ELIA TRANSMISSION BELGIUM

Grid connection tariffs

2024-2027 period

Tariff schedule

The tariff terms and conditions established by the CREG decision dated 9 November 2023 shall apply from 1 January 2024 to 31 December 2027 inclusive.

1 Terms and conditions governing Elia grid connection tariffs for grid users directly connected to the Elia grid and for distribution system operators (excluding distribution system operators connected at transformer output to medium voltage)

These terms and conditions apply to:

- the tariff for preliminary studies;
- the tariff for detailed studies;
- the tariff for studies into major modernisation work;
- the tariff for using onshore connection bays;
- the tariff for using offshore connection bays;
- the tariff for using other connection equipment: an overhead or underground connection or any other equipment required to this end, transformation equipment, or equipment used to compensate reactive energy;
- the tariff for using additional security equipment, additional equipment for alarms, measurements and metering;
- the tariff for power quality acceptance tests;
- special arrangements.

1.1 Tariff for preliminary studies

The tariff charged for preliminary studies for a new connection or the modification of an existing connection is a one-off tariff, the amount of which depends on the amount of nominal power to be connected.

The table below sets out the amounts that may be charged.

Nominal power to be connected (P)	Tariff for preliminary studies			
	2024	2025	2026	2027
P <25 MVA	€2,870	€2,919	€2,965	€3,013
25 MVA < P <50 MVA	€5,739	€5,837	€5,930	€6,025
50 MVA <= P	€11,479	€11,674	€11,861	€12,051

Table 1: Tariff for preliminary studies

1.2 Tariff for detailed studies

1. **Detailed studies conducted with a view to connecting new equipment or modifying existing equipment**

The tariff charged for detailed studies for a new connection or the modification of an existing connection is a one-off tariff, the amount of which depends on the type and voltage level of the work covered by the detailed study in question.

The amount invoiced for studies involving a connection bay as well as a line is the sum of the amount for the study of the bay(s) and the amount for the study of the line(s) concerned. This tariff will be applied for each requested variant of the study.

The **Error! Reference source not found.** below sets out the tariffs for detailed studies. In the event of detailed studies involving generation units or storage units, these tariffs shall be increased by a factor of 33%, though this increase only applies to the part of the study concerning the bay(s), in order to cover the extra costs incurred due to the broader scope of such detailed studies (extra studies are needed concerning the bay(s)).

Type of study	Tariff for detailed study, one bay	Tariff for detailed study, two bays	Tariff for detailed study, one line* (in addition to the detailed study for one or two bays)* per route
2024			
Minor modifications (low-voltage modifications)	€5,739	€8,609	€11,479
36-70 kV	€11,479	€17,218	€17,218
110-150-220 kV	€17,218	€22,958	€22,958
380 kV	€28,697	€34,437	€45,916
2025			
Minor modifications (low-voltage modifications)	€5,837	€8,756	€11,674
36-70 kV	€11,674	€17,511	€17,511
110-150-220 kV	€17,511	€23,348	€23,348
380 kV	€29,185	€35,022	€46,696
2026			
Minor modifications (low-voltage modifications)	€5,930	€8,896	€11,861
36-70 kV	€11,861	€17,791	€17,791
110-150-220 kV	€17,791	€23,722	€23,722
380 kV	€29,652	€35,583	€47,444
2027			
Minor modifications (low-voltage modifications)	€6,025	€9,038	€12,051
36-70 kV	€12,051	€18,076	€18,076
110-150-220 kV	€18,076	€24,101	€24,101
380 kV	€30,127	€36,152	€48,203

Table 2: Tariff for detailed studies

2. Power quality assessment during the connection or modification of disruptive facilities or of compensation facilities (pre-assessment)

In order to supply a voltage that satisfies the specifications set out in the applicable regulations, the levels of disruption on the grid permitted under said regulations must be respected.

As such, grid users are required to voluntarily communicate to Elia all information regarding any of their facilities that affect the quality, reliability or efficiency of the grid.

Grid users are required to check whether the disruption caused by said facilities remains within Stage 1 emission limits (as set out in Synergrid procedure C10/17) based on the voltage level at the connection point and the annual peak.[1] They must then submit their

1 The annual peak used here is defined as the maximum monthly peak during the previous 12 months, i.e. the current invoicing month and the previous 11 months, without taking into account the tariff period for the annual peak. This annual peak corresponds to that used in connection with the tariff for offtake of additional reactive energy and as such differs from the annual peak used in connection with the annual peak tariff.

findings as well as a description of the facilities in question (type and nominal capacity) to Elia for approval.

If Stage 1 emission limits are exceeded, even after considering additional measures intended to minimise the disruption caused, the grid user must ask Elia to switch to Stages 2 or 3, in which case the following tariffs shall apply:

Study concerning the calculation of Stage 2 emission limits**	€2,500
Study concerning the calculation of Stage 3 emission limits**	€3,500

(**) In accordance with the provisions of Synergrid procedure C10/17 '*Prescriptions Power Quality pour les utilisateurs raccordés aux réseaux haute tension*' [Power quality specifications for users connected to high-voltage networks].

The amounts invoiced for studies concerning the calculation of Stage 2 or 3 emission limits cannot be reimbursed if the connection goes ahead.

At the end of the study, Elia shall provide the grid user in question with a report containing the adjusted emission limits. The grid user must verify whether their facilities respect these authorised emission limits and must pass on their findings, in writing, to Elia for approval.

1.3 Tariff for studies into modernisation work

Such studies are intended to investigate the substantial nature of a modernisation of facilities connected to the grid, which may require a review of the connection contract, as per European network codes for connections. This is a one-off tariff, the amount of which depends on the type and voltage of the connection point of the facilities covered by the study in question. This type of study solely pertains to connection bays.

A study into modernisation work is conducted in addition to a detailed study. If such a study is conducted together with a detailed study, the tariff for the study into modernisation work is half that of the detailed study. If a detailed study is not carried out (e.g. in the case of more minor modifications), the tariff amounts to 75% of the tariff for a detailed study into a more minor modification.

Type of study	Tariff for study into major modernisation work, one connection bay	Tariff for study into major modernisation work, two connection bays
2024		
Minor modifications (no detailed study)	€4,305	€6,457
36-70 kV (additional tariff for detailed study)	€5,739	€8,609
110-150-220 kV (additional tariff for detailed study)	€8,609	€11,479
380 kV (additional tariff for detailed study)	€14,349	€17,218
2025		
Minor modifications (no detailed study)	€4,378	€6,567
36-70 kV (additional tariff for detailed study)	€5,837	€8,756
110-150-220 kV (additional tariff for detailed study)	€8,756	€11,674
380 kV (additional tariff for detailed study)	€14,593	€17,511
2026		
Minor modifications (no detailed study)	€4,448	€6,672
36-70 kV (additional tariff for detailed study)	€5,930	€8,896
110-150-220 kV (additional tariff for detailed study)	€8,896	€11,861
380 kV (additional tariff for detailed study)	€14,826	€17,791
2027		
Minor modifications (no detailed study)	€4,519	€6,779
36-70 kV (additional tariff for detailed study)	€6,025	€9,038
110-150-220 kV (additional tariff for detailed study)	€9,038	€12,051
380 kV (additional tariff for detailed study)	€15,063	€18,076

Table 3: Tariff for studies into major modernisation work

1.4 Tariff for using the first onshore connection bay

The tariff for using the first onshore connection bay encompasses:

- an annual fee for the installation, substantial modification, dismantling or renovation of the connection bay; and
- an annual fee for managing the connection bay.

Upon paying these annual fees (the amounts of which are listed in Table 4 below), grid users are entitled to use all of the connection bay's functionalities, including any maintenance work or replacements required. The first connection bay includes a single meter for invoicing purposes.

The fee for making available existing bays shall be adjusted on a pro rata basis to take into account previous payments made. This adjustment applies until the date on which the bay in question is replaced and at the latest 33 years after the commissioning date.

(k€ per bay)	Annual fee for the installation, substantial modification, dismantling or renovation of an onshore connection bay	Annual fee for managing an onshore connection bay
2024		
380-kV connection bay	192.10	57.59
220-kV connection bay	77.53	23.24
150-kV connection bay	70.64	21.18
110-kV connection bay	60.23	18.06
70-kV connection bay	45.23	13.56
36- or 30-kV connection bay	22.59	6.77
Medium-voltage connection bay	11.29	3.39
2025		
380-kV connection bay	195.37	58.57
220-kV connection bay	78.85	23.64
150-kV connection bay	71.84	21.54
110-kV connection bay	61.25	18.36
70-kV connection bay	45.99	13.79
36- or 30-kV connection bay	22.97	6.89
Medium-voltage connection bay	11.49	3.44
2026		
380-kV connection bay	198.49	59.51
220-kV connection bay	80.11	24.02
150-kV connection bay	72.99	21.88
110-kV connection bay	62.23	18.66
70-kV connection bay	46.73	14.01
36- or 30-kV connection bay	23.34	7.00
Medium-voltage connection bay	11.67	3.50
2027		
380-kV connection bay	201.67	60.46
220-kV connection bay	81.39	24.40
150-kV connection bay	74.16	22.23
110-kV connection bay	63.23	18.95
70-kV connection bay	47.48	14.23
36- or 30-kV connection bay	23.71	7.11
Medium-voltage connection bay	11.86	3.55

Table 4: Fees for making available and managing onshore connection bays

1.5 Tariff for using the first offshore connection bay

Similarly to onshore connections, the tariff for using the first offshore connection bay encompasses:

- an annual fee for the installation, substantial modification, dismantling or renovation of the connection bay; and
- an annual fee for managing the connection bay.

Upon paying these annual fees (the amounts of which are listed in Table 5 below), grid users are entitled to use all of the connection bay's functionalities, including any maintenance work or replacements required. The first connection bay includes a single meter for invoicing purposes.

This tariff was established as a standard, non-discriminatory tariff between users of the offshore grid.

(k€ per bay)	**Annual fee for the installation, substantial modification, dismantling or renovation of an offshore connection bay**	**Annual fee for managing an offshore connection bay**
2024		
220-kV connection bay	353.49	119.60
2025		
220-kV connection bay	359.50	121.63
2026		
220-kV connection bay	365.25	123.57
2027		
220-kV connection bay	371.10	125.55

Table 5: Fees for making available and managing offshore connection bays

1.6 Tariff for using other connection equipment: overhead or underground connections or any other equipment required to this end, transformation equipment, or equipment used to compensate reactive energy or to filter voltage waves

1. Fee for the installation of new connections or the substantial modification, dismantling or renovation of existing connections

The amount representing the total investment amount is set out in a quote.

2. Fee for making available existing connections

The annual fee is that shown in Table 7 (summary tables - see Section 1.7) and is to be de-indexed based on the consumer price index up to the commissioning date of the equipment in question. The fee must be adjusted on a pro rata basis to take into account previous payments.

3. Fee for managing other (new and existing) connection equipment

Error! Reference source not found. 8 (summary table - see Section 1.7) sets out all fees for managing other connection equipment.

For transformers with a capacity different to that specified in said table, the fee is calculated using the following formula:

where

$$K = K_0 \left[0{,}25 + 0{,}75 . \frac{MVA}{MVA_0} \right]^{0{,}75}$$

- K is the fee for managing the transformer in question
- MVA is the capacity of the transformer in question
- K_0 and MVA_0 are the management fee and the capacity of a reference transformer respectively, chosen from those given in **Error! Reference source not found.**8 to ensure that the primary voltage is identical to that of the transformer in question and that the capacity is as close as possible to that of the transformer concerned

4. Tariff for Elia's light management of connection equipment

This tariff is applied to grid users who themselves manage connection equipment located beyond the connection bay.

It is expressed as an annual fee per connection bay.

€ per bay	Annual fee for light management
2024	
380-kV connection bay	6,399
220-kV connection bay	2,582
150-kV connection bay	2,353
110-kV connection bay	2,006
70-kV connection bay	1,506
36- or 30-kV connection bay	752
Medium-voltage connection bay	376
2025	
380-kV connection bay	6,508
220-kV connection bay	2,626
150-kV connection bay	2,393
110-kV connection bay	2,040
70-kV connection bay	1,532
36- or 30-kV connection bay	765
Medium-voltage connection bay	383
2026	
380-kV connection bay	6,612
220-kV connection bay	2,668
150-kV connection bay	2,431
110-kV connection bay	2,073
70-kV connection bay	1,557
36- or 30-kV connection bay	777
Medium-voltage connection bay	389
2027	
380-kV connection bay	6,717
220-kV connection bay	2,711
150-kV connection bay	2,470
110-kV connection bay	2,106
70-kV connection bay	1,581
36- or 30-kV connection bay	790
Medium-voltage connection bay	395

Table 6: Flat rate applying to grid users who own and manage other connection equipment

1.7 Summary tables

For short connections (lines or cables), the management fee for each connection cannot be lower than the fee for light management described in the previous section.

If a distribution system operator uses Elia's bays to connect their equipment for the purposes of injecting centralised remote control signals and if Elia simultaneously uses these connection bays to transmit electricity, the fees for using connection bays to inject centralised remote control signals are capped at 50% of the annual fee for installation or substantial modification of said bay and at 25% of the fee for managing a connection bay due to shared use, while for cables 100% of the fees will be invoiced as these are only used to transmit signals.

	Fee for provision				Unit
	2024	2025	2026	2027	
380-kV bay	192.10	195.37	198.49	201.67	k€/bay
220-kV bay	77.53	78.85	80.11	81.39	k€/bay
150-kV bay	70.64	71.84	72.99	74.16	k€/bay
110-kV bay	60.23	61.25	62.23	63.23	k€/bay
70-kV bay	45.23	45.99	46.73	47.48	k€/bay
36/30-kV bay	22.59	22.97	23.34	23.71	k€/bay
Medium-voltage bay	11.29	11.49	11.67	11.86	k€/bay
380-kV line, one three-phase transmission line	47.38	48.19	48.96	49.74	k€/km
220-kV line, one three-phase transmission line	19.81	20.15	20.47	20.80	k€/km
150-kV line, one three-phase transmission line	20.24	20.59	20.92	21.25	k€/km
70-kV line, one three-phase transmission line	14.39	14.63	14.86	15.10	k€/km
36/30-kV line, one three-phase transmission line	9.39	9.55	9.70	9.86	k€/km
380-kV line, two three-phase transmission lines	71.84	73.07	74.24	75.42	k€/km
220-kV line, two three-phase transmission lines	32.74	33.29	33.82	34.37	k€/km
150-kV line, two three-phase transmission lines	30.58	31.10	31.60	32.10	k€/km
70-kV line, two three-phase transmission lines	21.79	22.17	22.52	22.88	k€/km
36/30-kV line, two three-phase transmission lines	14.21	14.46	14.69	14.92	k€/km
380-kV cable	146.17	148.66	151.03	153.45	k€/km
220-kV cable	93.21	94.79	96.31	97.85	k€/km
150-kV cable	64.61	65.71	66.76	67.83	k€/km
110-kV cable	55.09	56.02	56.92	57.83	k€/km
70-kV cable	44.80	45.56	46.29	47.03	k€/km
36/30-kV cable	21.54	21.90	22.25	22.61	k€/km
Medium-voltage cable	10.96	11.15	11.33	11.51	k€/km
380/70-kV transformer (220 MVA)	248.42	252.64	256.68	260.79	k€/transformer
220/MV transformer (50 MVA)	88.95	90.47	91.91	93.38	k€/transformer
150/MV transformer (50 MVA)	78.84	80.18	81.46	82.77	k€/transformer
150/36-kV transformer (125 MVA)	133.06	135.32	137.48	139.68	k€/transformer
70/MV transformer (40 MVA)	71.63	72.85	74.01	75.20	k€/transformer
36-30/MV transformer (25 MVA)	45.41	46.19	46.92	47.68	k€/transformer

Table 7: Fee for making available other connection equipment

	Management fee				Unit
	2024	2025	2026	2027	
380-kV bay	57.59	58.57	59.51	60.46	k€/bay
220-kV bay	23.24	23.64	24.02	24.40	k€/bay
150-kV bay	21.18	21.54	21.88	22.23	k€/bay
110-kV bay	18.06	18.36	18.66	18.95	k€/bay
70-kV bay	13.56	13.79	14.01	14.23	k€/bay
36/30-kV bay	6.77	6.89	7.00	7.11	k€/bay
Medium-voltage bay	3.39	3.44	3.50	3.55	k€/bay
380-kV line, one three-phase transmission line	20.52	20.87	21.20	21.54	k€/km
220-kV line, one three-phase transmission line	8.58	8.73	8.86	9.01	k€/km
150-kV line, one three-phase transmission line	8.77	8.92	9.06	9.20	k€/km
70-kV line, one three-phase transmission line	6.23	6.34	6.44	6.54	k€/km
36/30-kV line, one three-phase transmission line	4.07	4.14	4.20	4.27	k€/km
380-kV line, two three-phase transmission lines	31.11	31.64	32.15	32.66	k€/km
220-kV line, two three-phase transmission lines	14.17	14.42	14.65	14.88	k€/km
150-kV line, two three-phase transmission lines	13.24	13.47	13.68	13.90	k€/km
70-kV line, two three-phase transmission lines	9.44	9.60	9.75	9.91	k€/km
36/30-kV line, two three-phase transmission lines	6.15	6.26	6.36	6.46	k€/km
380-kV cable	14.61	14.85	15.09	15.33	k€/km
220-kV cable	9.31	9.47	9.62	9.78	k€/km
150-kV cable	6.46	6.57	6.67	6.78	k€/km
110-kV cable	5.50	5.60	5.69	5.78	k€/km
70-kV cable	4.48	4.55	4.63	4.70	k€/km
36/30-kV cable	2.15	2.19	2.22	2.26	k€/km
Medium-voltage cable	1.10	1.11	1.13	1.15	k€/km
380/70-kV transformer (220 MVA)	82.74	84.15	85.50	86.87	k€/transformer
220/MV transformer (50 MVA)	29.63	30.13	30.62	31.11	k€/transformer
150/MV transformer (50 MVA)	26.26	26.71	27.14	27.57	k€/transformer
150/36-kV transformer (125 MVA)	44.32	45.07	45.79	46.53	k€/transformer
70/MV transformer (40 MVA)	23.86	24.27	24.65	25.05	k€/transformer
36-30/MV transformer (25 MVA)	15.13	15.38	15.63	15.88	k€/transformer

Table 8: Fee for managing other (new and existing) connection equipment

1.8 Tariff for using additional security equipment, additional equipment for alarms, measurements and metering

The tariff for using additional security equipment, additional equipment for alarms, measurements and metering is calculated on a case-by-case basis, taking into account the specific nature of the equipment in question. This tariff covers the replacement of existing equipment belonging to the first connection bay but with an additional functionality.

New meters are made available based on a quote.

The **Error! Reference source not found.** below lists the annual fee for managing these meters.

Additional meters	Annual fee for managing a meter (€ per meter)
2024	632
2025	643
2026	653
2027	664

Table 9: Annual fee for managing a meter

1.9 Tariff for power quality acceptance tests

When commissioning new disruptive facilities or after modifying existing disruptive facilities, Elia is entitled to conduct acceptance tests to check the scale of disruption caused by these facilities.

If these checks can be conducted based on measurements of the voltage at the grid user's connection point, the tariff for acceptance tests is €3,000.

Once the tests are complete, Elia shall send a report to the grid user, outlining the most important results and the findings of the tests.

Grid users with Stage 3 emission limits as well as grid users requesting more complex measurements will be charged an extra €4,500 (in this case, the total fee is €7,500).

1.10 Special arrangements

1. **Reduction coefficient if multiple grid users use the same connection equipment at the same time**

All costs covered by a one-off tariff for (all or part of) the equipment used by two or more grid users, excluding the costs for metering and measurement equipment, can be shared between these grid users. Metering and measurement equipment must be installed separately for each individual grid user. The cost is split on a pro rata basis according to the connection capacity specified in the corresponding connection contract or according to any other agreement between the parties involved.

All costs covered by a recurring tariff for (all or part of) the equipment used by two or more grid users shall first be multiplied by a coefficient k1 (=1+0.05) and then divided on a pro rata basis according to the connection capacity specified in the connection contract or according to any other agreement between the parties involved.

In order to cover the extra administrative costs incurred, the 5% increase shall be replaced by an amount of €1,000/year if the 5% increase amounts to less than €1,000/year.

In the event of the termination of the connection contract by one of the grid users concerned by the shared connection, the connection fees shall continue to be invoiced to the remaining grid user in accordance with the aforementioned terms and conditions. However, at the end of a period of 10 years from the effective date of termination of the contract by the other party, connection fees shall be invoiced at the full rate to the remaining grid user(s).

2. Reduction coefficient applying to tariffs for generation units using renewable energy or cogeneration units

There is no reduction coefficient for the 2024-2027 regulatory period.[2]

3. Reduction or multiplication coefficient applying to tariffs for using a first partial connection bay

If the first connection bay is simplified, or if Elia does not make available or manage all the equipment making up the first connection bay, the annual fees for the installation, substantial modification, dismantling and renovation of the connection bay or for its management may be applied in part depending on the exact configuration of the bay concerned.

Installation of a first partial connection bay	**Reduction or multiplication coefficient**	
	Application of availability fee	**Application of management fee**
Invoice metering	10%	10%
Security and interface cabinets (particularly low-voltage facilities, excluding meters)	10%	10%
Current transformer	10%	10%
Line/cable/rail disconnector	20%	20%
Earthing switch	20%	20%
Voltage transformer	25%	25%
Connection bay without circuit breaker	60%	60%
Operation of first connection bay	-	20%

[2] For offers issued by Elia before 31 December 2007, the reduction coefficients applicable to the tariffs for generation units using renewable energies with limited predictability and to the tariffs for self-generation units shall continue to apply in accordance with the old terms and conditions until the end of the 10-year period if the periodic fee for the provision of connection equipment is applied.

Table 10: Multiplication or reduction coefficients for connection tariffs

Please note that the coefficients can be added together if Elia has installed or is managing multiple facilities.

For the first connection bay, these coefficients shall remain in force until the date on which the bay in question is replaced and at most for 33 years after the commissioning date.

2 Tariff terms and conditions for Elia grid connections for distribution system operators connected at transformer output to medium voltage

These tariff terms and conditions encompass the annual tariffs for connections to the Elia grid applicable to distribution system operators to whom Elia makes available and/or manages infrastructure necessary for their activities.

These tariffs are based on two components:

- The type of service provided, i.e. a tariff for making available these facilities and a tariff for managing these facilities
- The equipment in question, i.e. connection tariffs based on the facilities in question: the accessories for transformers to medium voltage, the non-feeder medium-voltage cells, the general facilities and buildings

The reference medium-voltage substation has a reference capacity of 80 MVA (assumed to be supplied by two 40-MVA reference transformers). It consists of two connections from these transformers to the medium-voltage busbar, two transformer inputs and a rail coupling. This substation is housed in a building supplied with electricity for heating and lighting.

The connection tariffs are multiplied by a factor, more specifically the size of the medium-voltage substation, which is defined as the ratio between the actual capacity of this substation and the reference capacity (i.e. 80 MVA). The actual capacity of the substation in question is determined based on the apparent nominal capacity of this medium-voltage substation.

For example, for a medium-voltage substation supplied by two 25-MVA transformers:

- The actual capacity is equal to 2 x 25 MVA = 50 MVA.
- The size of the substation is 50 MVA/80 MVA = 0.625.
- The tariffs (if applicable to this substation) are multiplied by 0.625.

Table 11 below lists the fees for making available and managing connection equipment.

(k€ per year)	Annual fee 2024-2027 for making available infrastructure for a reference medium-voltage substation			
	2024	2025	2026	2027
Connection tariffs - transformer accessories	12.27	12.48	12.68	12.88
Connection tariffs - non-feeder medium-voltage cells	19.00	19.32	19.63	19.94
Connection tariffs - general facilities and building	15.55	15.81	16.07	16.32
(k€ per year)	**Annual fee 2024-2027 for managing infrastructure relating to a reference medium-voltage substation**			
	2024	**2025**	**2026**	**2027**
Connection tariffs - transformer accessories	5.94	6.05	6.15	6.25
Connection tariffs - non-feeder medium-voltage cells	8.10	8.25	8.38	8.52
Connection tariffs - general facilities and building	9.80	9.97	10.13	10.29

Table 11: Connection tariffs for distribution system operators for a reference medium-voltage substation