Implementation of congestion management rules in the EU

ACER’s CMP Implementation Monitoring Report (2016 update)

3rd Meeting on Implementation of the Gas Network Codes in the Energy Community
20 October 2016
1. Congestion Analysis

2. Main Results of CMP IMR

3. CMP Indicators

4. Conclusions
Gas Regulation – Art. 2(21):

“contractual congestion’ means a situation where the level of firm capacity demand exceeds the technical capacity;”

CMP Guidelines:

➔ para. 2.2.1(2): Agency to publishing a yearly monitoring report on contractual congestion at interconnection points (‘IPs’).

➔ para. 2.2.3(1): Capacity demand exceeds offer at IP sides (at the reserve price in case of auctions) in the monitored year (Y₁) for products for use in Y₁ or Y₂ or Y₃ (i.e. 2015-2016-2017)

(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 product with a duration of 1 year or more or
(d) where no firm capacity product with a duration of 1 month or more was offered.

➔ FDA UIOLI shall apply as from 1.7.2016 at those IP sides, where at least one of the criteria a) - d) was met
Congestion Results for 2015

Results of congestion analysis of 347 IP sides

- **Congested** (36 in 2014)
- **Close to be congested** (23 due to quota)
- **Out of scope** (mainly virtual)
- **Not congested**

Breakdown of the 41 congested IP sides by type:

- Cross-border: 23
- In-country: 8
- With 3rd country: 6
- In-country (IC): 2
- Cross-border (IC): 2

(18 in 2014)
Map of 41 congested IP sides (2015)

Key:
- Congested exit
- Non-congested entry
- Congested entry Gaspool
- Congested exit NCG
- Congested entry Gaspool (only 1 out of 2 TSOs)
- Congested bundled capacity expressed via Auction Premia
- Congestion expressed via Auction Premia

Note:
All other IP sides (marked with arrows) were found to be contractually congested due to the non-offer of capacity products with a duration of 1 month or longer in 2015 or 2016 or 2017. Smaller sized arrows represent in-country cross-zonal IPs, and do not reflect the extent of contractual congestion.

Map source:
ENTSOE Capacity Map (5/2015), www.entsoe.eu
CMPs leading to additional capacity availability at congested vs. non-congested IPs in 2014 & 2015

- **at congested IP sides**
- **at non-congested IP sides**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FDA UIOLI</td>
<td>81</td>
<td>52</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Oversubscription</td>
<td>30</td>
<td>38</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surrender</td>
<td>22</td>
<td>22</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>LT UIOLI</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Data source: ENTSOG TP

- OS&BB not applied at congested IPs
- FDA UIOLI applied at 11 congested IPs
• **Reference period:** 2015 - 2017

• **41 contractually congested IP sides in the EU in 2015** (2014: 36 instances)
  ~17% of 246 IP sides within CMP GL’s scope, 36 triggered by lack of offered capacity

  → FDA UIOLI mechanism already applied at 22 (of the 41) IP sides

  → FDA UIOLI to be implemented at 19 IP sides by 1 July 2016

• **20** of the identified IP sides were already congested in 2014, 10 of those even in 2013

• **Physical congestion**: indicated by actual interruptions of interruptible capacity, occurred at **9** of the contractually congested IP sides (mostly only for a few days)

• According to ENTSOG data, application of CMPs yielded additional capacity offers only at borders of 6 MS

→ CMP data on ENTSOG’s Transparency Platform still incomplete!
→ Improve definition of contractual congestion? → „Call for Evidence“
Congestion Results \rightarrow stakeholders doubt whether « congestion criteria leading to FDA UIOLI » correctly identify actual problematic situations of contractual congestion

\rightarrow Agency asked for concrete suggestions to improve criteria, that are supposed to:

- appropriately reflect / describe circumstances that identify persistent existence of contractual congestions at IP sides,
- are objective and replicable,
- be based on data which is or will have to be made available at least to the Agency in a timely manner,
- and be applicable - with reasonable efforts - across the EU

- « Call for Evidence » (Stakeholder Survey) Aug. – Sept. 2016: only 15 responses + diverse NRA views

- ACER/NRA will evaluate responses and consider potential amendments to the CMP GL
Survey Results

1. **Diagnosis of most respondents**: congestion criteria do NOT accurately reflect contractual congestion (they produce false-positives)

   - The sole occurrence of Premia for Y/Q/M products or non-offer of capacity:
     - does not mean that shippers have difficulties to access cross-border cap.
     - does not regard possible DA / WD offers, or offers on the secondary market.

2. **Proposals**: Before enforcing FDA UIOLI, NRAs should consider:

   - The availability of capacity on a liquid **secondary cap. market**
   - The availability of long-term **interruptible** capacity
   - The **probability** of interruptible cap. to be interrupted
   - The availability of **CMP capacity** (e.g. through OS&BB)
   - The volume of unsuccessfully requested capacity
   - **Instances where firm capacity is not being used and there is a gas price spread between markets**

   Already assessed in ACER’s Congestion Reports

   New proposal
Findings from the survey

The majority of respondents asks for:

- Non-automatic use of FDA UIOLI (when current CMP indicators are met)
- Possibility for NRA discretion to decide on FDA UIOLI implementation
- Harmonisation of the rules at both sides of the IPs

- Criterium 2.2.3.1d: Offer of all 12 months necessary for non-congestion?
  - Some consider this too strict: i.e. the non-offer of all 12 months may be due to maintenance
  - Focus on monthly products during winter (higher demand)

- Extend the scope of congestion to the day-ahead timeframe?
  - No clear-cut opinions

- Should the Agency also assess physical congestion?
  - No. This is part of NC CAM INC process (market demand assessment) + ENTSOG’s TYNDP

- Until when shall the Agency provide congestion reports?
  - No clear views on this topic. Analysis could be included in the MMR.
Outline

1. Congestion Analysis

2. Main Results of CMP IMR

3. CMP Indicators

4. Conclusions
### CMP Implementation Monitoring (Update 2016 – status as of 6/2016):

<table>
<thead>
<tr>
<th>Member States</th>
<th>BE¹</th>
<th>CZ</th>
<th>DE</th>
<th>EL</th>
<th>FR²</th>
<th>SI</th>
<th>SK</th>
<th>AT</th>
<th>DK</th>
<th>UK¹</th>
<th>HR</th>
<th>IE</th>
<th>LT</th>
<th>NL¹</th>
<th>PL</th>
<th>ICs¹</th>
<th>ES²</th>
<th>HU</th>
<th>IT</th>
<th>PT²</th>
<th>BG</th>
<th>RO</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS&amp;BB/FDA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURRENDER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT UIOLI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Implementation by the deadline**

**Implementation in 2014, 2015**

**Implementation expected in 2016, 2017**

**ICs:** Interconnectors (BBL, IUK, Premier Transmission)

1. The UK, NL, BE have coordinated the LT UIOLI mechanism including BBL & IUK
2. The South region (France - Tigf-, Spain and Portugal) intend to apply fully coordinated CMPs by 2017

---

**Full implementation in BG, HU, RO expected 2016/17.**

**FDA UIOLI implemented / upcoming**
Average daily capacity made available via CMPs in 2015 for use in 2015 (kWh/d)

Data source: ENTSOG Transparency Platform, CMP section, 02/16

* includes IUK data (daily avg. 9/15-12/15), sent to ACER 26.5.16
## CMP Application 2015

<table>
<thead>
<tr>
<th>CMP</th>
<th>MS involved</th>
<th>Number of (cross-zonal) borders involved</th>
<th>Number of IP sides involved</th>
<th>Total number of days</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>NL</td>
<td>7</td>
<td>31</td>
<td>21033</td>
</tr>
<tr>
<td></td>
<td>UK*</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>PL</td>
<td>1</td>
<td>2</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>FR</td>
<td>2</td>
<td>2</td>
<td>145</td>
</tr>
<tr>
<td>BB</td>
<td>none</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>FDA UIOLI</td>
<td>AT</td>
<td>7</td>
<td>11</td>
<td>3799</td>
</tr>
<tr>
<td></td>
<td>DE</td>
<td>17</td>
<td>52</td>
<td>11401</td>
</tr>
<tr>
<td>Surrender</td>
<td>NL</td>
<td>6</td>
<td>14</td>
<td>2837</td>
</tr>
<tr>
<td></td>
<td>PL</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>UK*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>FR</td>
<td>2</td>
<td>2</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>AT</td>
<td>3</td>
<td>3</td>
<td>922</td>
</tr>
<tr>
<td></td>
<td>DE</td>
<td>4</td>
<td>4</td>
<td>196</td>
</tr>
<tr>
<td>LT UIOLI</td>
<td>none</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>AT, DE, FR, NL, PL, UK</td>
<td>51</td>
<td>124</td>
<td>40433</td>
</tr>
</tbody>
</table>

* excluding IUK data
1. Congestion Analysis

2. Main Results of CMP IMR

3. CMP Indicators

4. Conclusions
CMP.1: Evolution of the application of CMPs:

→ Capacity volumes made available by each CMP

![Diagram showing capacity volumes and number of countries for different categories: OS, FDA UIOLI, Surrender, Total.](image-url)
**CMP.3: Aggregated utilisation of booked capacity at IPs**

→ Total physical flows / total booked firm + int. capacity

<table>
<thead>
<tr>
<th>% of total CMP</th>
<th>IP sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

*2014 Average* vs *2015 Average*

- Utilisation level: 
  - $\leq 0.5$
  - $0.7$
  - $0.9$
  - $1$

![Graph](image)

- Share of IP sides with higher utilisation levels increased.
- But this is only indicative! CMP application may not be the main driver!
Outline

1. Congestion Analysis

2. Main Results of CMP IMR

3. CMP Indicators

4. Conclusions
Transparency: TSOs / NRAs / ENTSOG

- Ensure full availability and high quality of Transport & CMP data on ENTSOG’s TP (e.g. auction results, data on all non-available products, bundles)

- Use a consistent “unique identifier” at ENTSOG’s TP, Booking Platforms, Maps, NC CAM / CMP IP scope lists for efficient & automated data processing

- Standardise reporting of auction results across the booking platforms

Policy: European Commission:

- EC shall consider clarifying in the CMP GL:
  - scope of monthly non-offers, reporting termination, FDA UIOLI impl. period

- EC may consider:
  - extending the scope of congestion to the DA level between hubs requiring the Agency to assess auction premia / non-offer of firm DA products at a cross-zonal level, which may then require the FDA UIOLI to enable a short-term gas market price convergence
  - clarifying that Art. 6 NC CAM on dynamic cap. calculation takes priority over the application of oversubscription at a yearly, quarterly and monthly level
Conclusions (largely congruent w/ the ones from the 2014 report):

• No full implementation (still by 7 MS) and limited application of CMPs (only in 6 MS) so far

• Dynamic re-calculation of technical and additional capacity to be improved (still by 7 MS)

• Surrender products’ range to be enlarged (still by 6 MSs)

• NRAs to facilitate better data reporting to the Agency and of their TSOs to ENTSOG TP

• Harmonisation of CMP application could be further improved

• ENTSOG’s Transparency Platform transport and CMP data availability and quality for CMP indicator calculations should be further improved

• Indicator results not yet fully reliable / significant → longer assessment periods required to observe trends
Thanks for your attention!

Questions or comments?

Thomas.Hoelzer@acer.europa.eu