

*Network Code on Harmonised
Transmission Tariff Structures for
Gas for the Energy Community
Contracting Parties*

USAID/NARUC/EnC Workshop on Gas
Market Design and Gas Transmission
Grid Codes

Vienna, 28th November 2018

- ❑ ***Legal background***
- ❑ ***Gas Network Codes in the Energy Community Contracting Parties***
- ❑ ***Gas transmission tariffs in the EnC CPs***
- ❑ ***Tariff Network Code- main provisions and deadlines for the EnC CPs***

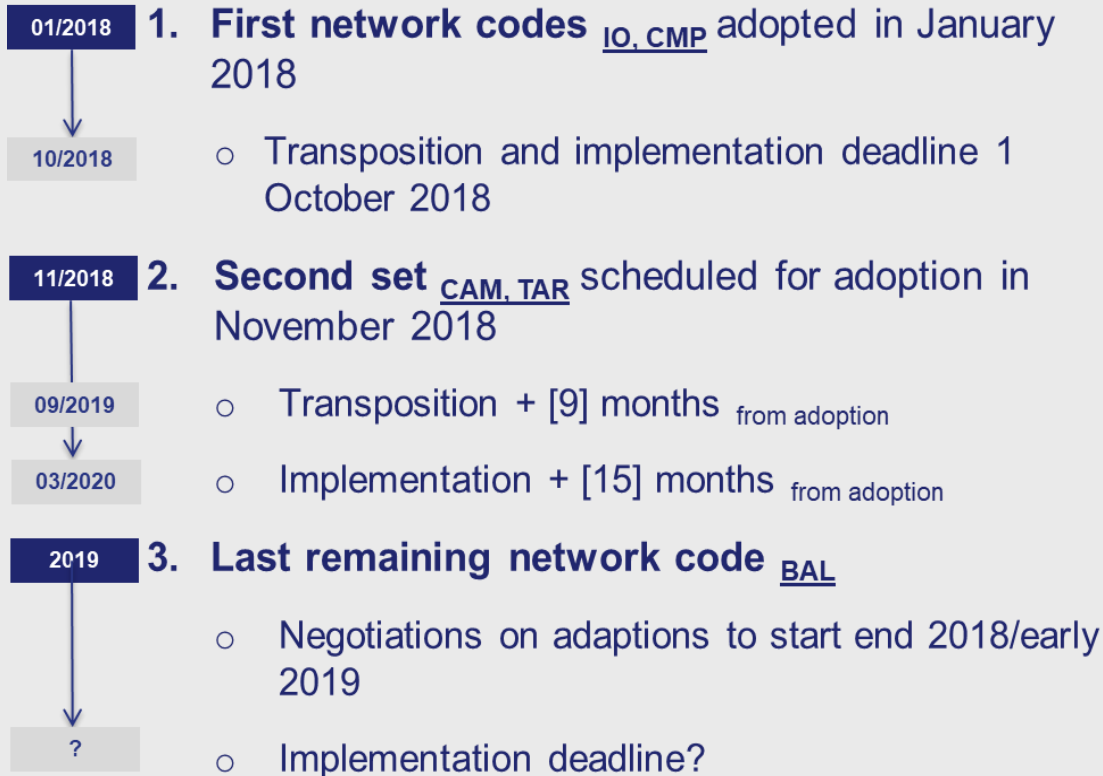
❑ *Regulation 715/2009, adopted by the EnC MC Decision in October 2011, applicable as of 2015:*

→ *Tariffs, or the methodologies used to calculate them, shall facilitate efficient gas trade and competition, while at the same time avoiding cross-subsidies between network users and providing incentives for investment and maintaining or creating interoperability for transmission networks.*

→ *Tariffs for network users shall be non-discriminatory and **set separately for every entry point into or exit point out of the transmission system.***

❑ *EnC shall endeavour to apply the Network Codes developed by the European Commission under Regulation 715/2009 (2011 MC Decision)*

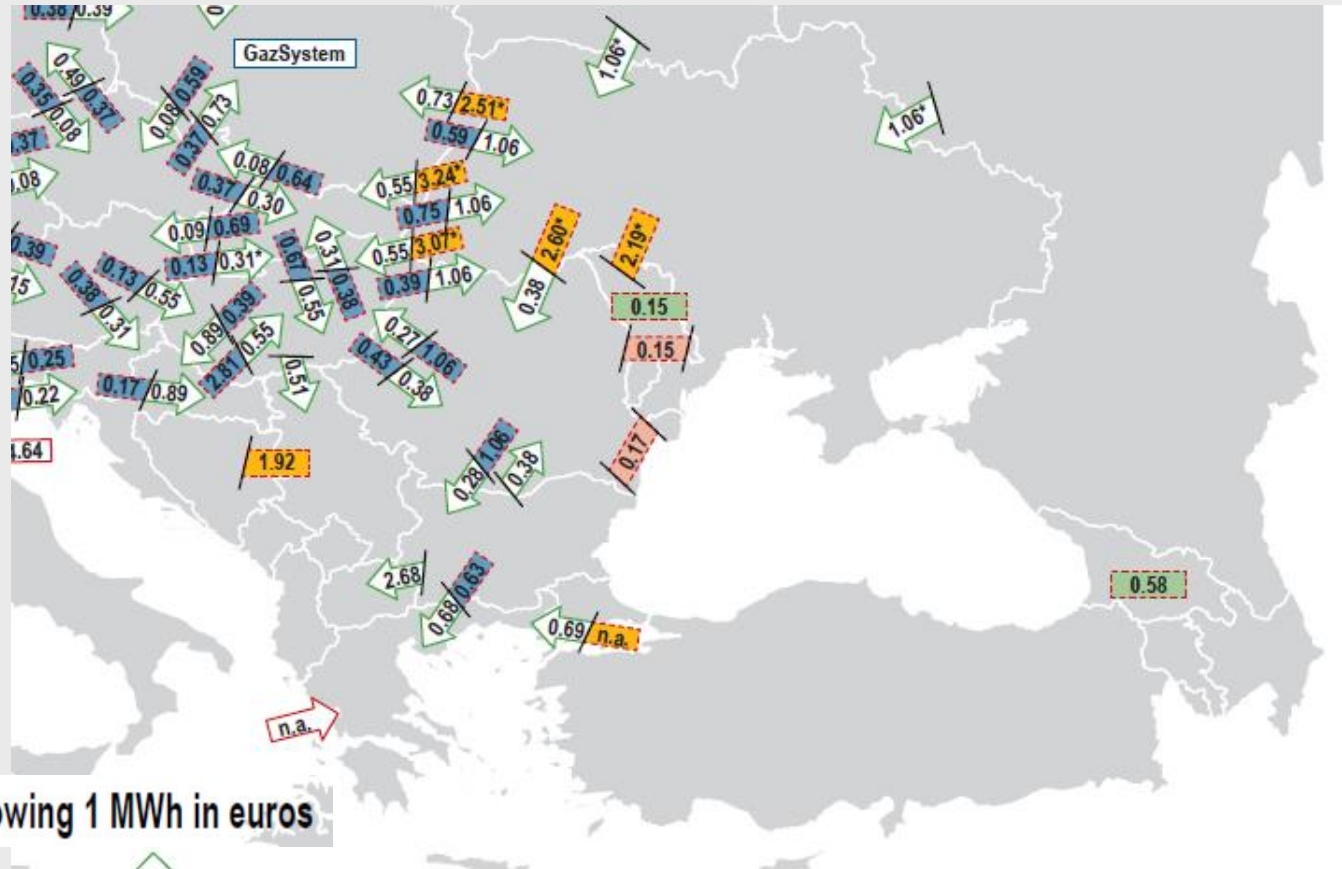
❑ *Amendments to the EnC acquis in line with the evolution of EU law possible (EnC Treaty)*



- ❑ **Entry- exit tariffs implemented in two CPs- Serbia and Ukraine**
 - **however in UKR currently only to IPs**
 - **capacity/commodity split in SRB 70/30, in UKR 100 capacity**
- ❑ **Other CPs- only commodity charge (post stamp)**
 - **entry-exit methodology under preparation in FYR of Macedonia and Moldova**
- ❑ **Treatment of legacy contracts (MDA, SRB, UKR)**

Transmission tariffs in the EnC CPs (2)

ACER MMR
2017



All entry and exit points (TAR NC scope > CAM NC scope)

- C.1 General provisions
- C.2 Reference price methodologies
- C.4 Reconciliation of revenue
- C.7 Consultation requirements (except Art.28)
- C.8 Publication requirements
- C.10 Final and transitional provisions

Interconnection points (TAR NC scope = CAM NC scope)

- C.3 Reserve prices
- C.5 Pricing of bundled capacities and VIP capacity
- C.6 Clearing and payable price
- C.7 Consultation requirements (Art.28)
- C.9 Incremental capacity

Transmission services, when both criteria met:

(1) The costs of such service are caused by the **cost drivers of both technical or forecasted contracted capacity and distance**

(2) The costs of such services are related to the **investment in and operation of the infrastructure which is part of the regulated asset base** for the provision of transmission services

Transmission services revenue to be recovered by capacity- based tariffs

Exemption: part of the transmission services revenue may be recovered through commodity-based tariffs:

(a) flow-based charge (for costs driven by gas flows; applied at all points- same for all entries and the same for all exits)

(b) complementary revenue recovery charge (for managing revenue over- or under-recovery; applied at points other than IPs)

CAA for capacity-based tariffs

- Cost drivers: capacity or capacity&distance
- Ratios for intra- system and cross- system revenue

CAA for commodity-based tariffs

- Cost drivers: amount of gas flows or flows&distance
- Ratios for intra- system and cross- system revenue

Comparison of ratios- to indicate cross-subsidization

- Capacity cost allocation comparison index
- Commodity cost allocation comparison index
- Where the results exceed 10%, NRA shall provide justification

Reference price is:

- Price for firm capacity product with duration of one year*
- Used to derive reserve prices*
- Applicable to both IPs and non-IPs*

Reference price methodologies:

- Should comply with the prescribed criteria (network users should be able to reproduce the calculation, reflecting actual costs incurred, ensuring non-discrimination, avoiding volume risk, not distorting cross-border trade)*
- Capacity-weighted distance RPM (serves as counterfactual)- share of allowed revenue to be collected from each entry and exit point should be proportional to its contribution to the costs of the system's capacity and to the distance between it and all entry and exit points*

- ❑ **Benchmarking by NRA:** reference prices are adjusted so that the resulting values meet the competitive level of reference prices;
- ❑ **Equalisation:** same reference price is applied to some or all points within a homogeneous group of points;
- ❑ **Rescaling:** the reference prices at entry or at all exit points or both are adjusted either by multiplying their values by a constant or by adding to or subtracting from their values a constant.
- ❑ **Storage points:** a discount of at least 50% shall be applied unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point.
- ❑ **Discount for increasing SoS** may be applied to LNG and infrastructure developed with the purpose of ending the isolation of CPs

- ❑ ***For yearly standard capacity products for firm capacity, reference price shall be used as reserve price i.e. input to CAM NC auctions***
- ❑ ***TAR NC defines the ranges for the respective multipliers:***
 - *quarterly and monthly products: 1-1,5*
 - *daily and within- day products: 1-3; in duly justified cases the level maybe less than 1 but higher than 0, or higher than 3*
 - *By October 2025 for daily and within-day shall be no more than 1,5, if by October 2023 the ECRB issues a recommendation on this (justified by prescribed criteria)*
- ❑ ***$P_{st} = (M \times T / 365) \times D$ (M- multiplier; T- reference price; D- duration in gas days)***
 $P_{st} = (M \times T / 8760) \times H$ (H- duration in hours)- for intra- day capacity products

Calculation of reserve prices with seasonal factors

For monthly standard capacity products:

Seasonal factors for monthly products are calculated using as an input the forecasted flows for each month. Only if the forecasted flows for one month (or more) are 0, forecasted contracted capacity should be used in the calculations.

- (a) For each of the months, calculate the forecasted flows or forecasted contracted capacity.

$$Month_i \rightarrow Flows_i$$

- (b) For each of the months, calculate the usage rate for each month:

$$Usage\ rate_i = \frac{Flows_i}{\sum_{i=1}^{12} Flows_i}$$

- (c) For each of the months, calculate the primary factor:

$$Primary\ factor_i = Usage\ rate_i \times 12$$

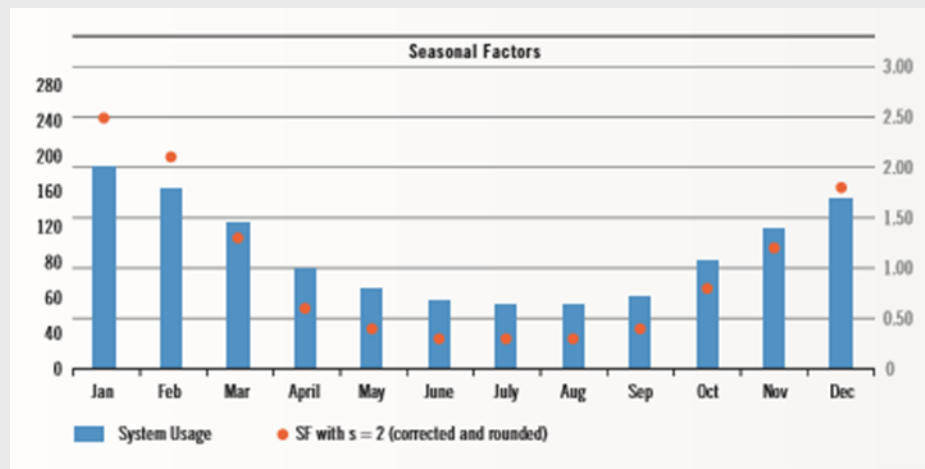
* If one of the above calculated primary factors is equal to 0, then this value needs to be corrected. Its value will be changed to whichever is lower: (1) the lowest of the other primary factors; or (2) 0.1.

- (d) For each of the months, calculate the initial level of the seasonal factors:

$$Initial\ SF_{monthly,i} = Primary\ factor_i^s$$

The purpose of seasonal factors is to foster efficient system use by allowing higher reserve prices in months with high utilisation rates, and lower reserve prices in low-utilisation months

$$P_{st} = (M \times SF) \times (T / 365) \times D$$



$$0 \leq s < 2$$

s is applied in order to penalise / incentivise the months that deviate the most from a flat usage. With $s = 1$, the seasonal factors are directly proportional to the use for the system.

Ex- ante discounts

- $D = \text{Pro} * A * 100$
- A- reflects the estimated economic value of the type of standard interruptible capacity product
- $\text{Pro} = (N * D_{\text{int}}) / D * (\text{CAP}_{\text{av.int}} / \text{CAP})$
- N- expectation of number of interruptions; D_{int} - duration of expected interruption; $\text{CAP}_{\text{av.int}}$ - expected average interrupted capacity

Ex- post discounts

- Network users compensated after the actual interruption occurred
- May be used on IPs where there was no interruption of capacity due to physical congestion in the previous year
- For each day of interruption, the compensation = 3x reserve price for daily firm product.

Ex-ante calculation

Standard capacity product

- $D = 720$ h
- $CAP = 1,000,000$ units

Expected scale of interruption

- $N = 6$ interruptions
- $D_{int} = 12$ h
- $CAP_{av.int} = 100,000$ units



Probability factor



$$Pro = \frac{6 \times 12}{720} \times \frac{100,000}{1,000,000} = 0.01$$

Adjustment factor

- $A = 20$



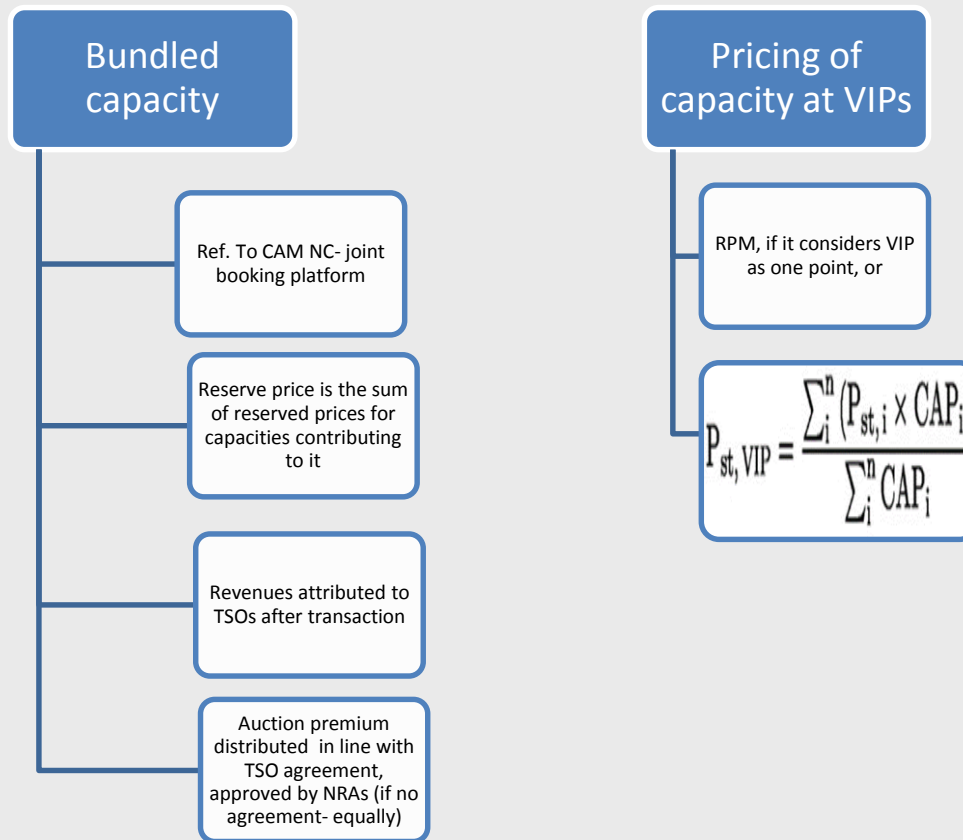
Discount



$$Di_{ex\ ante} = 0.01 \times 20 \times 100\% = 20\%$$

- ❑ *In case of non- price cap regimes*
- ❑ *Over- or under- recovery: $R_A - R$, recorded on the **regulatory account**, reconciled in the next period (tariff or regulatory, as decided by NRA)*
- ❑ *Reconciliation may be partial in case of incentives to TSOs*
- ❑ *CRRC may be used for non- IPs*
- ❑ *Price cap regimes- risk covered exclusively by risk premium, no reconciliation*
- ❑ *Earned **auction premium** to be attributed to **specific account** (other than regulatory account)*
 - *NRA may decide to use auction premium for reducing physical congestion or decrease tariffs for the next tariff period*

Pricing of bundled capacity and capacity at VIPs



□ **Clearing price is the price resulting from auction: $P_{cl} = P_{R, au} + AP$**

□ **Payable prices:**

1) **Floating payable price: $P_{flo} = P_{R, flo} + AP$**

2) **Fixed payable price: $P_{fix} = (P_{R,y} * IND) + RP + AP$**

Conditions for application:

a) **Non- price cap regimes**

i. **If only existing capacity offered- floating price**

ii. **If both incremental and existing capacity offered- floating price and fixed price (for alternative capacity allocation and PECIs)**

a) **Price cap regime: any of the approaches**

- ❑ *What is to be consulted?*

- *RPM, allowed revenue information, methodologies for commodity tariff and non- transmission tariff setting as well as for fixed payable tariffs, if applied*

- ❑ *How long?*

- *2 months for consultation;*

- *TSO or NRA has 1 month to publish responses*

- ❑ *Role of the ECRB*

- *analysis of compliance and publications, 2 months after the consultation is done, conclusions to be sent to the NRA and the ECS (NRA/TSO forward consultation documents to the ECRB)*

- ❑ *NRA's decision 5 months after end of consultation*

- ❑ ***The whole process, including calculation of tariffs, to be accomplished by 31st May 2021 the latest.***

- ❑ *Information to be published before yearly capacity auction- related to products and reserve prices*
- ❑ *Information to be published before the tariff period- related to methodology*
- ❑ *Where to publish?*
 - *on ENTSOG's web page, via link, for members and observers to ENTSOG*
 - *on TSO's web page for those that are not members or observers to ENTSOG*
 - *to the extent possible in English*

TAR NC shall not affect the level of transmission tariffs from contract concluded before 1st October 2019.

However, the provisions of these contracts related to capacity bookings and tariffs cannot be renewed, prolonged or rolled over after expiration date.

Contracts or information on bookings to be sent to NRA before 1st November 2019.

- ❑ *ECRB reports on methodologies applied in the EnC CPs*
- ❑ *EnC Secretariat performs monitoring*
- ❑ *Deadline for transposition: 9 months after adoption*
- ❑ *Deadlines for implementation: 15 months, but*
→ *chapters II, III and IV as of 31st May 2021*



*Thank you
for your attention!*

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