



CAP0717-17  
ENTSOG's Capacity conversion model  
24 July 2017

# ENTSOG's Capacity conversion model

**2017-07-24**

## Background

On October 13<sup>th</sup>, 2016 the amendment of CAM NC was endorsed by the Gas committee of EU member states. Article 21(3) states that ENTSOG has to develop a Capacity conversion model until 1 October 2017, which shall function as a basis for TSOs to offer capacity conversion services as of 1 January 2018.

Article 21(3) CAM NC amendment:

*“As from 1 January 2018, transmission system operators shall offer network users holding mismatched unbundled capacity at one side of an interconnection point a free-of-charge capacity conversion service. Such a capacity conversion service shall apply to annual, quarterly or monthly capacity products for bundled firm capacity at that interconnection point which the network user had to acquire because insufficient unbundled capacity on the other side of the interconnection point was offered by an adjacent transmission system operator. This service shall be offered on a non-discriminatory basis and shall prevent additional charges from being applied to network users for capacity they already hold. In particular, payments for the part of the contracted bundled capacity which network users already hold as mismatched unbundled capacity shall be limited to a possible auction premium. This service shall be based on the conversion model under development by ENTSOG and to be finalised at the latest by 1 October 2017 after consulting stakeholders and the Agency.”*

The ENTSOG conversion model according to CAM NC put forward by this document builds upon previous work done by ENTSOG in this area (rf. next paragraph).

## **Previous work of ENTSOG regarding capacity conversion**

EFET and ENTSOG started in the beginning of year 2015 a dialogue process in an ad-hoc joint work stream with the aim to identify and resolve potential issues related to the introduction of capacity bundling before more long term bundled products are offered. The issues identified in the dialogue between EFET and ENTSOG – amongst others especially the so called “capacity mismatch issue” where network users holding unbundled capacity bookings on one side of an IP may not find the equivalent unbundled capacity on the other side of the interconnection (rf. to Annex 1) – were jointly presented on the XXVII Madrid Forum. Thereafter, EFET and ENTSOG opened the discussion for all stakeholders including national regulatory authorities, ACER and the European Commission. Based on the intensive dialogue with stakeholders (public consultation, preparatory meetings of stakeholder experts and two stakeholder workshops) about the outlined issues, ENTSOG reached stakeholder’s support for potential options on a stakeholder workshop in June 2015.

The ENTSOG recommendation paper published in 2015 derived from this extensive and transparent work stream included measures to prevent the “capacity mismatch issue” as well as potential options to deal with it once it materialized. More specifically, it mentioned 3 options for capacity conversion services. When ENTSOG published the paper in 2015, the implementation of any of the measures and options was based on voluntary action and/or subject to approval on national level –today the CAM NC amendment obliges TSOs to offer a capacity conversion service based on the ENTSOG model. The work being done by ENTSOG by that time regarding capacity conversion can therefore be considered as input for the capacity conversion model to be developed until October 2017 according to CAM NC being put forward by this document.

## **ENTSOG capacity conversion model according to Art. 21 (3) CAM NC**

### **Introduction to the capacity conversion service**

The capacity conversion service allows a network user having contracted existing unbundled capacity at one side of an IP and having successfully acquired bundled capacity in an auction at the same IP to convert such unbundled capacity into bundled capacity.

A single capacity conversion is a bilateral procedure between two parties on the same side of an IP – one TSO and one network user. When implementing the capacity conversion service the TSOs shall therefore ensure that the service is applied identically at all IP sides belonging to the same entry-exit system, implying that network users benefit from the exact same conditions at each IP within this entry-exit-system. Applying the same conditions across the border between two entry-exit-systems (e.g. applying the same conditions at the entry- and exit-side of a specific IP) is not necessary due to the fact that a conversion only affects the contractual arrangements on one side of an IP and is even counter-productive regarding the higher-rated aim to have the same conditions within an entry-exit-system. In addition, the specifics of each entry-exit-system including processes and IT-systems can be reflected in the conversion mechanism. Accordingly, no requests for the application of the same service across an IP were raised by the network users in consultations conducted by ENTSOG and several TSOs on this topic.

### **Subject of the service**

The TSO offers all network users holding unbundled capacity at one side of an interconnection point (IP) the possibility to acquire capacity on the other side of the IP, without paying twice for the capacity on the side where they already hold unbundled capacity. Article 21(3) CAM NC refers only to firm bundled capacity products. Therefore the conversion capacity service relates to firm capacity only.

Provision of the service refers to yearly, quarterly or monthly standard capacity products (in line with CAM NC Art 21(3)), without prejudice to the voluntary offer of the Conversion service for daily and within-day capacity products on a national level.

This conversion model is without prejudice to provisions described in Art. 19(5) and 21(1, 4) CAM NC.

### **Process description**

1. A network user has concluded a contract for an unbundled firm capacity at an interconnection point from/to the TSO system
2. According to its contractual arrangements, the TSO requires network users to submit requests for the conversion service to be applied before or after the end of the respective auction of bundled capacity.
3. Subject to successful allocation of bundled capacities to the network users in the respective bundled capacity auction, the TSO performs the conversion service for the network users.
4. The capacity becoming available by the application of the conversion service will be reoffered by the TSO in the subsequent auction(s).

### **Allowed conversion scenarios**

1. The network user may request a conversion up to the capacity (amount) and runtime of its unbundled contract(s), subject to the acquisition of bundled capacity in the respective auction.
2. Provision of the service is obligatory for yearly, quarterly and monthly standard capacity products. It can be offered for shorter standard capacity products on a voluntary basis. The NRA may approve/reject specific conditions under which the capacity conversion service will be offered

### **Applicable charges**

1. After successful conversion of capacity by the TSO, only potential auction premium stemming from the respective auction of bundled capacity will be charged in addition to the applicable contractual price of the initial unbundled contract (applicable tariff plus auction premium, if any)<sup>1</sup>. Specifically this means that for the converted part of the newly acquired bundled capacity the contractual price is the applicable tariff including the auction premium (if any) resulting from the allocation of the initial contract being converted plus the auction premium (if any) resulting from the allocation of the newly acquired bundled capacity.

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<sup>1</sup> However, the NRA may ask the affected TSO to apply the contractual price (applicable tariff plus auction premium, if any) of the bundled capacity contract.

Example for applicable charges for the converted capacity part:

- EUR 2,50 kWh/h/runtime applicable tariff incl. any potential multipliers and seasonal factors of the contract
- EUR 0,20 kWh/h/runtime auction premium of the contract for unbundled capacity
- EUR 0,40 kWh/h/runtime auction premium of the contract for bundled capacity
- **EUR 3,10 kWh/h/runtime total payable price for the converted part**

2. No conversion service fee will be imposed to the network user.

### **Conversion service request**

In case that a TSO requires ex-ante conversion requests (conversion request to be sent before the auction of bundled capacity), network users shall send the capacity conversion service request before the end of the auction of bundled capacity, whereby the deadline for sending the request is subject to NRA approval.

In case that a TSO requires ex-post conversion requests (conversion request to be sent after the auction of bundled capacity), network users shall send the capacity conversion service request within 3 working days after the end of the auction of bundled capacity.

The network user shall send a conversion service request in a form specified in the respective terms and conditions of the TSO

- in written form (letter or fax, ) using a TSO's standard form, or
- in electronic form (e-mail or TSO back-end system), or
- via the relevant capacity booking platform, if supported by TSOs and the relevant platform.

Electronic communication shall be the preferred way of communication.

In case the service request is incomplete or incorrect, the network user will be invited by the TSO to complete or correct it.

The capacity conversion request contains at least (where applicable) the following information:

- Reference number of the auction of bundled capacity
- Interconnection Point

- Flow direction
- The capacity(amount) and runtime(duration) to be converted
- Reference number of the unbundled contract(s)

### **Conversion service confirmation**

In case that a TSO requires ex-ante conversion requests:

When the conversion service request is complete, the TSO sends the capacity conversion service confirmation within 3 working days after completion of the auction of bundled capacity.

In case that a TSO requires ex-post conversion requests:

When the conversion service request is complete, the TSO sends the capacity conversion service confirmation within 3 working days after receiving the valid capacity conversion request from the network user.

The Capacity conversion service confirmation contains at least (where applicable) the following information:

- Reference number of the auction of bundled capacity
- Interconnection Point
- Flow direction
- The capacity(amount) and runtime(duration) converted
- Reference number of the unbundled contract(s)

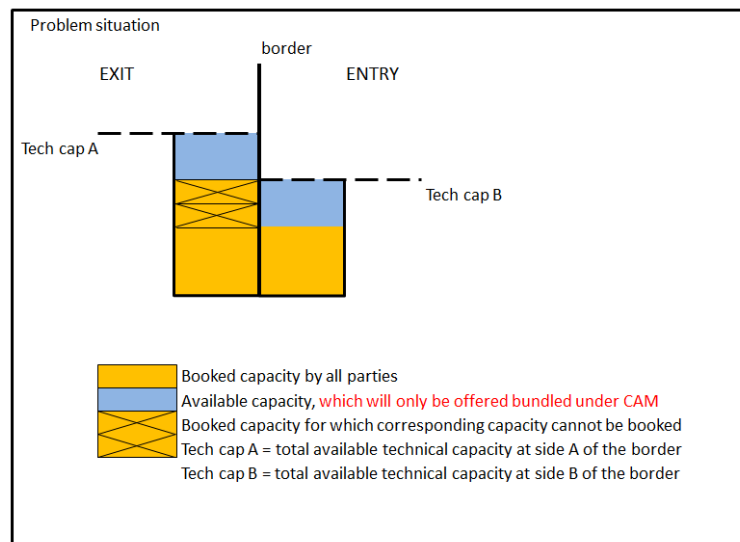
The capacity conversion service confirmation is sent in written or electronic form to the network user.

## Annex 1:

### Issue description: Already contracted unbundled capacity and offer of bundled products only – the so called “capacity mismatch issue”<sup>2</sup>

Article 19(1) of CAM NC defines that TSOs are obliged to offer all firm capacity at interconnection points as bundled capacity, in so far as there is available firm capacity on both sides of the interconnection point. Unbundled firm capacity may be offered by a TSO where the respective TSO has more available firm capacity on its side of the interconnection point than the adjacent TSO on the other side in accordance with Article 19(5) of CAM NC.

Based on these requirements set out in CAM NC, the offer of unbundled capacity is limited to specific cases. This issue can materialize when network users hold existing unbundled long term capacity contracts at that side of an IP at which the level of technical capacity exceeds the level at the other side of the IP. In this case, the network user will not be able to contract unbundled capacity from the TSO to match it with its existing unbundled long term capacity contract on the adjacent side. In order to be able to transport capacity, the network user would be required to obtain bundled capacity, thus partly requiring the contracting of a capacity product that the network user already has. The issue is illustrated in the following diagram:



<sup>2</sup> Refer also to the joint EFET/ENTSOG MF paper on issues regarding bundling of capacities - ([Link](#))



In the example above, the network user holds an unbundled existing long term contract on the side of the exit TSO with no corresponding unbundled capacity at the side of the entry TSO. Due to the fact that the exit TSO has a higher level of technical capacity than the entry TSO, both TSOs have available capacity even though the exit TSO has contracted capacity in an unbundled manner. Based on the requirements of CAM NC, the available capacity on both sides of the IP would be offered in a bundled way, thus making it impossible for the network user to obtain only the unbundled capacity at the side of the entry TSO to match his existing capacity portfolio. However, interruptible capacity might be available but – according to Art. 32 (1) CAM NC – only in case all firm capacity was sold at an auction premium, sold out or not offered at all at the specific interconnection point.

## Annex 2: **Examples for conversion scenarios**

- 1) Process examples (ex-ante and ex-post)
- 2) Conversions scenarios (capacity and duration options)

## Process examples

### Ex-ante conversion request

*(The TSO requires the network user to submit requests for the conversion service to be applied before the end of the respective auction of bundled capacity)*

1. A network user has in the past concluded a contract for an unbundled firm capacity (that is still valid) at an interconnection point from/to the TSO system
2. The network user sends the conversion request to the TSO in a request form (electronically, via booking platform or other mean of communication) to the TSO
3. The network user participates in the auction of bundled capacity, which covers (partially) the runtime of the capacity contract that shall be converted
4. Subject to successful allocation of bundled capacities to the network user in the respective bundled capacity auction, the TSO performs the conversion service for the network user
5. When the conversion service has been completed, the TSO sends the capacity conversion service confirmation within 3 working days after completion of the auction of bundled capacity

### Ex-post conversion request

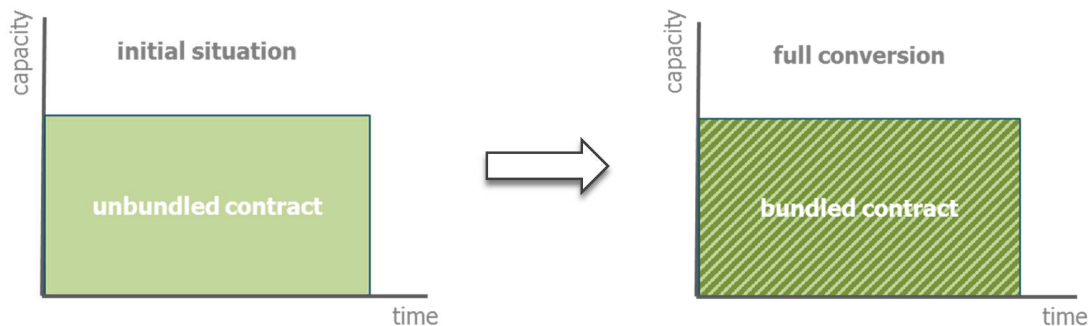
*(The TSO requires the network user to submit requests for the conversion service to be applied after the end of the respective auction of bundled capacity)*

1. A network user has in the past concluded a contract for an unbundled firm capacity (that is still valid) at an interconnection point from/to the TSO system
2. The network user participates in the auction of bundled capacity, which covers (partially) the runtime of the capacity contract that shall be converted
3. The network user sends the conversion request within 3 working days after the end of the auction of bundled capacity (electronically, via booking platform or other mean of communication) to the TSO
4. Subject to successful allocation of bundled capacities to the network user in the respective bundled capacity auction, the TSO performs the conversion service for the network user  
When the conversion service has been completed, the TSO sends the capacity conversion service confirmation within 3 working days after the day of receipt of the conversion request.

## Conversions scenarios (capacity and duration options)

### **Situation 1a: The shipper converts**

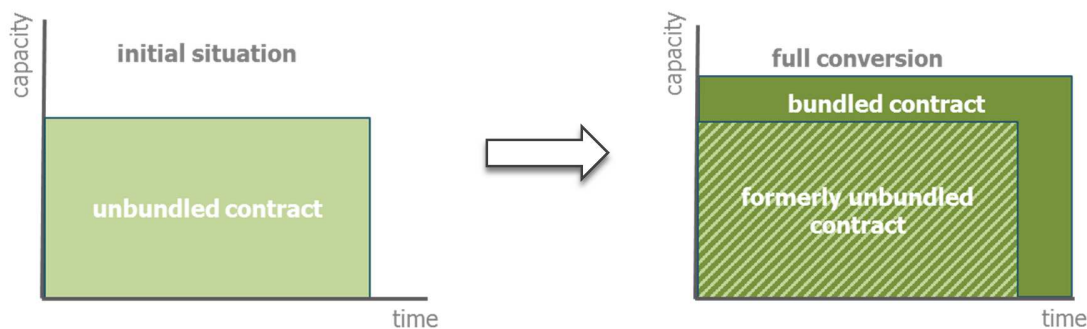
- 100% of capacity of the unbundled contract
  - Full remaining runtime of the unbundled contract (e.g. unbundled contract with remaining runtime of one year (01.10.2018 – 01.10.2019), conversion request for the remaining runtime (yearly capacity product))
  - Unbundled contract
    - Firm capacity: 2 400 MWh/d
    - Duration: until 01.10.2019
  - Bundled capacity acquired in the annual yearly auction 2018 (in July 2018)
    - Firm capacity: 2 400 MWh/d
    - Duration of the product: gas year 2018/19 (01.10.2018 – 01.10.2019)
    - Duration of the product to be converted: gas year 2018/19 (01.10.2018 – 01.10.2019)
- ⇒ **Results in full conversion of the capacity and runtime**



### **Situation 1b: The shipper converts**

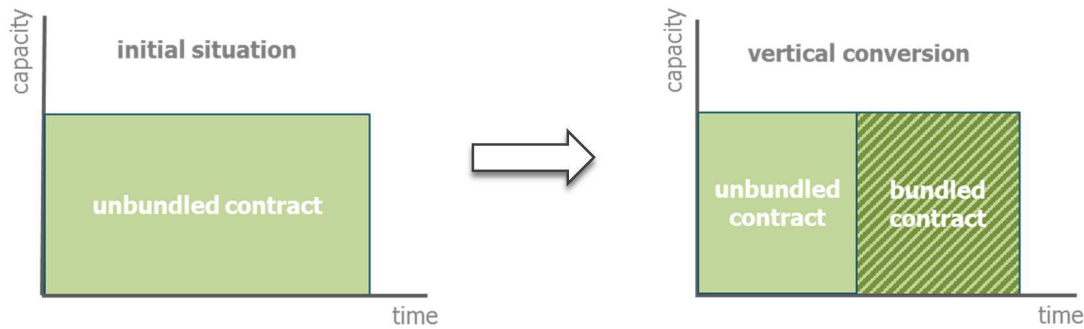
- 100% of capacity of the unbundled contract
- Full remaining runtime of the unbundled contract (e.g. unbundled contract with remaining runtime of one quarter (01.10.2018 – 01.01.2019), conversion request for the remaining runtime (quarterly capacity product))
- Unbundled contract
  - Firm capacity: 2 400 MWh/d
  - Duration: until 01.01.2019
- Bundled capacity acquired in an annual yearly auction 2018 (in July 2018)
  - Firm capacity: 3 600 MWh/d

- Duration of the product: gas year 2018/19 (01.10.2018 – 01.10.2019)
- Duration of the products to be converted: one quarter (01.10.2018 – 01.01.2019)
- ⇒ **Results in full conversion of the capacity and runtime beyond conversion**
- ⇒ **additional bundled capacity is acquired**



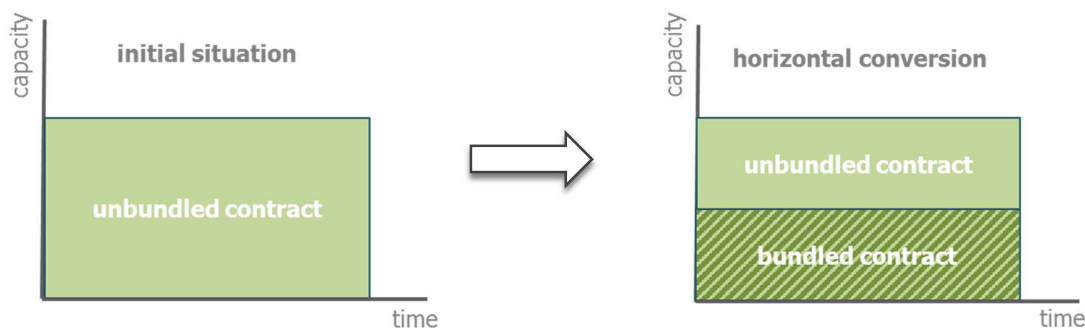
**Situation 2: The shipper converts**

- 100% of capacity of the unbundled contract
- Partially the runtime of the unbundled contract (e.g. unbundled contract with remaining runtime of one year (01.10.2018 – 01.10.2019), conversion request for one month (monthly capacity product))
- Unbundled contract
  - Firm capacity: 2 400 MWh/d
  - Duration: until 01.10.2019
- Bundled capacity acquired in an monthly auction in August 2019
  - Firm capacity: 2 400 MWh/d
  - Duration of the product: one month (01.09.2019 – 01.10.2019)
  - Duration of the product to be converted: one month (01.9.2019 – 01.10.2019)
- ⇒ **Results in partial conversion of the runtime and full conversion of the contracted capacity**



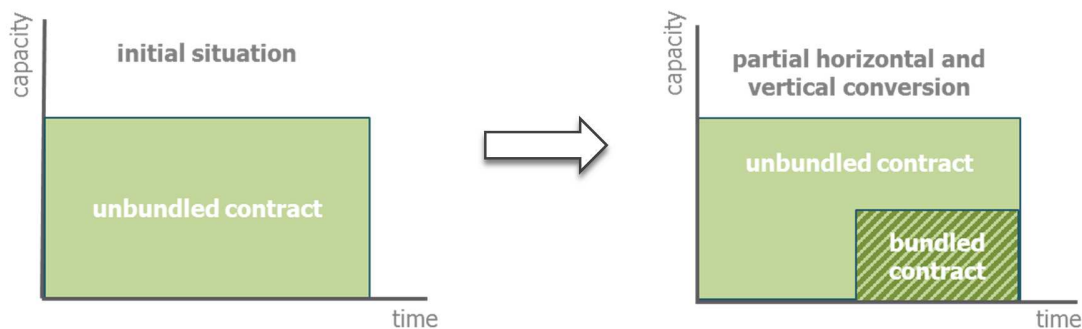
**Situation 3: The shipper converts**

- Less than 100% of capacity of the unbundled contract
  - Full remaining runtime of the unbundled contract (e.g. unbundled contract with remaining runtime of one year (01.10.2018 – 01.10.2019), conversion request for the remaining runtime (yearly capacity product))
  - Unbundled contract
    - Firm capacity: 2 400 MWh/d
    - Duration: until 01.10.2019
  - Bundled capacity acquired in an annual yearly auction 2018 (in July 2018)
    - Firm capacity: 1 200 MWh/d
    - Duration of the product: gas year 2018/19 (01.10.2018 – 01.10.2019)
    - Duration of the product to be converted: gas year 2018/19 (01.10.2018 – 01.10.2019)
- ⇒ **Results in partial conversion of the contracted capacity and full conversion of the runtime**



**Situation 4: The shipper converts**

- Less than 100% of capacity of the unbundled contract
  - Partially the remaining runtime of the unbundled contract (e.g. unbundled contract with remaining runtime of one year (01.10.2018 – 01.10.2019), conversion request for one month (monthly capacity product))
  - Unbundled contract
    - Firm capacity: 2 400 MWh/d
    - Duration: until 01.10.2019
  - Bundled capacity acquired in a monthly auction in August 2019
    - Firm capacity: 1 200 MWh/d
    - Duration of the product: one month (01.09.2019 – 01.10.2019)
    - Duration of the product to be converted: one month (01.9.2019 – 01.10.2019)
- ⇒ **Results in partial conversion of the contracted capacity and partial conversion of the runtime**



### Annex 3:

#### Template for capacity conversion service parameters overview

(to be published on ENTSOG's webpage as of December 2017)

TSO name	Conversion request: ex-ante/ex-post	Contractual arrangements (which contract stay valid)	Applicable tariff	Deadline to send conversion request	Deadline to send conversion confirmation	Way of conversion indication	Specific conditions under which the capacity conversion service may be offered	Capacity product range	Link to TSO website, where to find conversion service information