Connection tariffs 2012-2015

TARIFF CONDITIONS FOR CUSTOMERS DIRECTLY CONNECTED TO THE ELIA GRID AND FOR DISTRIBUTION GRID OPERATORS CONNECTED AT TRANSFORMER OUTPUT TO THE 70/36/30 KV NETWORK AND ON THE 70/36/30 KV NETWORK

The tariff conditions for a connection to the Elia-grid as stipulated by the decision of the CREG of December 22nd 2011 and of December 18th 2014 are applicable from January 1st 2012 until December 31st 2015. These conditions are:

- The tariff for an orientation study;
- The tariff for a detail study ;
- The tariff for the use of the first connection bay ;
- The tariff for the use of other connection equipments: lines or cables and its requisites, equipments for transformation, compensation of reactive power and filtering of the voltage wave ;
- The tariff for the use of supplementary protection-equipments, supplementary equipments for alarm signalisation, metering ;
- Particular terms.

1. The tariff for an orientation study

The tariff for an orientation study for either a new connection or for the adaptation of an existing connection is a one-shot whose amount depends on the nominal power to connect. The amounts of the tariff are published in the table below:

Nominal power to connect (P)	One-shot tariff
P <25 MVA	2.500 €
25 MVA < P <50 MVA	5.000 €
50 MVA <= P <100 MVA	10.000 €
100 MVA <= P	According to specifications

2. The tariff for a detail study

2.1. Detail study in view of connection of new equipments or modification of existing equipments

The tariff for a detail study for either a new connection or for the adaptation of an existing connection is a one-shot tariff depending on the type and the voltage level of the investment object of the detail study.

For a study concerning a bay and a connection, the invoiced amount is the addition of the amount for the study of the bay(s) and the amount for the study of the connection.

This tariff will be applicable for each required variant.

The tariffs for the detail study figure in the table below. For production units, an incremental factor of 33% will be applied to the tariffs in order to cover the costs resulting from the fact that a detailed study for production units encompasses several supplementary elements.

Study type	Detail study tariff 1 bay	Detail study tariff 2 bays	Detail study tariff 1 connection* (on top of the detail study for 1 or 2 bays)
Minor changes (low voltage)	5.000 €	7.500 €	10.000 €
36-70	10.000 €	15.000 €	15.000 €
150-220	15.000 €	20.000 €	20.000 €
380	25.000 €	30.000 €	40.000 €

** for each track*

2.2. "Power Quality" evaluation for connection or modification of disturbing installations or of compensation installations (pre-assessment)

In order to deliver a voltage according to the specifications intended by the article 47 of the Technical Code, the permitted level of the caused disturbance on the grid, intended by the article 46 of the Technical Code, has to be respected.

On this subject, the article 54 of the Technical Code imposes the grid user to communicate on his own initiative at Elia all information concerning his installations that have an impact on the quality, the reliability and the efficiency of the grid.

The grid user will verify if the levels of disturbances emanating from his installations respect de Stage 1 emission limits described in the Synergrid C10/17 procedure, based on the voltage level at the connection point and the subscribed power. He will present his evaluations as well as a description of his installation (nature and nominal power) to Elia for acceptance.

If the Stage 1 emission limits are transgressed, even after envisaging supplementary steps for limiting the levels of perturbation, the grid user must ask Elia to use the approach for Stage 2 or Stage 3. In this case, the following tariffs will be applicable:

Study relative to the calculation of emission limits Stage 2 (1)	2.250 €
Study relative to the calculation of emission limits Stage 3 (1)	3.000 €

(1) In accordance to the instructions Synergrid C10/17 "Power Quality instructions for the users connected to the high voltage grids".

The invoiced amounts for the studies relative to the calculation of emission limit stage 2 or 3 cannot be reclaimed when the connection is ordered.

Depending on the nature of the concerned equipment and their nominal power, Elia will decide whether to carry out a "Power Quality" evaluation.

At the end of the study, Elia delivers a report to the grid user encompassing the adapted emission limits. The grid user will verify if his installations respect these authorised emission limits. The result of this verification will have to be submitted in writing to Elia for acceptance.

3. The tariff for the use of the first connection bay

The tariff for the use of the first connection bay consists of

- a yearly charge to realize or modify in a substantial way the connection bay
- a yearly charge to operate and to maintain the connection bay.

These yearly charges, whose amounts are mentioned in the summary table under section 5, give the grid user a right to use the total functionality of the connection bay including preservation and replacement. The first connection bay includes one metering equipment for invoicing.

Charges to put an existing connection bay at disposal of the grid user are proportionally adapted in order to reflect the financial interventions that the grid user has done in the past. This adaptation is valid until the date of replacement of the connection bay and not longer than 33 years after the date the connection has been put into service.

4. The tariff for the use of other connection equipments: lines or cables and their requisites, equipments for transformation, compensation of reactive power and filtering of the voltage wave

4.1. For a new connection (or the adaptation of an existing connection): charge to realize or modify in a substantial way

The amount, representing the total amount of investment, is determined according to specification.

4.2 Charges to put existing equipments at disposal of the grid user

The annual charge is the one as mentioned in the summary table under section 5, which has to be des-indexed on basis of the consumption price index until the date when the concerned equipment has been put into service. If there were financial interventions in the past, those charges have to be reduced on a proportional basis.

4.3. Charges to operate and maintain the connection equipments (new or existing ones)

The charge to operate and maintain the « other » connection equipments is mentioned in the summary table under section 5.

For the transformers that have a capacity that differs from those indicated in the table above, following formula is applied to determine the charges:

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

Where

- K is the charge to put the concerned transformer at disposal and to operate and maintain it
- MVA is the transformer capacity of the concerned transformer
- K_0 and MVA_0 are respectively the charge to put the reference transformer at disposal and to operate and maintain it and the transformer capacity of the reference transformer, chosen in the list of the summary table so that the primary voltage equals the one of the concerned transformer and the transformer capacity is nearest to the one of the concerned transformer.

4.3 Fixed charges applicable in case a user owns its connection and operates and maintains it in the name and for account of Elia

This tariff is applied in case the user operates and maintains himself the connection equipments other than the connection bay.

The tariff is expressed under the form of an annual charge for each connection bay.

	Annual charge
Connection Bay 380 kV	4.900 €/bay
Connection Bay 220 kV	2.000 €/bay
Connection Bay 150 kV	1.800 €/bay
Connection Bay 70 kV	1.200 €/bay
Connection Bay 36 kV or 30 kV	600 €/bay
Connection Bay Medium Voltage	300 €/bay

5. Summary table

	Charge to realise or modify in a substantial way (*)	Charge to operate and maintain
Bay 380 kV	168,13 k€/bay	49,30 k€/bay
Bay 220 kV	67,86 k€/bay	19,90k€/bay
Bay 150 kV	61,83 k€/bay	18,13 k€/bay
Bay 70 kV	39,59 k€/bay	11,61 k€/bay
Bay 36 or 30 kV	19,77 k€/bay	5,80 k€/bay
Bay Medium Voltage	9,88 k€/bay	2,90 k€/bay
Line 380 kV – single circuit	41,47 k€/km	10,94 k€/km
Line 220 kV – single circuit	17,35 k€/km	4,58 k€/km
Line 150 kV – single circuit	17,72 k€/km	4,68 k€/km
Line 70 kV – single circuit	12,59 k€/km	3,32 k€/km
Line 36 or 30 kV – single circuit	8,21 k€/km	2,17 k€/km
Line 380 kV – double circuit	62,88 k€/km	16,59 k€/km
Line 220 kV – double circuit	28,65 k€/km	7,56 k€/km
Line 150 kV – double circuit	26,76 k€/km	7,06 k€/km
Line 70 kV – double circuit	19,08 k€/km	5,03 k€/km
Line 36 or 30 kV – double circuit	12,44 k€/km	3,28 k€/km
Cable 380 kV	127,8 k€/km	33,73 k€/km
Cable 220 kV	81,5 k€/km	21,51 k€/km
Cable 150 kV	56,55 k€/km	6,63 k€/km
Cable 70 kV	39,2 k€/km	4,60 k€/km
Cable 36 or 30 kV	18,85 k€/km	2,21 k€/km
Cable Medium Voltage	9,59 k€/km	1,13 k€/km
Tfo 380/70 kV (220 MVA)	217,42 k€/transformer	63,75 k€/transformer
Tfo 220/MT (50 MVA)	77,85 k€/transformer	22,83 k€/transformer
Tfo 150/MT (50 MVA)	69 k€/transformer	20,23 k€/transformer
Tfo 150/36 kV (125 MVA)	116,46 k€/transformer	34,15 k€/transformer
Tfo 70/MT (40 MVA)	62,7 k€/transformer	18,38 k€/transformer
Tfo 36-30/MT (25 MVA)	39,74 k€/transformer	11,65 k€/transformer

(*) to put at disposal of the grid user in case of an existing connection

6. The tariff for the use of supplementary protection-equipments, supplementary equipments for alarm signalisation, metering

The tariff for the use of supplementary protection-equipments, supplementary equipments for alarm signalisation, metering will be determined case-by-case, taking into account the specificity of the concerned equipments. A replacement of existing equipments belonging to the first connection bay, but with a supplementary functionality, comes under this arrangement.

New metering equipment is made according to specifications.

The annual charge for operation and maintaining of these metering equipments is 487,12€ per equipment.

"Power Quality" reception test

While installations are put into service or after modification of these installations, Elia has the right to realise reception tests in order to control the level of perturbation caused by these installations.

If the verification of these levels can be done on basis of measures of the voltage at the connection point of the user, the tariff for the reception tests equals 2.600 €.

At the end of these tests, Elia delivers a report to the grid user with most important measuring results and the conclusions of the tests.

For grid users with emission limits of « stage 3 » as well as for the cases that impose more complex measures, an extra charge of 4.000 € will be imposed (the total for those cases is thus 6.600 €).

7. Particular terms

7.1 Reduction coefficients if several users use simultaneously the same connection bays

All costs covered by a one-shot tariff relative to (a part of) the equipments that are used by 2 or more grid users, except for the costs for the equipments for metering, can be divided under those users. The equipments for metering have to be installed separately for each user. The division is done proportionally to the power of connection as stipulated in the Connection contract.

All costs covered by a periodically applied tariff relative to (a part of) the equipments that are used by 2 or more grid users, will first be multiplied by a coefficient k1 (1+0,05) and then be divided proportionally to the power of connection as stipulated in the Connection contract. This coefficient reflects the increased risk for Elia that one of the users will stop using the connection.

In order to cover the extra administrative costs, the increase of 5% will be replaced by an amount of 1.000 €/year if that increase of 5% corresponds to an amount inferior to 1.000€/year.

7.2 Reduction coefficients on the connection tariffs for the use of connections of production units based on renewable energy sources or of cogeneration units

No reduction coefficient is in application on January, 1st 2012[1].

[1] For the tenders emitted by Elia before the date of December 31st 2007, the reduction coefficients on the connection tariffs for the use of connections of production units based on renewable energy sources with limited predictability and for the use of connections of auto-production units remain in application following the former modalities. This is until the period of 10 years has expired in case the option of a periodical tariff has been chosen for putting the connection equipment at disposal.

TARIFF CONDITIONS FOR DISTRIBUTION GRID OPERATORS EXCEPTED FOR DISTRIBUTION GRID OPERATORS CONNECTED AT TRANSFORMER OUTPUT TO THE 70/36/30 KV NETWORK AND ON THE 70/36/30 KV NETWORK

The tariff conditions for Distribution Grid Operators connected to the Elia grid encompass:

- Annual tariffs for connection to the Elia grid for Distribution Grid Operators to whom Elia puts at disposal and/or operates and maintains infrastructure necessary for their activity
- The unique or periodical tariff linked to the usage right for a Distribution Grid Operator of complementary equipment for remote actions and/or centralized remote control

1. Annual tariffs for connection to the Elia grid for Distribution Grid Operators to whom Elia puts to disposition and/or operates and maintains infrastructure necessary for their activity

These tariffs are structured along two axes:

1. The nature of the performances, either a tariff for the putting at disposal these installations and a tariff for maintaining and operating them;
2. The concerned installations, be it connection tariffs with respect to the concerned installations: the transformation accessories towards Middle Voltage, the non-feeder Middle Voltage cells, the general installations and buildings.

The Middle Voltage reference post presents a reference power of 80 MVA (supposed to be brought forth by 2 reference transformers de 40 MVA); it is composed of 2 connections from the transformers to the bus bar to the Middle Voltage level, and 2 arrival cells of the transformers; it is also composed of a bus bar for coupling and VT bus bars; the post is located in a building equipped with specifically its electrical infeed for heating and lighting.

The size of a Middle Voltage post is defined as being the ratio between the effective power of the post under consideration and the reference power, equal to 80 MVA. The effective power of the post under consideration is determined by the dimension of the power put at disposal at this Middle Voltage post.

For example, for a Middle Voltage post fed by 2 transformers of 25 MVA:

- The effective power equals 2 x 25 = 50 MVA ;
- The size of the post is 50 MVA / 80 MVA = 0,625 ;
- The tariffs (if applicable for this post) are multiplied by a factor 0,625.

The charges for putting at disposal and maintaining and operating connection equipments are represented in the table below.

Table 1 : Connection tariffs for Distribution Grid Operators in correspondence with the reference equipment

	Annual charge 2012-2015 for putting at disposal infrastructure relative to medium voltage posts (€)	Annual charge 2012-2015 for maintaining and operating infrastructure relative to medium voltage posts (€)
Connection tariffs – Transformer accessories	9.513 €	4.529 €
Connection tariffs - Non-feeder medium voltage cells	6.975 €	4.055 €
Connection tariffs - General installations and building	16.394 €	8.687 €

For medium voltage posts not corresponding with the reference power of a medium voltage post of 80 MVA, a multiplication coefficient will be applied, based on the dimension of the power put at disposal for this medium voltage post, divided by the reference power of (80 MVA).

2. The unique or periodical tariff linked to the usage right of a Distribution Grid Operator of complimentary installations for remote actions and/or centralized remote control

The costs linked to putting at disposal centralized remote controls will be attributed individually and directly to the Distribution Grid Operators that put them to use. The attribution of these costs will be based on the costs incurred by Elia for the putting at disposal and maintaining and operating centralized remote controls.

In the case where a Distribution Grid Operator uses bays that are property of Elia for connecting its injection equipment for centralized remote controls and the Distribution Grid Operator takes at his expense the costs related to the elaboration and injection of the centralized remote control signals, the charges for putting at disposal and maintaining and operating are the following:

- In the case where the Distribution Grid Operators uses dedicated infrastructure for the injection of centralized remote control signals, the tariffs applicable are equal to 100% of the annual charges for realization and substantial modification, as well as for maintaining and operating, of a bay and the cable put at disposal for transferring the signal as represented in the summary table in section 5 of the connection tariffs for clients directly connected to the Elia grid.

- In the case where the infrastructure is simultaneously used for the injection of centralized remote control signals and for the transport of electrical energy, the charges for the connection bays for the injectors for the centralized remote controls will be limited to 50% of the annual charge for realization and substantial modification and 25% of the annual charge for maintaining and operating a connection bay, following the partial use, as represented in the summary table in section 5 of the connection tariffs for clients directly connected to the Elia grid, whereas the cables will be invoiced at 100% of the charges represented in the summary table in section 5 of the connection tariffs for clients directly connected to the Elia grid, due to their unique use for the transmission of signals.

These charges are determined case by case, taking into account the specificities of the concerned equipments.