Implementation of NC CAM Regulation (EU) 984/2013 in the EU

ACER’s Implementation Monitoring Report on NC CAM

3rd Meeting on Implementation of the Gas Network Codes in the Energy Community
20 October 2016
Outline

1. Legal Basis & Scope

2. Main Results of CAM IM

3. CEPA CAM IM Indicators

4. Conclusions & Recommendations
NC CAM IMR: LEGAL BASIS & SCOPE

- **NC CAM** (Reg. No 984/2013), **applicable as of 1.11.2015**

- **Art. 8 & 9 of Gas Regulation:**
  
  **ACER** to monitor & analyse NC/GL implementation + effect on harmonisation of applicable rules to facilitate market integration, non-discrimination, effective competition and effective functioning of the market and **report to the EC**

  **ENTSOG** to analyse & monitor NC/GL implementation and to make available Information to ACER → ENTSOG published CAM IMR + annual report on 8.6.2016

- **SCOPE:**
  
  → 21 Member States
  
  → 41 TSOs
  
  → 341 IP sides

  SE: no booking procedures
  EE, FL, LV, LU: derogation
  CY, MT: no IPs / gas markets

  → Implementation Check + Analysis of (CEPA’s) CAM indicators
Outline

1. Legal Basis & Scope

2. Main Results of CAM IM

3. CEPA CAM IM Indicators

4. Conclusions & Recommendations
# NC CAM IMR: OVERALL RESULTS

## General Provisions

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
<td>75%</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td>59%</td>
</tr>
</tbody>
</table>

## Principles of Cooperation

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>70%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>89%</td>
<td>10%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>88%</td>
</tr>
</tbody>
</table>

## Allocation of Firm Capacity

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>87%</td>
<td>66%</td>
<td>66%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>33%</td>
<td>66%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>66%</td>
<td>66%</td>
<td>100%</td>
<td>33%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

## Bundling of Cross-Border Capacity

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92%</td>
<td>100%</td>
<td>22%</td>
<td>91%</td>
<td>92%</td>
<td>100%</td>
<td>92%</td>
<td>100%</td>
<td>92%</td>
<td>58%</td>
<td>58%</td>
<td>50%</td>
<td>90%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>66%</td>
<td>66%</td>
<td>100%</td>
<td>33%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

## Interruptible Capacity

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

## Tariffs & Capacity Booking Platforms

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>94%</td>
</tr>
</tbody>
</table>

## Total average score

<table>
<thead>
<tr>
<th>MS</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>LT*</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
<th>Average per chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>82%</td>
<td>100%</td>
<td>28%</td>
<td>84%</td>
<td>91%</td>
<td>83%</td>
<td>78%</td>
<td>90%</td>
<td>96%</td>
<td>80%</td>
<td>66%</td>
<td>73%</td>
<td>88%</td>
<td>88%</td>
<td>N/A</td>
<td>92%</td>
<td>82%</td>
<td>80%</td>
<td>79%</td>
<td>77%</td>
<td>86%</td>
<td>100%</td>
<td>82%</td>
</tr>
</tbody>
</table>
A) Coordination of Maintenance

B) Joint Method / Dynamic Capacity Recalculation as a tool to maximise technical capacity (offer) [% of CAM IP sides]
**CH. IV: Bundling / VIPs**

Bundling & VIPs are essential for easy access & use of cross-zonal capacities!

<table>
<thead>
<tr>
<th>NC CAM articles</th>
<th>AT</th>
<th>BE</th>
<th>BG</th>
<th>CZ</th>
<th>DE</th>
<th>DK</th>
<th>EL</th>
<th>ES</th>
<th>FR TIGF</th>
<th>FR GRTgaz</th>
<th>HR</th>
<th>HU</th>
<th>IE</th>
<th>IT</th>
<th>IT</th>
<th>NL</th>
<th>PL</th>
<th>PT</th>
<th>RO</th>
<th>SI</th>
<th>SK</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.1 Offer of max. possible of avail. cap. as bundled?</td>
<td></td>
<td></td>
<td></td>
<td>(2)</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>19.5 Unbundl. cap. auctioned w/ auction calendar?</td>
<td></td>
<td></td>
<td></td>
<td>(2)</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>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.7 Single nomination procedure for bundled cap.?</td>
<td></td>
<td></td>
<td>(4)</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>19.9 Start of VIP analysis?</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>20.1 Any volunt. bundling arrangements reached?</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>

| Count of 'yes' (except *)           | 1/2| 3/3| 0/3| 3/3| 2/6| 3/3| 2/3| 2/3| 3/3| 3/3   | 3/3   | 1/3| 2/3| 3/3| 3/3| 0/3| 3/3| 2/3| 2/3| 3/3| 1/3| 3/3| 3/3| 3/3|
| Implementation level in %           | 50%| 100%|0% | 100%| 87%| 66%| 66%| 100%| 100%| 100%  | 33%  | 66%| 100%| 100%| 0% | 100%| 66%| 66%| 100%| 33%| 100%| 100%| 100%|

**Key:**
- yes
- no
- NR - no reply
- NA - not applicable
- NRA question
- TSO question

* This question was not considered in the chapter’s scoring.
### CH. IV: Possible future VIPs

<table>
<thead>
<tr>
<th>Entry-Exit Zone 1</th>
<th>Entry-Exit Zone 2</th>
<th>Possible VIPs</th>
<th>Number of physical IPs(^1)</th>
<th>Number of related IP sides(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE (GP)</td>
<td>DE (NCG)</td>
<td>1</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>DE (NCG)</td>
<td>NL</td>
<td>1</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>AT</td>
<td>DE (NCG)</td>
<td>1</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>CZ</td>
<td>DE (GP)</td>
<td>1</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>BG(^3)</td>
<td>RO(^3)</td>
<td>1</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>BE</td>
<td>NL</td>
<td>1</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>DE (GP)</td>
<td>NL</td>
<td>1</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>AT</td>
<td>SK</td>
<td>1</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>BE (H)</td>
<td>FR (Nord)</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>BE</td>
<td>DE (NCG)(^4)</td>
<td>1</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>DE (GP)</td>
<td>PL(^3)</td>
<td>1</td>
<td>1 IP + 1 VIP</td>
<td>8</td>
</tr>
<tr>
<td>CZ</td>
<td>DE (NCG)</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>12</strong></td>
<td><strong>60</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Potential „IP side saving“: 200 – 48 = 152

Remaining IP side scope list: 339 - 152 = 187
BP selection for bundled capacity offers still unresolved for:

- 1 VIP + IP Mallnow DE - PL
- IP Moson-magyarovar AT – HU (tender ongoing)
OTHER INTERESTING FINDINGS

- **Implicit Allocations** (gas + capacity) under NC CAM rules and (voluntary) measures to limit upfront the bids (CRE set 20%) are applied only at IP Liaison Nord Sud (FR)

- **Interruptible Capacities:**
  lowest compliance on the obligation to *jointly decide on the minimum interruption lead time* (TSOs of 10 MSs either did not decide or decided individually)

- **Tariffs:**
  - Mostly variable tariffs applied
  - Fixed prices only for 38 IP sides: BG, LT, SK, HR, IUK & BBL, South North CSEP (IE) and Liaison Nord Sud (FR)
  - Default Auction premium split (for bundles) is 50:50
  - A different split was reported only for IP Mallnow (PL-DE)
Outline

1. Legal Basis & Scope
2. Main Results of CAM IM
3. CEPA CAM IM Indicators
4. Conclusions & Recommendations
Aggregated yearly average technical capacities of IP sides
(CMP scope list 2016, only those IP sides, where data was available)
CAM IMR: CEPA indicator – CAM.2 & 3

CAM.2 & 3: Bundled Capacity offered and sold in the EU

Offer < 0.9% of total technical firm cap!
CAM.5: Avg. contractual capacity utilisation (booked/technical)

→ ratio distribution of CMP IP sides

- Hint to more profiled bookings, e.g. to profit from gas market price differences
CAM.6: Avg. Physical capacity utilisation (physical flow/technical)

→ ratio distribution of CMP IP sides

![Graph showing the ratio distribution of CMP IP sides for Average 2014, Average 2015, Peak 2014, and Peak 2015.]

- Overall stable physical flows

Legend:
- <50%
- >=50%<70%
- >=70%<90%
- >=90%
Outline

1. Legal Basis & Scope

2. Main Results of CAM IM

3. CEPA CAM IM Indicators

4. Conclusions & Recommendations
NC CAM implementation is well on track on core requirements…

→ auctioning of standard products at booking platforms (94%)
→ average EU compliance level is 82%

… but full implementation is still outstanding

→ BG & LT are lagging behind
→ only BE + UK have implemented all provisions

**Priority** should be set on

1) Capacity Bundling
2) Virtual IPs
3) Capacity maximisation

Access to capacity is essential for gas markets and for competition to further develop.
Dynamic (re-)calculation of technical capacity shall be improved:

Goal: “structured” technical cap. (at least for quarters / months)

Recommendation on cap. recalculation

Qualitative Example:

Fluxys Belgium – Blaregnies (H) (BE) / Taisnières (H) (FR) (Troll) (exit) Firm Technical
NC CAM indicators show limited effects...

→ Indicators calculated only for 2014 and 2015

→ Calculations are based on partial and sometime inconsistent data from ENTSOG’s Transparency Platform

→ Trends can be observed only over a longer period

→ No definite conclusions on NC CAM effects and the effectiveness of its provisions possible...

... but some initial observations can be shared:
Initial observations:

(1) **Increasing offer of bundled capacity** since 2013, with more TSOs offering it. Total amounts are *still at a very low level*. (In 2015 < 1% of total tech. cap. of NC CAM IPs)

→ Amounts should increase over time, as unbundled contracts will expire and all available cap. on both sides of an IP should be offered as bundled!

(2) Total capacity **bookings for peak days increased**, while **physical flows** remained rather **stable**.

→ **Aim of NC CAM**: Increased (commercial) cap. utilisation, which better coincides with the actual (ST) needs to flow gas across borders. Auctions of standard cap. products (incl. DA) & CMPs seem to deliver!
Conclusions on data requirements

Transport data availability and quality on ENTSOG’s Transparency Platform could be further improved

- **Regular checks** and timely updates by TSOs, NRAs to verify this (ENTSOG/TSOs to check bulk data export files **before** delivering to ACER)

- Instant implementation of updated NC CAM / CMP **IP scope lists** on ENTSOG’s TP

- To get more meaningful CAM indicator results, new data and more analysis is needed:
  - Reasons for technical capacity changes to explain observed in-/decreases
  - Indication on whether data on physical flows / renominations contain TSO operational actions and to what extent

  → Provision of „commercial flow“ data to become mandatory?
Thanks for your attention!

Questions or comments?

Thomas.Hoelzer@acer.europa.eu