}^{cc} (Wh/TKB)	Long distance rc_{ld}^{cc} (Wh/TKB)	Long distance rg_{ld}^{cc} (Wh/TKB)	Medium Distance rc_{md}^{cc} (Wh/TKB)	Medium Distance rg_{md}^{cc} (Wh/TKB)	Commuter rc_{cc}^{cc} (Wh/TKB)	Commuter rg_{cc}^{cc} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	109.73395710	38.97547394	19.66360640	1.96636064	31.46177024	3.14617702	35.39449152	3.53944915	51.12537664	5.11253766
apr-23	94.73*	31.27*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
may-23	122.18*	27.64*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jun-23	132.92*	32.00*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	144.73*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	142.27*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	141.51*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	158.69*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	158.68*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	158.71*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 04/24/2023 are not binding to invoice. The energy cost estimate from April to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 April 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN FEBRUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	153.40454695	51.13252109	20.31363094	2.03136309	32.50180951	3.25018095	36.56453569	3.65645357	52.81544045	5.28154404
mar-23	118.60*	53.38*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
apr-23	116.82*	31.27*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
may-23	133.27*	27.64*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jun-23	140.52*	32.00*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	144.08*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	140.33*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	140.06*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	152.24*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	152.24*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	152.26*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 03/22/2023 are not binding to invoice. The energy cost estimate from March to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 24 March 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES IN A CONVENTIONAL NETWORK:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JANUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccc} €/MWh net**	$TATR^{ccc}$ €/MWh net**	Freight rc_m^{ccc} (Wh/TKB)	Freight rg_m^{ccc} (Wh/TKB)	Long distance rc_{ld}^{ccc} (Wh/TKB)	Long distance rg_{ld}^{ccc} (Wh/TKB)	Medium Distance rc_{md}^{ccc} (Wh/TKB)	Medium Distance rg_{md}^{ccc} (Wh/TKB)	Commuter rc_c^{ccc} (Wh/TKB)	Commuter rg_c^{ccc} (Wh/TKB)
jan-23	99.67034293	49.71432141	20.29957300	2.02995730	32.47931681	3.24793168	36.53923141	3.65392314	52.77888981	5.27788898
feb-23	151.92*	69.44*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
mar-23	125.16*	53.38*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
apr-23	128.51*	31.27*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
may-23	145.15*	27.64*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jun-23	155.74*	32.00*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	160.33*	48.56*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	160.33*	32.03*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	160.33*	31.86*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	170.00*	26.60*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	169.99*	39.18*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	170.02*	47.70*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 02/20/2023 are not binding to invoice. The energy cost estimate from February to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 23 February 2023

SC-2 ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR ELECTRIFIED LINES IN DIRECT CURRENT IN THE CONVENTIONAL NETWORK FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	177.03*	57.84*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
feb-23	184.21*	61.02*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
mar-23	189.78*	47.67*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
apr-23	184.19*	30.12*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
may-23	212.95*	29.99*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jun-23	221.68*	37.84*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
jul-23	241.86*	60.55*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
aug-23	241.86*	38.99*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
sep-23	241.86*	37.37*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
oct-23	264.61*	31.33*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
nov-23	264.60*	47.31*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*
dec-23	264.62*	59.85*	19.12*	1.92*	30.59*	3.06*	34.41*	3.44*	49.71*	4.97*

* Reference Prices/Ratios estimated as of 16/12/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 28 December 2022

SC-2 ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR ELECTRIFIED LINES IN DIRECT CURRENT IN THE CONVENTIONAL NETWORK FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios *							
Month of service	TE^{ccC} €/MWh net**	$TATR^{ccC}$ €/MWh net**	Freight rc_m^{ccC} (Wh/TKB)	Freight rg_m^{ccC} (Wh/TKB)	Long distance rc_{ld}^{ccC} (Wh/TKB)	Long distance rg_{ld}^{ccC} (Wh/TKB)	Medium Distance rc_{md}^{ccC} (Wh/TKB)	Medium Distance rg_{md}^{ccC} (Wh/TKB)	Commuter rc_c^{ccC} (Wh/TKB)	Commuter rg_c^{ccC} (Wh/TKB)
jan-23	199.56*	62.84*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
feb-23	199.56*	66.02*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
mar-23	199.57*	52.67*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
apr-23	252.71*	35.12*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
may-23	252.71*	34.99*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
jun-23	252.71*	42.84*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
jul-23	262.10*	65.55*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
aug-23	262.10*	43.99*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
sep-23	262.10*	42.37*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
oct-23	273.91*	36.33*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
nov-23	273.91*	52.31*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*
dec-23	273.92*	64.85*	22.17*	2.22*	35.46*	3.55*	39.90*	3.99*	57.63*	5.76*

* Reference Prices/Ratios estimated as of 05/09/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 7 December 2022

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN AUGUST 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.22793441	26.59758610	52.27281186	5.22728119	20.10492764	2.01049276
jun-23	116.11350035	29.68456744	52.25126272	5.22512627	20.09663951	2.00966395
jul-23	112.80057400	47.19136793	52.86298002	5.28629800	20.33191539	2.03319154
aug-23	118.95995893	29.45692783	53.79409895	5.37940989	20.69003806	2.06900381
sep-23	124.53*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	124.45*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	136.64*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	143.03*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 09/20/2023 are not binding to invoice. The energy cost estimate from September 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 September 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JULY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.22793441	26.59758610	52.27281186	5.22728119	20.10492764	2.01049276
jun-23	116.11350035	29.68456744	52.25126272	5.22512627	20.09663951	2.00966395
jul-23	112.80057400	47.19136793	52.86298002	5.28629800	20.33191539	2.03319154
aug-23	119.88*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	119.60*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	125.24*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	145.02*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	150.91*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 08/24/2023 are not binding to invoice. The energy cost estimate from August 2023 to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 28 August 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JUNE 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE^{ccR} €/MWh net**	$TATR^{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.22793441	26.59758610	52.27281186	5.22728119	20.10492764	2.01049276
jun-23	116.11350035	29.68456744	52.25126272	5.22512627	20.09663951	2.00966395
jul-23	114.31*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	116.37*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	118.25*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	127.14*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	151.92*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	163.93*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 07/24/2023 are not binding to invoice. The energy cost estimate from July to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 27 July 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MAY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.22793441	26.59758610	52.27281186	5.22728119	20.10492764	2.01049276
jun-23	119.60*	57.17*	53.73*	5.37*	20.67*	2.07*
jul-23	136.30*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	134.14*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	138.53*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	138.99*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	151.92*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	163.26*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 06/21/2023 are not binding to invoice. The energy cost estimate from June to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 June 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN APRIL 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	93.45631478	27.43470654	53.89283061	5.38928306	20.72801177	2.07280118
may-23	94.54*	26.72*	53.73*	5.37*	20.67*	2.07*
jun-23	105.05*	57.17*	53.73*	5.37*	20.67*	2.07*
jul-23	106.67*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	110.11*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	117.98*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	135.76*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	135.76*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	135.76*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 05/24/2023 are not binding to invoice. The energy cost estimate from May to December 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 30 May 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN MARCH 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	103.26022958	32.18423939	55.29770711	5.52977071	21.26834889	2.12683489
apr-23	95.28*	31.40*	53.73*	5.37*	20.67*	2.07*
may-23	122.83*	26.72*	53.73*	5.37*	20.67*	2.07*
jun-23	133.60*	57.17*	53.73*	5.37*	20.67*	2.07*
jul-23	145.46*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	142.99*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	142.22*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	159.46*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	159.46*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	159.46*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 04/24/2023 are not binding to invoice. The energy cost estimate from April to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 26 April 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN FEBRUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversion ratios			
Month of service	€/MWh net**	€/MWh net**	Passengers (Wh/TKB)	Passengers (Wh/TKB)	Freight (Wh/TKB)	Freight (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	151.49264829	36.92143296	60.35583444	6.03558344	23.21378248	2.32137825
mar-23	112.91*	32.55*	53.73*	5.37*	20.67*	2.07*
apr-23	117.44*	31.40*	53.73*	5.37*	20.67*	2.07*
may-23	133.96*	26.72*	53.73*	5.37*	20.67*	2.07*
jun-23	141.23*	57.17*	53.73*	5.37*	20.67*	2.07*
jul-23	144.81*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	141.04*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	140.77*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	153.00*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	153.00*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	153.00*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 03/22/2023 are not binding to invoice. The energy cost estimate from March to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 24 March 2023

SC-2_COSTS FOR SUPPLYING DIRECT CURRENT TO ELECTRIFIED LINES ON RAM:

MONTHLY PUBLICATION OF PRICES AND RATIOS THAT WILL BE USED TO ISSUE THE CORRESPONDING INVOICE FOR THE SERVICES PERFORMED IN JANUARY 2023.

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios			
Month of service	TE_{ccR} €/MWh net**	$TATR_{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	93.49960364	37.25570386	61.06097137	6.10609714	23.48498899	2.34849890
feb-23	150.06*	37.26*	53.73*	5.37*	20.67*	2.07*
mar-23	120.21*	39.40*	53.73*	5.37*	20.67*	2.07*
apr-23	129.17*	31.40*	53.73*	5.37*	20.67*	2.07*
may-23	145.88*	26.72*	53.73*	5.37*	20.67*	2.07*
jun-23	156.51*	57.17*	53.73*	5.37*	20.67*	2.07*
jul-23	161.12*	91.99*	53.73*	5.37*	20.67*	2.07*
aug-23	161.12*	44.47*	53.73*	5.37*	20.67*	2.07*
sep-23	161.12*	28.60*	53.73*	5.37*	20.67*	2.07*
oct-23	170.81*	23.87*	53.73*	5.37*	20.67*	2.07*
nov-23	170.81*	35.65*	53.73*	5.37*	20.67*	2.07*
dec-23	170.81*	44.89*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 02/20/2023 are not binding to invoice. The energy cost estimate from February to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 23 February 2023

SC-2_ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR DIRECT CURRENT ELECTRIFIED LINES IN RAM FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios			
Month of service	TE^{ccR} €/MWh net**	$TATR^{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	177.97*	42.60*	53.73*	5.37*	20.67*	2.07*
feb-23	185.93*	41.41*	53.73*	5.37*	20.67*	2.07*
mar-23	192.13*	34.93*	53.73*	5.37*	20.67*	2.07*
apr-23	185.40*	26.49*	53.73*	5.37*	20.67*	2.07*
may-23	214.27*	26.73*	53.73*	5.37*	20.67*	2.07*
jun-23	223.03*	30.64*	53.73*	5.37*	20.67*	2.07*
jul-23	243.29*	46.17*	53.73*	5.37*	20.67*	2.07*
aug-23	243.29*	29.90*	53.73*	5.37*	20.67*	2.07*
sep-23	243.29*	30.17*	53.73*	5.37*	20.67*	2.07*
oct-23	266.12*	26.53*	53.73*	5.37*	20.67*	2.07*
nov-23	266.12*	36.32*	53.73*	5.37*	20.67*	2.07*
dec-23	266.12*	42.48*	53.73*	5.37*	20.67*	2.07*

* Reference Prices/Ratios estimated as of 16/12/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism. as set under Royal Decree-Law 10/2022. of 13 May. temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon. prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated. considered at border point with the electricity sector.

Published on 28 December 2022

SC-2 ANNUAL PUBLICATION OF THE FORECAST (*) OF THE SUPPLY COST RATES FOR DIRECT CURRENT ELECTRIFIED LINES IN RAM FOR 2023:

SC-2	Reviewed reference / Invoicing prices *		Reviewed reference / Invoicing conversión ratios			
Month of service	TE^{ccR} €/MWh net**	$TATR^{ccR}$ €/MWh net**	Passengers rc_v^{ccR} (Wh/TKB)	Passengers rg_v^{ccR} (Wh/TKB)	Freight rc_m^{ccR} (Wh/TKB)	Freight rg_m^{ccR} (Wh/TKB)
jan-23	200.83*	47.60*	46.21*	4.62*	17.77*	1.78*
feb-23	200.83*	46.41*	46.21*	4.62*	17.77*	1.78*
mar-23	20.83*	39.93*	46.21*	4.62*	17.77*	1.78*
apr-23	254.18*	31.49*	46.21*	4.62*	17.77*	1.78*
may-23	254.18*	31.73*	46.21*	4.62*	17.77*	1.78*
jun-23	254.18*	35.64*	46.21*	4.62*	17.77*	1.78*
jul-23	263.60*	51.17*	46.21*	4.62*	17.77*	1.78*
aug-23	263.60*	34.90*	46.21*	4.62*	17.77*	1.78*
sep-23	263.60*	35.17*	46.21*	4.62*	17.77*	1.78*
oct-23	275.46*	31.53*	46.21*	4.62*	17.77*	1.78*
nov-23	275.46*	41.32*	46.21*	4.62*	17.77*	1.78*
dec-23	275.46*	47.48*	46.21*	4.62*	17.77*	1.78*

* Reference Prices/Ratios estimated as of 05/09/2022 are not binding to invoice. The energy cost estimate from January to May 2023 does not include the effects of the cost excess generated by the gas cap mechanism, as set under Royal Decree-Law 10/2022, of 13 May, temporarily setting a mechanism to adjust production costs and reduce the price of electricity on the wholesale market. The volatility of this excess cost together with the large number of uncertain figures depending thereupon, prevent from giving a limited estimate of the value of this excess in said period.

** net = consumed - compensable regenerated, considered at border point with the electricity sector.

Published on 7 December 2022

