

ACER



Agency for the Cooperation
of Energy Regulators

The Agency's Monitoring of Congestion at Interconnection Points

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**Regulatory School Training - Congestion Management of
Gas Transmission Networks**

23 September 2019, Ljubljana

The views presented do not represent the official position of the Agency.

All statements are attributable solely to the authors.

- Legal basis
- Results of congestion monitoring
- Recommendations
- Application of congestion monitoring procedures
- Discussion on indicators of congestion

Legal basis

Gas Regulation – Art. 2(21):

*“**CONTRACTUAL CONGESTION**’ means a situation where the level of firm capacity demand exceeds the technical capacity;”*

CMP Guidelines:

→ **paragraph 2.2.1(2)**: Agency to publish a yearly monitoring report on contractual congestion at interconnection points (‘IPs’).

→ **paragraph 2.2.3(1)**: **CONGESTION CRITERIA**

Capacity demand exceeds offer at IP sides (at the reserve price in case of auctions) in the monitored year (Y_1) for products for use in Y_1 or Y_2 or Y_3 (i.e. 2018-2019-2020):

- (a) for at least 3 firm monthly capacity products or
- (b) for at least 2 firm quarterly products or
- (c) for at least 1 firm yearly/longer product
- (d) Or where no firm capacity product with a duration of 1 month or more was offered.

Congestion is apparent...

- **In auctions:**
once the auction clears with an ***auction premium*** (= a top-up paid by the successful bidder, on top of the reserve price at a specific IP).
- **In the absence of auctions:**
when available firm capacity at the concerned IP is lacking (capacity fully booked). Capacity demand exceeding the offer (at the reference price) may be indicated and reported through the ***“unsuccessful requests”*** and/or additional capacity demand for ***interruptible capacity***.

Main purpose of the report:

→ Identify for which IP sides at least one of the 4 conditions of CMP GL 2.2.3(1) is met during the analysed period **so that FDA UIOLI shall be applied**

Results of congestion monitoring

Reference period: 2018 – 2020 (year monitored: 2018)

» **31 congested IP sides** found in the EU

- ~12% of 255 IP sides within the scope of the CMP GL)
They were **17** instances of contractual congestion in 2017

- FDA UIOLI mechanism already applied at **10** (of the 31) IP sides
- FDA UIOLI may be implemented at **21** IP sides

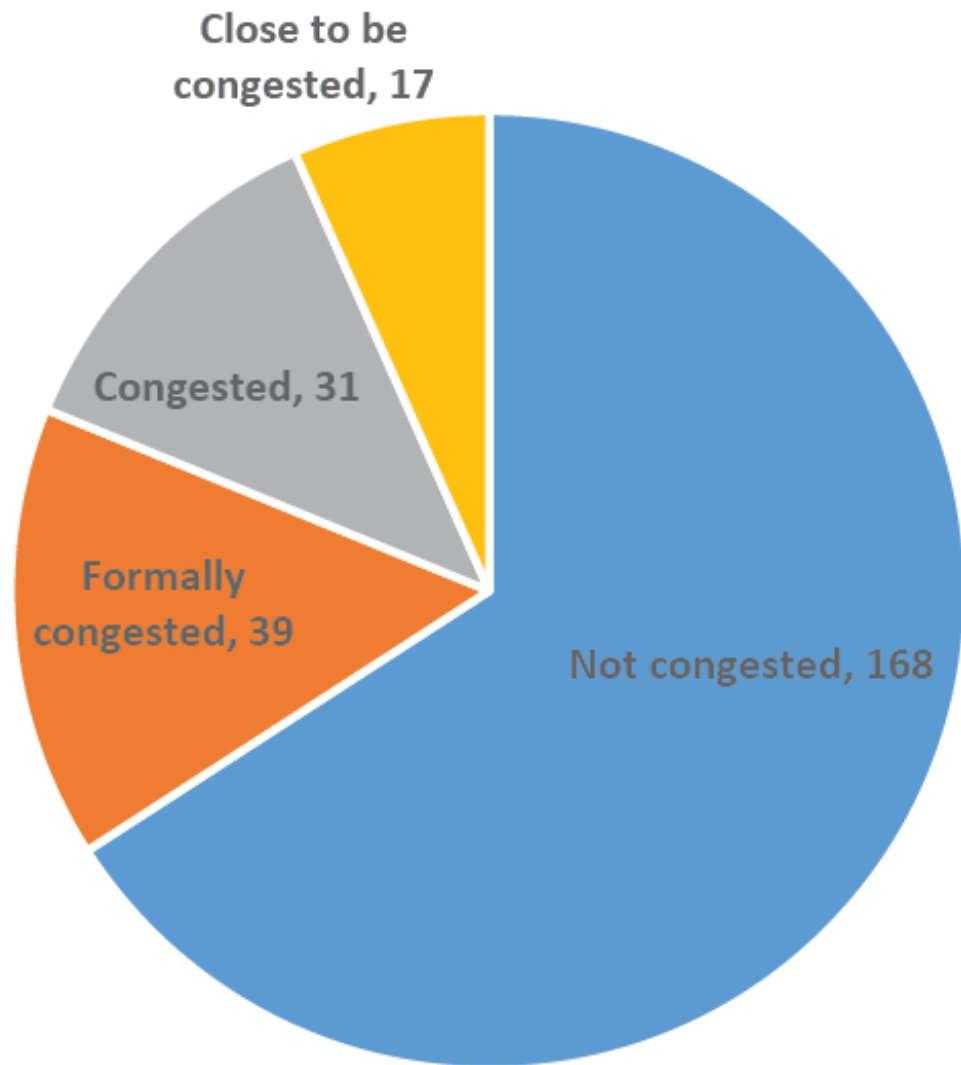
- **6** of the identified IP sides had been already indicated as congested in the previous congestion report and **2** of those even in the 2016 report

» **Physical congestion**: indicated by actual interruptions of interruptible capacity, occurred at **4** of the contractually congested IP sides

» **Application of CMPs** yielded additional capacity offers only at borders of **10** MS (**2** via FDA UIOLI, **6** via OS, **3** via surrender, **6** LT UIOLI)

Count of Preliminary status of Congestion	Column Labels		
Row Labels	DUE NON OFFER	PREMIA	Grand Total
AT		4	4
BE	1		1
DE	6	6	12
EE	2		2
EL		1	1
ES		1	1
FR		1	1
HU	1	2	3
ITC	2		2
RO	2	1	3
SK	1		1
Grand Total	15	16	31

- Germany has the highest number of congested IP sides, Austria comes after: they both already apply FDA UIOLI



- **Congested:** meeting at least one of the criteria from (a) to (d) of par. 2.2.3(1) of CMP GLs, but not formally congested
- **Formally congested:** criteria (d) met because of non-offer of GY 19-20 (it could still be offered in the annual auction of July 19)
- **Close to be congested:** auction premia, but lower frequency than threshold
- **Not congested:** all remaining CMP relevant IP sides, not falling in categories above

- » **None** of the IP sides show premia for all auction products
- » **5** IP sides congested for quarterly and yearly products
- » **5** IP sides congested for quarterly products only
- » **6** IP sides congested for yearly products
- » **29** congested IP sides are cross-border
 - ~90% of all congested IP sides
They were **17** instances of contractual congestion in 2017
- » **2** congested IP sides are within country, cross zonal
- » **4** congested IP sides with third countries (out of legal scope)

- 67 CMP relevant IP sides with auction premia for at least 1 firm day-ahead product in 2018
- Breakdown of 67 IP sides:
 - 7 – congested also for LT products
 - 6 – formally congested
 - 8 - close to be congested
 - 46 - not congested
- Highest frequency of DA premia in 2018 at:
 - » Wallbach, exit DE **(81x)**
 - » Liaison Nord->Sud, Exit GRTgaz **(76x)**
 - » Brandov, Exit DE **(49x)**
 - » Brandov, Entry CZ **(49x)**
 - » Tarvision, Entry IT **(49x)**

Note: FDA UIOLI already applied at AT & DE IP sides

- Unsuccessful requests are very low
 - » **7** out of **31** of congested IP sides (source: ENTSGO TP)
 - » **43** according to the Agency analysis
 - Only **7** due to congested IP sides that showed premia
 - **6** at formally congested IP sides
 - **8** at close to be congested IP sides
 - » Highest occurrence in AT (exit to IT and DE) and FR (North-South link)
- Interruptible capacity not offered at **17** out of **31** congested IP sides
- Secondary trading:
 - » Only at **5** out of **31** congested IP sides (highest in AT exit to IT and DE exit to NL)

Recommendations

- Improving data quality, automation & data gathering
ENTSOG (TP):
 - » **CMP data:** ENTSOG/TSOs shall ensure that auction results with premia and data on all non-available capacity products are uploaded on the TP as required by CMP GL.
 - » ENTSOG and booking platforms shall further align the EIC codes of TSOs and IPs so that «unique identifiers» match
 - » ENTSOG shall update the CAM/CMP IP scope list (available from the congestion analysis).
 - » ENTSOG TP should aim to incorporate information on bundled capacities.

NRAs to check and enforce their TSO data publication on ENTSOG's TP!

A CMP amendment proposal to improve effectiveness:

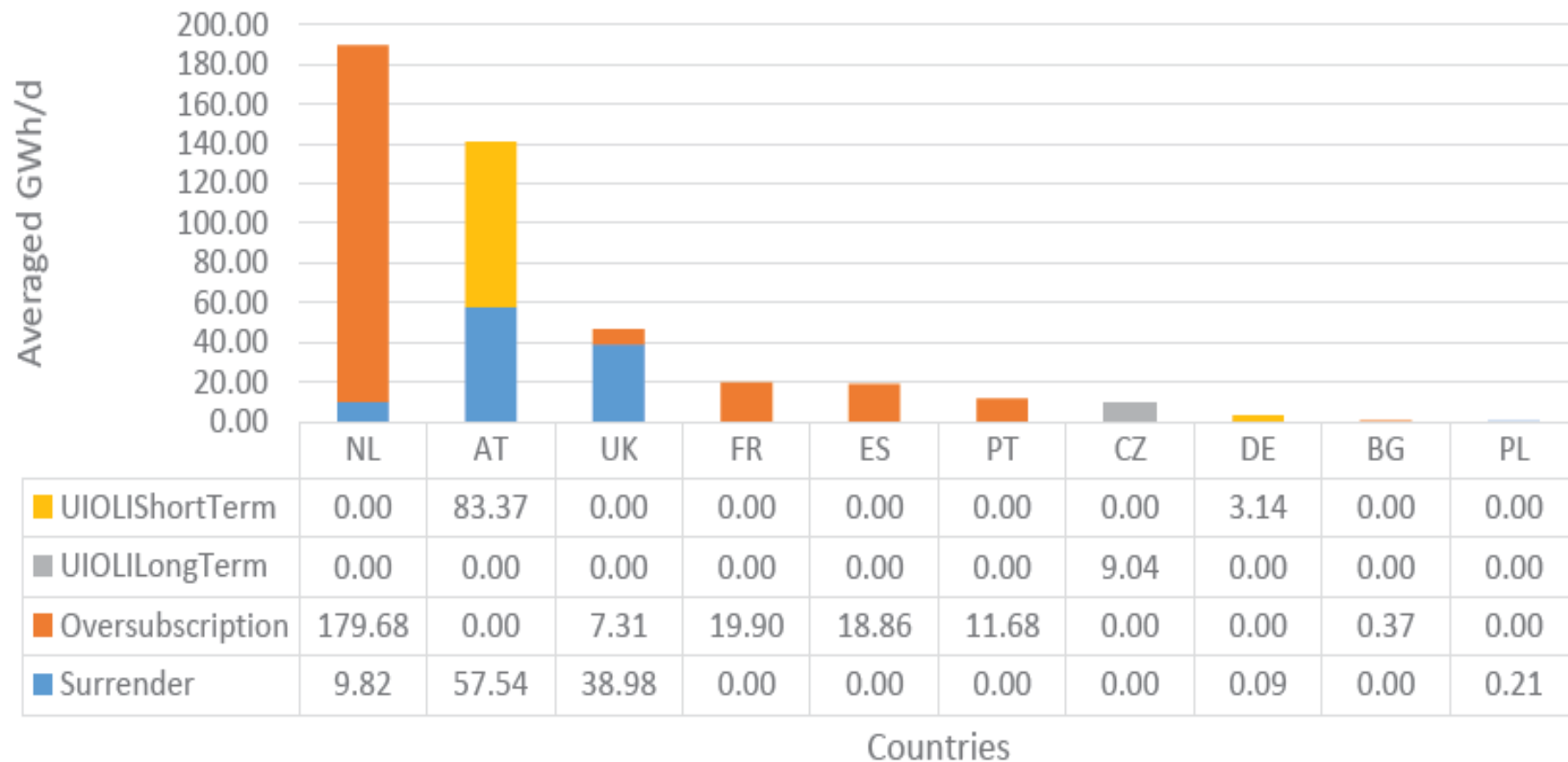
- » Until when shall the Agency produce the report
- » Set an implementation deadlines for the FDA UIOLI if contractual congestion is found
- » Align reporting to the Gas Year (now calendar)
- » Focus on availability of capacity in the analysed year, rather than simply requesting a 1-offer or monthly product
- » Refinement & alignment of the indicator (d) on the “non-offer of monthly products” with the indicator 2.2.3.1 (a) (proposal: IP is congested, if not at least 6 months are not offered)
- » Extent the scope of “contractual congestion” to the DA level
- » Clarify: Art. 6 NC CAM on dynamic capacity calculation takes priority over the application of OSBB
- » Clarify that better effectiveness of the CMP measures can be more effective if applied as a “preventive” measure

Application of congestion monitoring procedures

- Capacity increase through oversubscription and buy-back scheme
 - » Incentive based for TSO
 - » Dynamic approach to the calculation/offer of firm capacity
 - » Coordinated with neighbours
 - » Based on past patterns/statistics → avoid excessive buy-back
- Firm day-ahead use it or lose it
 - » Re-nomination allowed up to 90% and down to 10% of contracted capacity
 - » If initial nominations are $>80\%$ or $<20\%$ of contracted capacity, only half of the non-nominated volumes can be re-nominated
 - » Re-nomination as interruptible are allowed
 - » Alternative to OSBB

- Surrender
 - » Network users give away capacity, TSO must accept
 - » Capacity rights are transferred only if other users buy the capacity
 - » Surrendered capacity is the last to be sold
- Long term use it or lose it mechanism
 - » TSO withdraw systematically underused capacity, if not sold of offered reasonably
 - Average nominations <80% of contracted capacity both in winter and summer, contract length >1 year
 - Average nominations close to 100%, re-nominations to circumvent previous bullet

Capacity released by CMP measure [average GWh/d] in the EU MSs



Data source: ENTSOG TP

Discussion on indicators of congestion

Some stakeholders consider that the congestion criteria of CMP GL might be improved to determine the existence of contractual congestion at Is:



- 1 **Diagnosis:** the criteria used in the CMP GL could more accurately reflect contractual congestion (they can produce false-positives)
 - Having a premium during an (annual, quarterly, monthly) auction or no capacity made available in these primary auctions:
 - » may not provide sufficient info to conclude if market players have difficulties to get a proper access to cross-border capacity
 - » does not take into account the possibility to book capacity on a day-ahead or WD basis, or through the secondary market
 - Current criteria can provide an indication of a potential congestion which occurred in the past but no conclusion can be made if the point will be actually be congested in the future or if there is actual unmet demand

2 Possible alternative congestion criteria

- The availability of capacity through a liquid secondary market for capacity
- The availability of long-term interruptible capacity
- The propensity of interruptible capacity to be curtailed
- The availability of capacity through other CMP mechanisms such as OS&BB
- The volume of capacity requested remaining unfulfilled

- Instances where firm capacity is not being used and there is a spread between markets

What actually matters is to ensure that the transmission capacities are used as efficiently as possible given the market signals.

Advantages and drawbacks of the CMP provisions (1/2)

A premium can appear when there is...	Description	Solutions for a market player to get access to cross border capacity
1. Capacity hoarding	<p>All capacity is sold and there is no more firm capacity on offer.</p> <p>Network users are hoarding capacity in order to prevent competition</p>	<p>Anti-hoarding measures such a LT UIOLI</p>
2. Systematically high spreads between bidding zones	<p>Market players are ready to pay a premium: the contractual congestion is close to physical congestion (physical flows are close to technical capacity)</p>	<p>TSOs should try to sell extra short term capacity to allow an optimal use of the IP:</p> <ul style="list-style-type: none"> - OSBB procedures shall be foreseen first to free-up capacity on a short term basis. If OSBB does not prove efficient to release capacity for the market, FDA UIOLI shall be looked upon - Surrendering capacity is necessary to release capacity on a longer term basis - The offer of capacity on the secondary market - If the congestion problem is persisting, investments to create extra capacity via incremental procedures
3. Few long term capacity on offer	<p>Almost all capacity is sold out under long term capacity contracts, but network users have no intention to hoard capacity.</p>	<p>The short term quota remains to be allocated.</p> <p>If no short term capacity remains available:</p> <ul style="list-style-type: none"> • OSBB procedures can free up capacity, notably on a daily basis but also on a longer term basis • Alternatively, the implementation of FDA UIOLI can free up capacity on a daily basis <p>In addition, trades on secondary market can also be foreseen.</p>

- **A coordinated implementation of the CMP provisions on both sides of each IP is necessary**
- **OSBB**
 - » OSBB **can become expensive** if not properly configured. The amount of additional proposed capacity is limited by the **financial risk** for the TSO (buy back). This risk can be determined taking into account historical data:
 - **Flows** at the IP to assess the risk of physical congestion
 - **Market spreads** on both sides of the IP
 - » OSBB can efficiently **prevent punctual congestions** (with a limited risk)
- **FDA UIOLI**
 - » FDA UIOLI **reduces the value of long term bookings** (since re-nominations are limited) and incentivise short term bookings (since short term bookings are usually equal to the nominations).
 - » Limiting the re-nominations make shippers' **balancing more difficult**
 - » FDA UIOLI can **remedy frequent contractual congestions without inducing a financial risk** for the TSO.

- The report:

https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/Congestion%20Report%206th%20ed_27052019_FINAL.pdf

- The annex:

https://www.acer.europa.eu/Official_documents/Publications/Pages/Technical-Annex-Congestion-Report-6th-ed.aspx

Thank you for your attention



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