

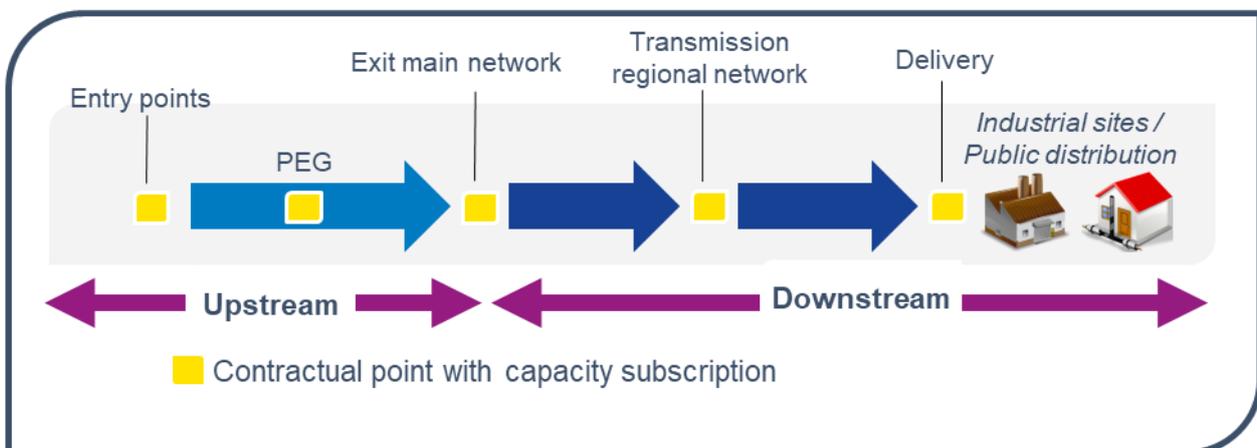
Downstream capacity subscription principles and their evolution

Your site is connected to a transmission network or you want to supply a site connected to the transmission network? You want to find out about the capacity subscription system related to this consumer delivery point (PLC)?

This sheet will give you useful information.

Different types of capacity

Your shipper may subscribe to the following capacity to supply your site:



The capacity used in the calculation of the downstream transmission is that which corresponds to the downstream network, i.e.:

- The main network exit capacity;
- The regional network transmission capacity;
- The delivery capacity.

Different kinds of capacity

When GRTgaz can guarantee the use of the network under normal operating conditions, this kind of capacity is referred to as “firm”.

When GRTgaz cannot provide firm capacity, “interruptible” capacity may be subscribed depending on capacity type, subscription type and technical feasibility.

Interruption may arise in the following circumstances:

- There is insufficient capacity to transport the requested quantities; such insufficiency may be due to the weather conditions, to maintenance works on the networks or to events of any nature arising.
- Some tests are being carried out at the request of GRTgaz to ensure the feasibility for a customer to interrupt consumption.

Interruptible capacity is only proposed in circumstances when GRTgaz can no longer offer firm capacity.

Different capacity natures

Daily capacity at the consumer delivery points:

The capacity subscribed for your site is daily capacity. It is subscribed for a given gas day of 24 hours (from 6am to 6am). Such capacity may be subscribed to different terms (daily, monthly or annual).

Hourly capacity at the consumer delivery points:

Hourly capacity allocated for the subscription of daily capacity

At any consumer delivery point, the subscribed delivery capacity (annual, monthly or daily) corresponds to an hourly delivery capacity of a maximum of 1/20th of the daily capacity subscribed (provided that this hourly capacity is available on the regional network and that this hourly capacity is below connection facilities hourly capacity).

Subscription for additional hourly capacity

In order to be allocated additional hourly capacity, the shipper must pay a price p supplement charge, within the limits of the capacity of the network and of the connection facilities. This supplement charge is calculated as follows:

$$p = (C_{max} - C) \times 10 \times (TCL + TCR)$$

with:

- **C_{max}** being: the hourly capacity requested by the shipper.
- **C** being: the hourly capacity booked as part of the annual, monthly or daily subscription to daily delivery capacity.
- **TCL** being: the annual, monthly or daily term of daily delivery capacity.
- **TCR** being: the annual, monthly or daily term of daily transmission capacity on the regional network.
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Daily and hourly capacity subscription principles

Annual subscription	
Delivery capacities	Firm and interruptible
Regional network transmission capacities	Firm and interruptible
Main network exit capacities	Firm and interruptible
Monthly subscriptions	
Delivery capacities	Firm
Regional network transmission capacities	Firm
Main network exit capacities	Firm
Daily subscriptions	
Delivery capacities	Firm and interruptible
Regional network transmission capacities	Firm and interruptible
Main network exit capacities	Firm and interruptible

The capacity subscription needs to be reserved by your shipper, according the following terms:

- At the latest on the twentieth (20th) day of month M-1 for annual subscriptions starting on the first (1st) day of the following month.
- At the latest on the twentieth (20th) day of month M-1 for monthly subscriptions starting on the first (1st) of month M.
- More than seven (7) calendar days notice in advance for daily subscriptions
- NB: This notice may be reduced until 8:00pm D-1 following the signature by your shipper of a Short Notice Subscription for your consumer delivery point. However, a subscription request received by GRTgaz after 9:00am D-2 **working day** implies an additional cost of 20% on the cost of capacity.

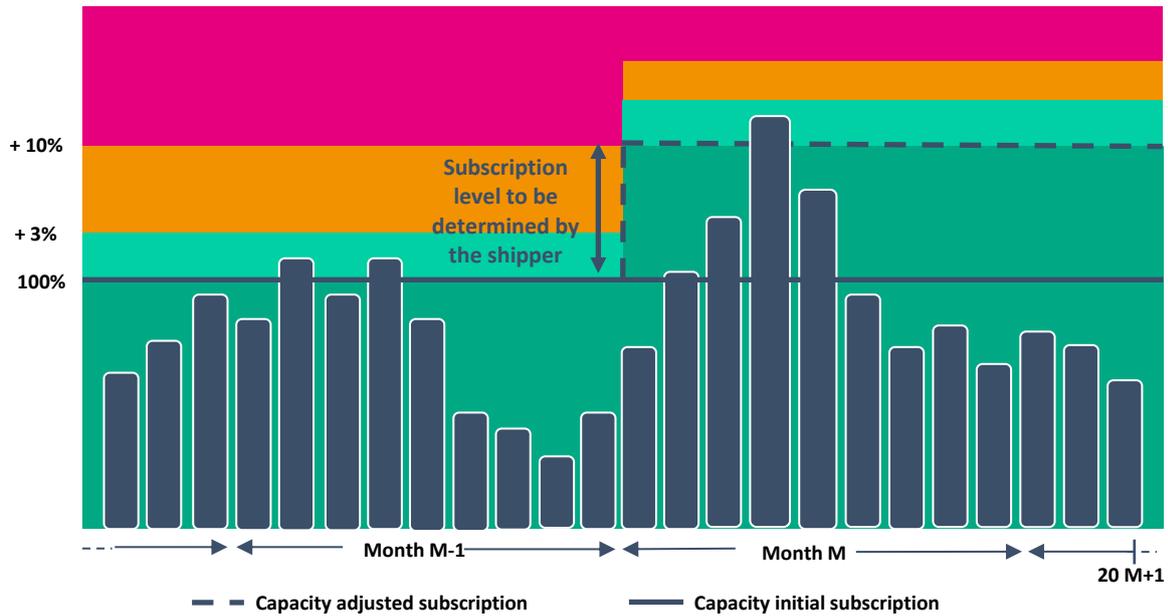
Continuity principle

GRTgaz applies a continuity rule to its hourly and daily delivery capacities: in the event of an annual capacity subscription being revised upwards or respectively downwards, the same may be not revised downwards or respectively upwards again during the next 12 months after the revision date. Such constraints do not apply for monthly and daily subscriptions and remain valid in the case of a change of shipper.

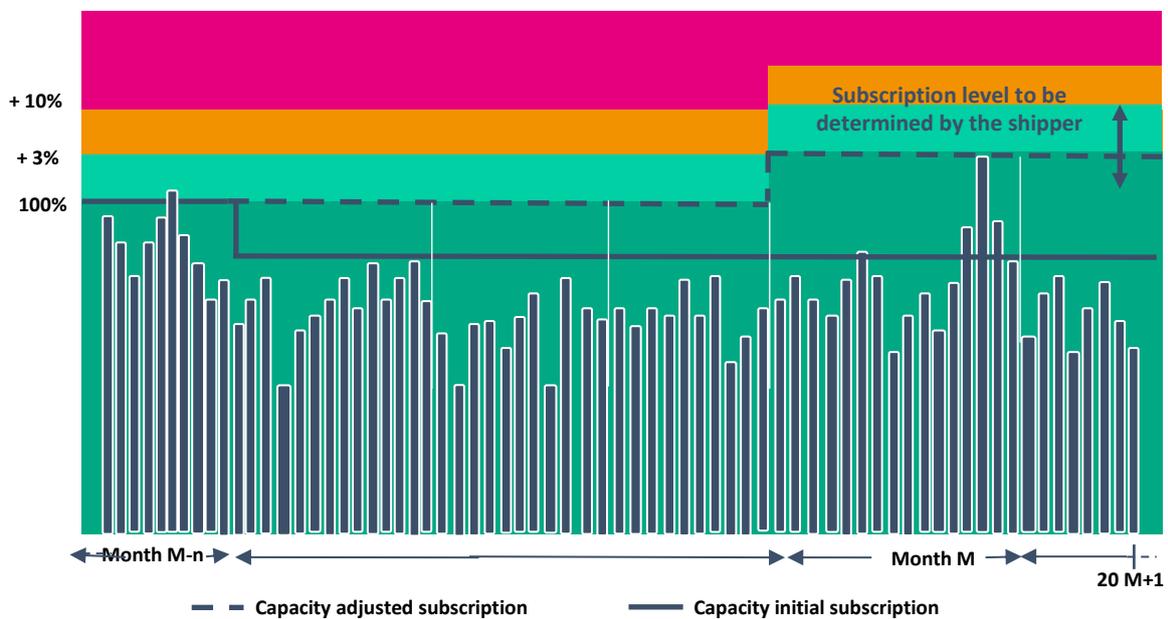
Subscription capacity adjustment

GRTgaz offers shippers the possibility to rapidly adjust daily and hourly capacity subscriptions in the event of a capacity overflow occurring, provided that there are availabilities on the network. If a daily capacity overflow is reported during month M, a revision upwards of the relevant annual subscription, starting on the first Day of month M, may be allocated until the 20th calendar day of month M+1, subject to compliance with the perennial development requirement principle. If an hourly capacity overflow is reported during month M-1, a revision upwards of the relevant subscription, starting on the first Day of month M-1, may be allocated until the 20th calendar day of month M.

Daily capacity overflow with continuity rule compliance / Hourly capacity overflow



In the event of the continuity rule not being complied with, a prior period adjustment of the relevant annual subscription may be requested starting as far back as the 1st day of month M-12 until the 20th calendar day of month M+1.

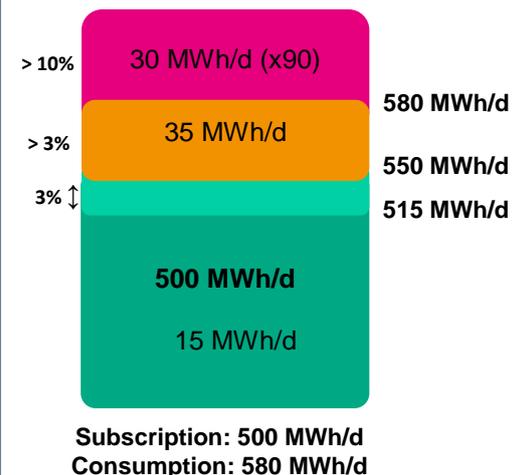
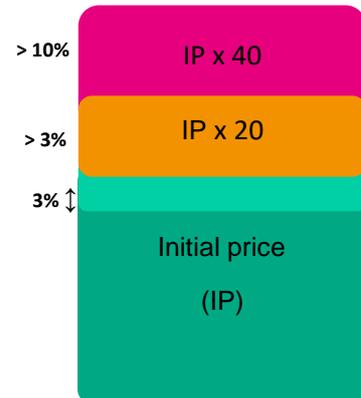


Daily capacity overflow

Each day, daily capacity overflows reported at the main network, the regional transmission network or the delivery network exit points are subject to price supplements.

Overflows lead to gradually increasing penalty charges according to the amount of such overflows.

- If the overflow exceeds 10 % of the initially subscribed capacity, the additional capacity price is multiplied by 40.
- If the overflow varies between 3% and 10% of the initially subscribed capacity, the additional capacity price is multiplied by 20.
- Tolerance: Up to 3% overflow, no penalty price is charged on top of the additional capacity price.



Example:

Annual subscription of 500 MWh/d, NTR=1

Overrun of capacity of 80 MWh/d during two days in January

Price of daily capacity (TCS+TCR+TCL)

Daily = monthly / 30

Monthly = annual x coef. (coef. January = 8/12)

Annual = Exit main network + regional network transmission + delivery

Daily price = $[(91.78+83.43 \times 1 + 33.20) \times 8/12] \times 1/30$
 $= 4.63\text{€/MWh}$

Overrun price

1st range: 3% < Overrun D < 10% Cost = 20 x daily capa. price

Overrun = 35 MWh x 4.63€/MWh x 20 = 3,241 €

2nd range: Overrun D > 10 % Cost = 40 X daily capa. price

Overrun = 30 MWh x 4.63€/MWh x 40 = 5,556 €

Total overrun cost = **8,797 € x 2 days = 17,594 €**

Annual cost of 65 MWh/d subscription of capacity:

$[80 \times (91.78+83.43 \times \text{NTR} + 33.20)] = 16,672.80 \text{ €/year}$

Overflows are invoiced to the primary owner (for more information, please refer to “*Find out more about transferring capacity right-of-use on consumer delivery points*”) of the relevant capacity, except in the case of the main network exit capacity.

Hourly capacity overflow

Each day, hourly delivery capacities at each delivery point are subject to price supplements. For a given gas day, the hourly capacity overflow is equal to the difference between the maximum value of all 4 hour averages of quantities delivered to the relevant consumer delivery point, (there are 21 consecutive 4-hour timeslots, hence 21 four-hour averages of which the highest one is used) if positive, and the subscribed hourly capacity to the relevant delivery point. It is equal to zero if not positive.

- If the overflow exceeds 20% of the allocated capacity, the additional capacity price is multiplied by 90.
- If the overflow varies between 10% and 20% of the allocated capacity, the additional capacity price is multiplied by 45.
- Up to 10%, an overflow tolerance applies.



Example:

Annual subscription of 500 MWh/d, NTR=1

Overrun of capacity of 10 MWh/h during a day of January

Hourly capacity price suppl.

$$\text{Hourly capacity price suppl.} = 10 \times [(83.43 \times 1 + 33.20)] \times 8/12 \times 1/30 = 25.90 \text{ €/MWh/h}$$

Overrun cost

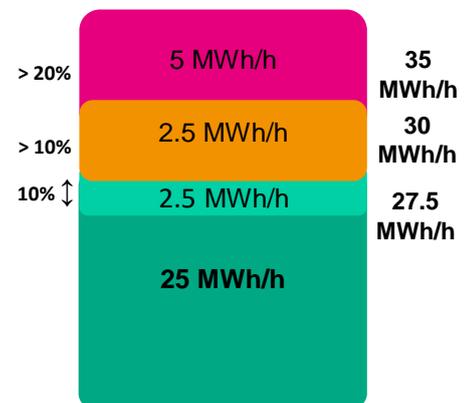
1st range: $10\% < \text{Overrun D} < 20\% \rightarrow 45 \times \text{hourly capacity price}$
 Overrun = $2.5 \text{ MWh} \times 25.90 \text{ €/MWh/h} \times 45 = 2,913.75 \text{ €}$

2nd range: $\text{Overrun D} > 20\% \rightarrow 90 \times \text{hourly capacity price}$
 Overrun = $5 \text{ MWh} \times 25.90 \text{ €/MWh/h} \times 90 = 11,655 \text{ €}$

Total overrun = **14,568.75 €**

Cost for an hourly capacity subscription of 10 MWh/h:

$$[10 \text{ MWh/h} \times 10 \times (83.43 \times 1 + 31)] = 11,663 \text{ €/year}$$



Subscription: 25 MWh/h
 Consumption: 35 MWh/h

Redistribution of penalties

- The penalties collected each year further to occurrences of overflows are then redistributed to the community of shippers on the basis of the prorated quantities delivered to the consumer delivery points and to the regional network interconnection points, at the latest in June of the following year.
- GRTgaz publishes the unit amount of the penalties thus redistributed on its website, stated in euros by MWh consumed by end consumers connected to the transmission network.