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Agency for the Cooperation
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ACER annual report on contractual congestion at interconnection points

Period covered: 2014

Second Edition

29 May 2015

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Executive Summary

The purpose of this report is to identify contractual congestion at Interconnection Points (IPs) in the European Union for the period 2014-2016. According to Regulation (EC) No 715/2009, contractual congestion is defined as a situation where the level of firm capacity demand exceeds the technical capacity. More specifically, for the purpose of this report, contractual congestion is assumed if at least one of the four criteria in paragraph 2.2.3(1) of the Congestion Management Procedures Guidelines ('CMP GL') is met. Therefore, this report not only analyses where demand exceeded the offer of firm capacity, but also at which IP sides no firm capacity product with duration of one month or longer was offered.

Relying on the available data, the following conclusions can be drawn:

- About 15% of the considered 257 IP sides were contractually congested in the monitored period (32 IP sides and 4 bundles, where a bundle includes exit and entry in one direction at a physical or virtual IP).
- Most contractual congestion was found in South-South-East Europe, followed by the South region. In North-West Europe the detected congestion is mitigated by very active secondary trading (IUK) and CMP application resulting in firm day-ahead capacity offers (Dutch / German border).
- 59% of the contractual congestion is due to the non-offer of firm products with duration of at least one month for use between 2014 and 2016, while 23% and 18% is signalled by auction premia for monthly and yearly products, respectively.
- 13 of the congested IP sides in this report were already assessed as congested in the Agency's first congestion report.
- At 11 of the congested IP sides (incl. bundles) the Firm Day-Ahead Use-It-Or-Lose-It (FDA UIOLI) mechanism is already implemented.
- Physical congestion, indicated by actual interruptions of interruptible capacity, occurred at 3 of the contractually congested IP sides and at 2 of the contractually congested bundles, mostly for a limited period of time.
- In general congestion management procedures (CMPs) are increasingly applied at IPs in the European Union, with the exception of the Long-Term Use-It-Or-Lose-It (LT UIOLI) mechanism, for which application has not yet been reported to the Agency.
- The FDA UIOLI mechanism has to be applied where congestion persists or occurs based on next year's report. The current report identifies 24 individual IP sides and 2 bundles (at least on the congested side) which could be candidates. The indicative list of these IPs is provided in Annex 9.

In order to further improve the quality of future reports, the Agency recommends that:

- TSOs and ENTSOG ensure that all data on the ENTSOG Transparency Platform are fully available, reliable, checked and consistent (e.g. with PRISMA auction data).
- ENTSOG and ACER create an agreed CMP scope list by adapting the NC CAM IP scope list.
- The EC considers clarifying the case of "congestion" when firm monthly capacity is not offered every month, since the current reading of point 2.2.3(1) d) of the CMP GL suggests that an IP is not considered congested, if at least one single monthly product is offered.
- ACER assesses congestion at zonal borders (future VIPs) in addition to the analysis at physical IP (side) level.

1 Introduction

- (1) According to paragraph 2.2.1(2) of the Commission Guidelines on Congestion Management Procedures (hereafter, the 'CMP GL')¹, the Agency for the Cooperation of Energy Regulators ('the Agency') is responsible for publishing a yearly monitoring report on congestion at interconnection points ('IPs') by 1 March², starting with the year 2014. The report shall be based on the information on firm capacity products sold in the preceding year (in this case, 2014) for use in that year (i.e. 2014) and/or in the two subsequent years (i.e. 2015 and 2016), taking into consideration, to the extent possible, capacity trading on the secondary market and the use of interruptible capacity. The information above has to be published by each Transmission System Operator ('TSO') pursuant to Section 3 of Annex I of Regulation (EC) No 715/2009³ and, where appropriate, validated by national regulatory authorities ('NRAs').
- (2) The main purpose of this report is to identify the existence of contractual congestion at IPs between entry-exit zones in the European Union, based on the definition in Article 2(21) of Regulation (EC) No 715/2009⁴. In particular, the report aims to detect whether at least one of the specific conditions set out in paragraph 2.2.3(1) of the CMP GL is met during the monitored period, from 1 January 2014 to 31 December 2016. In the event that one of those specific conditions is met, the Firm Day-ahead Use-It-Or-Lose-It CMP mechanism ('FDA UIOLI') is triggered. NRAs shall then require TSOs to apply FDA UIOLI at the congested IP (side) as of 1 July 2016, unless it is shown that a congested situation is unlikely to reoccur in the following three years, e.g. due to capacity becoming available by a physical expansion of the network or through the termination of long-term contracts. In such cases, the relevant NRAs may decide to terminate the FDA UIOLI mechanism.

2 Scope of the report and definition of contractual congestion

2.1 Scope of the report

- (3) The report covers cross-border IPs, in-country inter-TSO IPs connecting entry-exit zones, IP sides with a third country, Virtual IPs and IPs to production site(s), to which the Network Code on Capacity Allocation Mechanisms (NC CAM)⁵ applies, as covered in the 'NC CAM IP scope list'⁶. The Agency has worked under the assumption that CMP measures apply to

¹ Commission Decision of 24 August 2012 on amending Annex I to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks (2012/490/EU), OJ L 213/16, 28.8.2012, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:231:0016:0020:en:PDF>

² Changed to 1 June of every year

³ Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005, OJ L211/36, 14.8.2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0036:0054:en:PDF>

⁴ cf. section 2.2

⁵ Commission Regulation (EU) No 984/2013 of 14 October 2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009 of the European Parliament and of the Council, OJ L273/5, 15.10.2013
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:273:0005:0017:EN:PDF>

⁶ List of Interconnection Points for the Expected or Possible Application of the Capacity Allocation Mechanism Network Code by ENTSOG and ACER, last updated on 3 Feb 2015

the same IPs included in this scope list. This scope list is regularly updated by ENTSOG and the Agency and currently covers 305 IP sides in total (status as of 19 February 2015)⁷.

- (4) The current report does not analyse the supply side of the capacity market, whether TSOs offered the maximum capacity to market participants. The analysis on the supply side shall be addressed by TSOs themselves through dynamic capacity calculation, an obligation for TSOs to efficiently maximise offered capacity in a network, as foreseen in Article 6 of NC CAM. The impact of capacity calculation methods on additional and bundled capacity will be reviewed by the Agency in the framework of implementation monitoring of the NC CAM.
- (5) Chapter 3 of this report presents in detail: the data sources used and the methods applied for the analysis of congestion based on the specific indicators provided in paragraph 2.2.3(1) of the CMP GL. A limited review of the extent to which transport and CMP data for NC CAM IPs required for the congestion analysis was made available on the ENTSOG Transparency Platform ('ENTSOG's TP') is provided in Annex 8.
- (6) The analysis of contractually congested IP sides in Chapter 4 is completed with an analysis on the offer and use of interruptible products (based on ENTSOG's TP), as well as with an analysis of secondary capacity trades for the congested IPs, based on PRISMA Secondary and TSO data from other secondary trading venues. In addition, the capacities made available through the application of the diverse CMPs in 2014 are assessed. (Chapter 5).
- (7) Furthermore, occasionally occurring physical congestion is signalled through the indicator "actual interruptions of nominated interruptible capacity" at contractually congested IP sides (Section 4.4).
- (8) For a few exemplary IPs, where data was provided by the NRAs, the links between capacity bookings and price spreads between adjacent markets are explored (Chapter 6).
- (9) For a set of selected congested IPs, aggregated capacity booking and utilisation levels are illustrated in Annex 7.
- (10) IP sides already indicated as congested in the first edition of the congestion report and still congested in the current report are highlighted in Annex 6 and Annex 9.
- (11) This report does not assess potential underuse of capacity ("capacity hoarding"), since this would require an in-depth analysis of individual network user's data. This is rather a task for national regulators, which have the necessary data collecting powers. The Agency may assist regulators by providing a list of IP sides per country, proposing their closer assessment, which NRAs could build upon and use.

<http://www.entsog.eu/public/uploads/files/publications/CAM%20Network%20Code/2014/CAM%20Interconnection%20Points%20scope%20list%20-%20edition%20Feb%202015.pdf>

⁷ During the last updates, the number of IP sides on the NC CAM IP scope list has been reduced from 352 (as used for the first congestion report) to 305. This is for example due to the fact that some physical IP sides disappeared after a merging into a virtual IP, or IP sides were removed because no firm capacity can be offered (e.g. IP sides with direction to production facilities), or because NRAs have not (yet) decided to apply NC CAM at borders from/to third-countries (for which application is not mandatory, unless NRAs decide otherwise).

2.2 Definition of contractual congestion

- (12) The concepts of contractual congestion and physical congestion are defined in Articles 2(21) and 2(23) of Regulation (EC) No 715/2009 in the following way:

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

“physical congestion’ means a situation where the level of demand for actual deliveries exceeds the technical capacity at some point in time”.

- (13) A frequent occurrence of physical congestion - representing a (severe) form of contractual congestion - cannot be remedied through application of CMPs, but should be addressed, where efficient to do so, by infrastructure expansions or, in some instances, via contractual arrangements (such as flow commitments).
- (14) Contractual congestion (during the time period in which there is no physical congestion) is meant to be tackled through the congestion management procedures laid down in the CMP GL. The CMP GL contain, in addition, certain conditions that oblige the application of one of the CMPs (FDA UIOLI). Paragraph 2.2.3(1) of the CMP Guidelines sets out that NRAs shall require TSOs to apply the FDA UIOLI mechanism if, on the basis of the findings in this report, it is shown that at IPs demand exceeds supply, at the reserve price when auctions are used, in the course of capacity allocation procedures for products for use in either that year or in one of the subsequent two years,
- (a) for at least three firm capacity products with a duration of one month or
 - (b) for at least two firm capacity products with a duration of one quarter or
 - (c) for at least one firm capacity product with a duration of one year or more or
 - (d) where no firm capacity product with duration of one month or more has been offered.
- (15) The main purpose of this report is therefore to identify for which IP sides at least one of these conditions is met during the analysed period. Such identified IP sides are assumed – for the purpose of this report - to be contractually congested IP sides in the sense of the definitions above⁸. That situation occurs if there is more market demand than offer for a certain capacity product of a distinct duration at a specific moment in time.
- (a) In the event of auctions, congestion is apparent once the auction clears with an auction premium. The auction premium is a top-up paid by the successful bidder, on top of the reserve price at a specific IP.
 - (b) In cases where auctions are not applied and available firm capacity at the concerned IP is lacking (capacity fully booked), the 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.

⁸ All references to the occurrence of ‘congestion’ or ‘congested IPs’ in this report should be understood in the light of this assumption. Some of the IPs identified as contractually congested could also be physically congested.

3 Data sources and applied methodology

3.1 PRISMA auction platform data

- (16) The CMP GL specify that the Agency's Report on Congestion shall be based on data published by TSOs on ENTSOG's TP⁹. However, not all data – in particular no auction results from the PRISMA¹⁰ capacity booking platform - are currently published on ENTSOG's TP. Therefore, PRISMA auction data have been used for the assessment of auction premia. These data are easily and promptly accessible¹¹.
- (17) The auction reports published by PRISMA at the beginning of each month contain all relevant information on the auction results from the previous month, including the identification of the IPs and TSOs, capacity products and types, demanded and allocated capacity, prices, and auction premia. This information enables an analysis of contractual congestion at IP sides in line with points a) to c) - and indirectly point d) - of paragraph 2.2.3(1) of the CMP GL.
- (18) The data are provided in a clear and user-friendly way. The PRISMA platform monthly auction reports allow the efficient assessment of contractual congestion, as 'demand exceeding offer' can easily be detected by comparing demanded volumes with allocated volumes per auction and by filtering for the occurrence of an auction premium.
- (19) With the help of a TSO list covering all TSOs that (solely) used PRISMA to offer and allocate capacities in 2014, also the non-offer of firm products with a duration of at least one month or longer (cf. point d) of paragraph 2.2.3(1) of CMP GL) could be indirectly identified and assessed for the PRISMA IPs. This was done by filtering all IP sides on PRISMA for which only day-ahead capacity was offered. In addition, with the use of the PRISMA TSO list, all respective IP sides¹² for which no auction entry was found in the 2014 PRISMA auction reports were detected and listed as "missing offers" and therefore considered as contractually congested as well.
- (20) The PRISMA data source obviously does not cover all capacity transactions on IP sides which have to be covered by this report as not all TSOs were using this platform. Therefore the existence of contractual congestion for about 29% of the total IP sides from the NC CAM scope list was assessed based on ENTSOG's TP data.

3.2 ENTSOG's Transparency Platform data

- (21) In 2014, the Agency requested daily transport and CMP data per IP side for the period from 1 January 2014 until 31 December 2014¹³ for the IPs identified in the NC CAM scope list, as well as other data relevant for the analysis of congestion. Due to the amount of

⁹ <http://www.gas-roads.eu/>

¹⁰ PRISMA is currently the largest common European platform for capacity allocation via auctions, with 33 TSOs using the platform and more than 400 registered shippers [status 30.03.2015]; <https://www.prisma-capacity.eu/web/start/>

¹¹ ENTSOG's TP however does already feature auction results from other auction platforms, such as the Polish GSA platform.

¹² listed in the NC CAM IP scope list

¹³ for capacity bookings, the requested period to be covered also include 2015 and 2016

daily data required for the congestion assessment, ENTSOG was asked to create a customised query and bulk data export file on the basis of the Agency's specifications on format and content, using ENTSOG's Transparency Platform as data source. Data were provided also on booking levels of firm/interruptible capacities, technical capacity, flows (physical, commercial flows and nominations), actual interruptions, application of CMPs, auction results, unsuccessful requests of capacity, non-availability of capacity products, etc..

- (22) The Agency received the referred bulk data export file on 16 February 2015 in two parts, one covering 2014 transport data and one covering the CMP data. Booking data for 2015 and 2016 was not provided in the export file and was therefore directly accessed by the Agency using the online tool of the Transparency Platform for the respective IP sides.¹⁴
- (23) To assess the existence of contractual congestion, the Agency applied the following method:
1. Starting from the NC CAM scope list, which currently contains 305 IP sides, and ENTSOG's transport data file, the 88 non-PRISMA IP sides¹⁵ were singled out. The export file and online data from ENTSOG Transparency Platform were checked for the booking levels of firm and interruptible capacity for the period between 1 January 2014 and 31 December 2016.
 2. The same period was used to check the (non-)availability¹⁶ of firm capacity per IP using monthly granularity. The outcome of the analysis was recorded in the results table (Annex 6). Then further information on whether in principle interruptible capacity was offered was checked, and if this was the case, whether it was (fully, partially or not at all) booked was assessed. The information on interruptible capacity bookings was used as a proxy in the analysis to show that demand for capacity was exceeding the actual offer of firm capacity. This was done in line with the CMP GL and their requirement '*to take into account the use of interruptible capacity*'.
 3. The CMP data file was then checked for the occurrence of unsuccessful requests, CMP applications, non-availability of specific products and occurrence of auction premia (for non-PRISMA auctions) for the respective IP sides and the outcomes were recorded in the results table (Annex 6).
 4. Additionally, the occurrence of actual interruptions of nominated interruptible capacity (as a possible indicator for potential physical congestion), where data were available, was documented in the table.
 5. The booking level of firm and interruptible capacity was plotted in individual diagrams for selected IP sides against the technical capacity and physical flows in 2014.
 6. Finally, for the identified congested IP sides it was indicated whether those points were already congested in the last quarter of 2013 (cf. first congestion report) and whether the FDA UIOLI mechanism is already applied.

¹⁴ Taking into account the fact that TSOs had the chance to check their data submitted via ENTSOG, the Agency relies on the accuracy of the data, since it has no means to verify it.

¹⁵ NC CAM IP list entries reduced by the IP sides covered by TSOs using PRISMA for capacity allocation

¹⁶ If less than 1% of technical capacity was available for a specific period, this information was also recorded.

3.3 Secondary Platforms: PRISMA Secondary and TSO data

- (24) For the IP sides qualifying as “contractually congested”, available data on secondary capacity trading at PRISMA Secondary (and other TSOs’ trading venues for secondary capacities) have been added to the results table (Annex 6). The analysis of secondary capacity trading is required by the CMP GL (*‘taking into consideration to the extent possible capacity trading on the secondary market’*).
- (25) Data of one secondary capacity trading platform (i.e. PRISMA Secondary) were directly accessible and (partially) used for this report, despite the fact that the exporting functionalities for full details of historical offers, requests and concluded trades were limited.
- (26) For the contractually congested IP sides, the Agency therefore additionally requested the respective TSOs (including those TSOs whose shippers are mainly using PRISMA Secondary) to provide data on the activities on the secondary markets. Trading of capacity on the secondary market can be done using many venues (platforms, TSO bulletin boards, brokers, bilateral communication etc.), which makes the data collection difficult. Despite the efforts of the Agency, a full picture of activities on the secondary market cannot be drawn, due to the variety of venues and ways to request, to offer and/or to conclude deals on secondary capacity markets.
- (27) It is noteworthy though that the amount of captured trades on PRISMA Secondary has grown substantially¹⁷ since the start of PRISMA Secondary, which emerged from merging the previously existent platforms Trac-X, Link-4-Hubs, eucabo and capsquare at the beginning of 2014.

3.4 Review of draft list of congested IP sides by TSOs and NRAs

- (28) In order to improve the quality and reliability of the results of the report, a draft indicative list of contractually congested IP sides (with compiled transport and CMP data) was shared - via ENTSG - with the concerned TSOs for data checks and amendments underpinned with explanations.
- (29) In line with the CMP GL, compiled data, results and the draft report have also been shared with the national regulatory authorities for data validation.
- (30) This (partial) review by TSOs and NRAs resulted in 48 IP sides, initially indicated as contractually congested by the Agency, being excluded from the final results of the report, as for most of them (41) no technical firm capacity existed (mostly virtual backhaul)¹⁸. At the end of this review, 257 IP sides out of the 305 IP sides of the NC CAM IP scope list remained within the scope of the report.

¹⁷ Around 500 activities on PRISMA Secondary are reported for 2014.

¹⁸ Those 41 comprise mostly in-country cross-zonal IP sides in Germany, but also cross-border bundles (Germany/Netherlands) and IP sides such as Baumgarten (Austria) TAG exit, Moffat (Ireland) Gaslink exit, Sidirokastron (Greece) DESFA exit and others. Further 7 IP sides were excluded: Petrzalka (Slovakia) entry (operated by a DSO), 4 IP sides of Ruse (Bulgaria) / Giurgiu (Romania) (←→) (IP only becomes operational in 2016); Gela (Italy) entry (to be removed from NC CAM scope list according to AEEGSI decision), GD Lux exit (Belgium) will disappear due to BeLux market integration

4 Overview and analysis of results on congestion

4.1 Identified congestion and its breakdown

- (31) The analysis of auction results and ENTSOG TP data for firm products offered in 2014 for use either in 2014, 2015 or 2016 for the 257 IP sides considered for this report resulted in 36 occurrences of contractual congestion. Among those 36 congestion instances, there are 32 individual IP sides (15 entries, 17 exits) and 4 bundles of exit and entry capacity. For the joint analysis of individual IP sides and bundles in Figure 1 below, the bundles (except for one overlapping instance) have been counted twice (one for exit, one for entry to reflect the two sides of the congested bundle), leading to a calculated number of 39 congested IP sides (~15% of the 257 IP sides considered) enabling a better comparison.¹⁹
- (32) Figure 1 illustrates the breakdown of congested IP sides according to the indicators signalling congestion, showing that for the largest number of IP sides (23 out of 39, representing 59%) congestion is signalled by the non-offer of a firm capacity product with duration of at least one month in the monitored period. Auction premia for at least one yearly or at least three monthly products rarely occurred, while auction premia for at least two quarterly products for use within one of the three calendar years (2014/15/16) did not emerge as the sole criterion²⁰ signalling congestion.

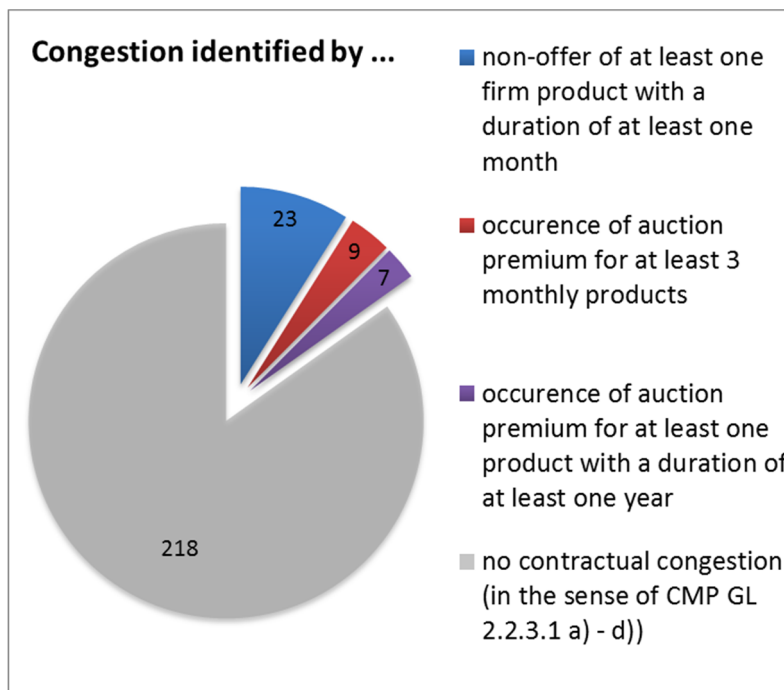


Figure 1: Identified congestion - categorisation of triggers

¹⁹ To arrive at total of 39 IP sides, not all 4 bundles were counted twice, as one congestion instance (i.e. the bundle of OGE exit Germany with GCA entry Austria at the IP Oberkappel) was partly overlapping with another congestion instance at the same IP (i.e. unbundled IP side OGE exit). Regardless of this, it is also to be noted that usually only one side of a bundle actually caused the contractual congestion for the whole bundle.

²⁰ Where auction premia for quarterly products occurred, they overlapped with premia for yearly products and have been categorised under yearly auction premia.

- (33) About one third (13) of the IP sides found congested had already been indicated as congested in the first congestion report. At 11 of the total congested IP sides (incl. IP sides of bundles), the FDA UIOLI mechanism is already implemented. A more detailed breakdown is provided in a table in Annex 2.
- (34) Figure 2 below illustrates the distribution of congestion across IP types, both for the 32 congested individual IP sides and for the 4 congested bundles. It is clear that most congestion is detected at cross-border IP sides. A non-negligible amount of congested IP sides and bundles also occurred on in-country cross-zonal points as well as on individual IP sides with third-countries. The rare occurrence of congested virtual IP sides/bundles is partly explained by the fact that only a handful of virtual IPs exists today.

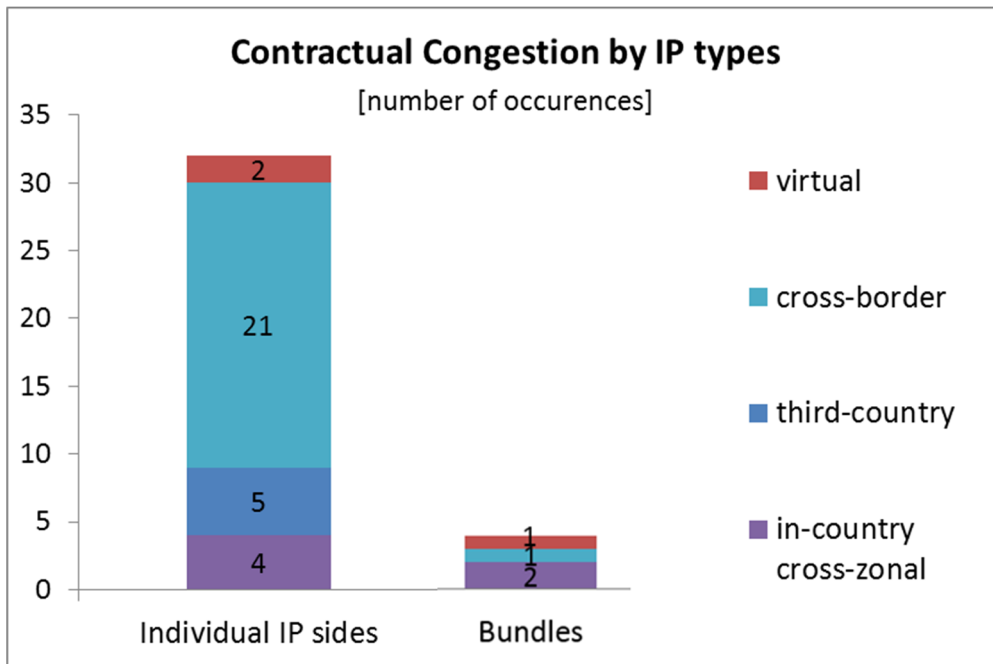


Figure 2: Identified congestion – breakdown by IP type

4.2 Extent of congestion at IP level: unsuccessful requests

- (35) At IPs where capacity is allocated through auctions, the indicator for demand exceeding offer can be easily derived from the occurrence of auction premia, whereby the volume of “unsuccessful requests” can be calculated by subtracting total allocated capacities from total demanded capacities at the reserve price. The unsuccessfully requested capacity amounts show to what extent an IP side is contractually congested.
- (36) The number of occurrences of unsuccessful requests in auctions coincides with the frequency of auction premia for a set of (standard) firm capacity products. In the course of 2014, 39 instances of demand exceeding offer (i.e. auction premia and occurrence of unsuccessful requests) for firm standard capacity contracts occurred on the PRISMA auction platform, for 8 IP sides and 3 bundles (Annex 3).
- (37) Demand remained more often unsatisfied at the two smaller platforms (i.e. 75 times collectively): for 4 IP sides auctioned at the Polish “GSA” and for 1 IP side auctioned at the

Hungarian “FGSZ Platform” (Annex 4). This seems to be due to the high market demand at the concerned IP sides in the monitored period.

- (38) Auction premia predominantly emerged for monthly products (72 out of 75 instances at GSA and FGSZ platforms jointly, and 21 out of 39 auctions at PRISMA), which seemingly derives from the network users’ preference and relatively limited offer of monthly products. Further details on unsuccessfully requested capacities, i.e. volumes and capacity product types can be found in Annex 3 and Annex 4.
- (39) At IPs where capacity is not allocated through auctions, “unsuccessful requests” are difficult to acquire in the absence of a dedicated reporting system. The analysis of CMP data of ENTSOG’s TP for congested IP sides has only resulted in 3 “unsuccessful requests” occurring at one single IP side (Annex 3).
- (40) Instead of unsuccessful requests, only the non-availability (or non-offer) of firm capacity products could be assessed using the TP’s data on booking levels. This corresponds to the condition referred to in point 2.2.3(1) d) of the CMP GL, for which the vast majority of congestion was identified. The offer and actual bookings of interruptible capacities can provide indications that demand could exceed the offer of firm capacity.
- (41) Using the data exported from ENTSOG’s TP, graphic examples were created to illustrate the existing technical capacity, the firm and interruptible capacity booked during the analysed period and the (aggregated) utilisation of capacity (physical flows) per congested non-PRISMA IP side, where no firm capacity was or is available for at least one month in the period from 1 January 2014 to 31 December 2016. Those diagrams provide insight into the individual capacity booking situations, where often the total - firm and interruptible - capacity demand (i.e. bookings) clearly exceeds the offer of firm (i.e. technical) capacities (see Annex 7 for detailed graphs on non-PRISMA IPs).
- (42) A separate analysis of interruptible capacities is provided in Chapter 4.4 and all the details can be found in the results table in Annex 6.

4.3 Regional localisation of contractual congestion

- (43) As described in Chapter 4.1, 36 instances of contractual congestion (32 IP sides and 4 bundles) have been identified for the analysed period. To provide a geographic visualisation and overview of congestion in Europe, all instances are marked by arrows on ENTSOG’s gas network map, which is provided in Annex 10.
- (44) In this section, these results are presented with a regional focus, with the three regions of the Gas Regional Initiative (GRI) taken as the geographical reference.

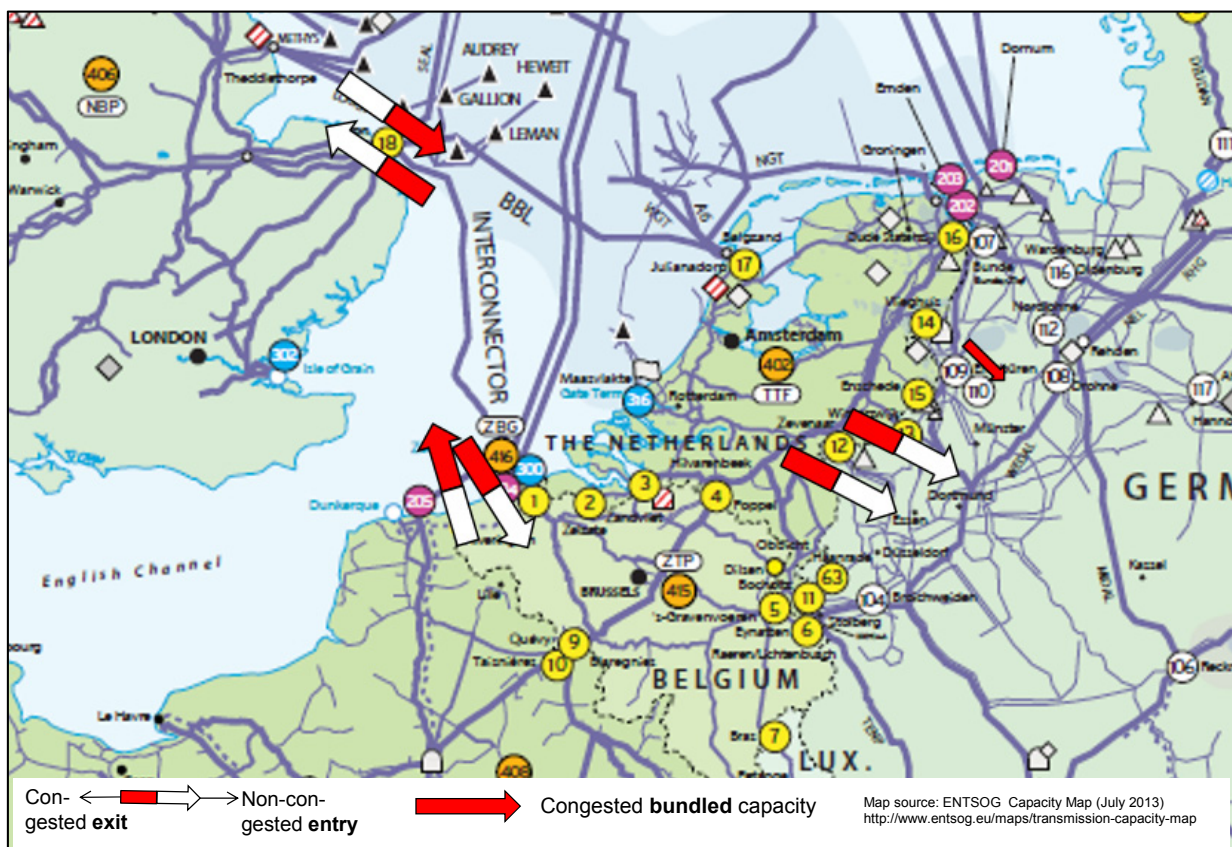


Figure 3: Indicative contractual congestion at interconnection points – NW region

- (45) Figure 3 illustrates the identified contractual congestion in North-West Europe, which concerns some interconnections from the Netherlands to Germany and the Interconnector IUK in both directions. Contractual congestion has also been detected inside Germany, where the two entry-exit zones NCG and Gaspool connect with each other. Although the CMP guidelines’ criteria used to identify contractual congestion are fulfilled in the cases at hand, there are already measures in place alleviating the effects of congestion. In fact, in Germany and at the Dutch-German border, the contractual congestion for products of at least one month’s duration is mitigated by the application of CMPs (Oversubscription at the Dutch side, FDA UIOLI at the German side), resulting in a functioning (spot) market connection on a daily basis. For the IUK, a very active secondary trading of firm capacity rights compensates the congestion on the primary capacity market.

- (46) As indicated in Figure 4, the South region - comprising France, Spain and Portugal - exhibits congestion at two IPs: one at the in-country IP in France between the balancing zones of GRTgaz Nord and GRTgaz Sud (showing also signs of physical congestion) and at the virtual IP “VIP PIRINEOS” in the direction from France to Spain, on the French exit side. Congestion is also reported at the interconnection between France and Switzerland. It is apparent that this region exhibits comparably less congestion than the other two regions.

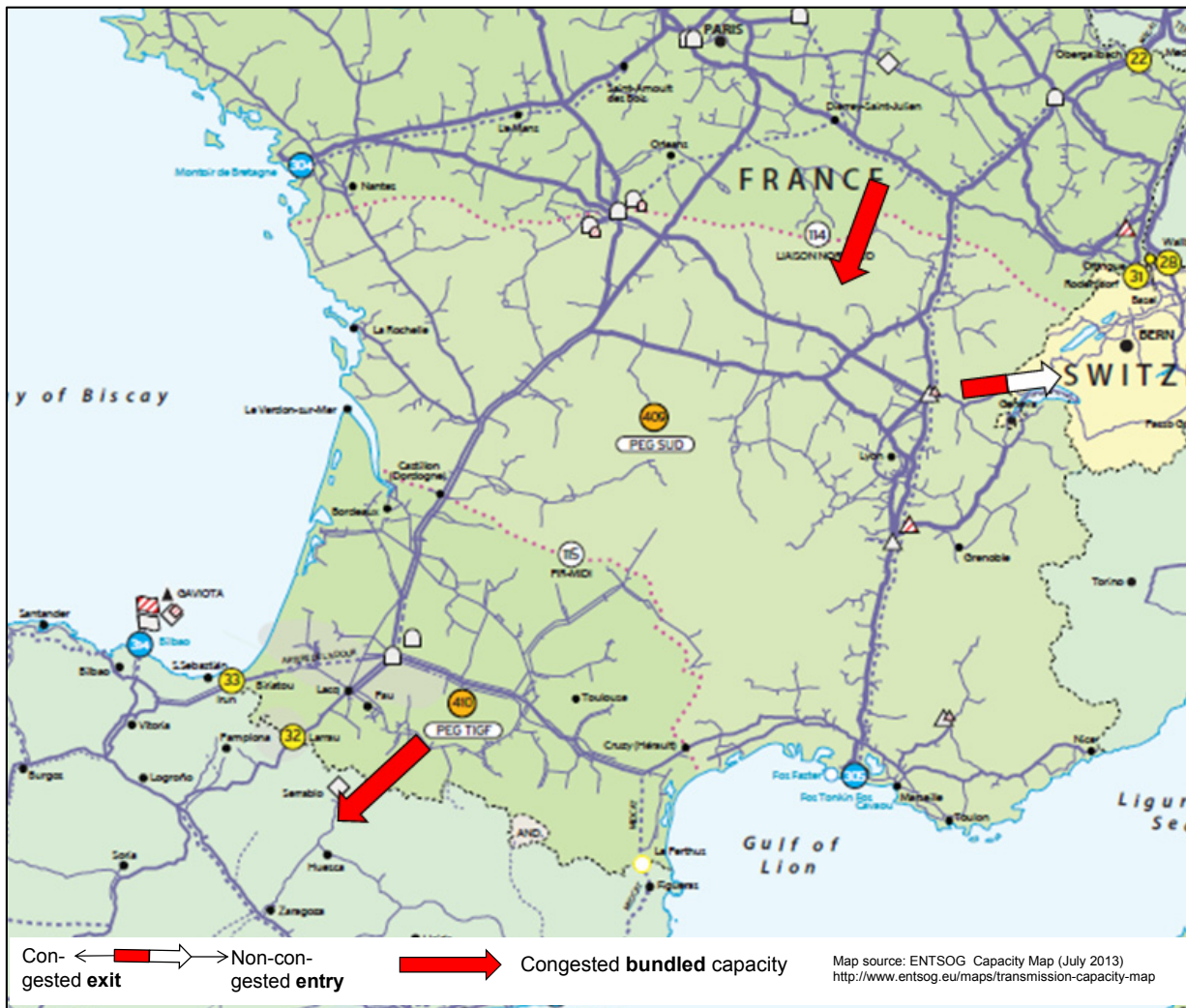


Figure 4: Indicative contractual congestion at interconnection points – South region

- (47) Within the South-South-East region, shown in Figure 5, comprising Central-Eastern Europe and countries to the North (Poland) and South-East of Europe, congestion was found for a number of IPs. This concerns mainly the interconnections between Germany and Poland and Germany to the Czech Republic, but also the interconnections from Austria to Hungary, from Romania to Bulgaria, from Bulgaria to Greece, Slovenia to Croatia, from Belarus and Ukraine to Poland, as well as in-country cross-zonal interconnections within Poland and within Germany.

- (48) The zonal borders between NCG and GASPOOL (in Germany) or NCG and Austria are not entirely congested, because of available capacity at alternative physical IPs connecting the same zones.

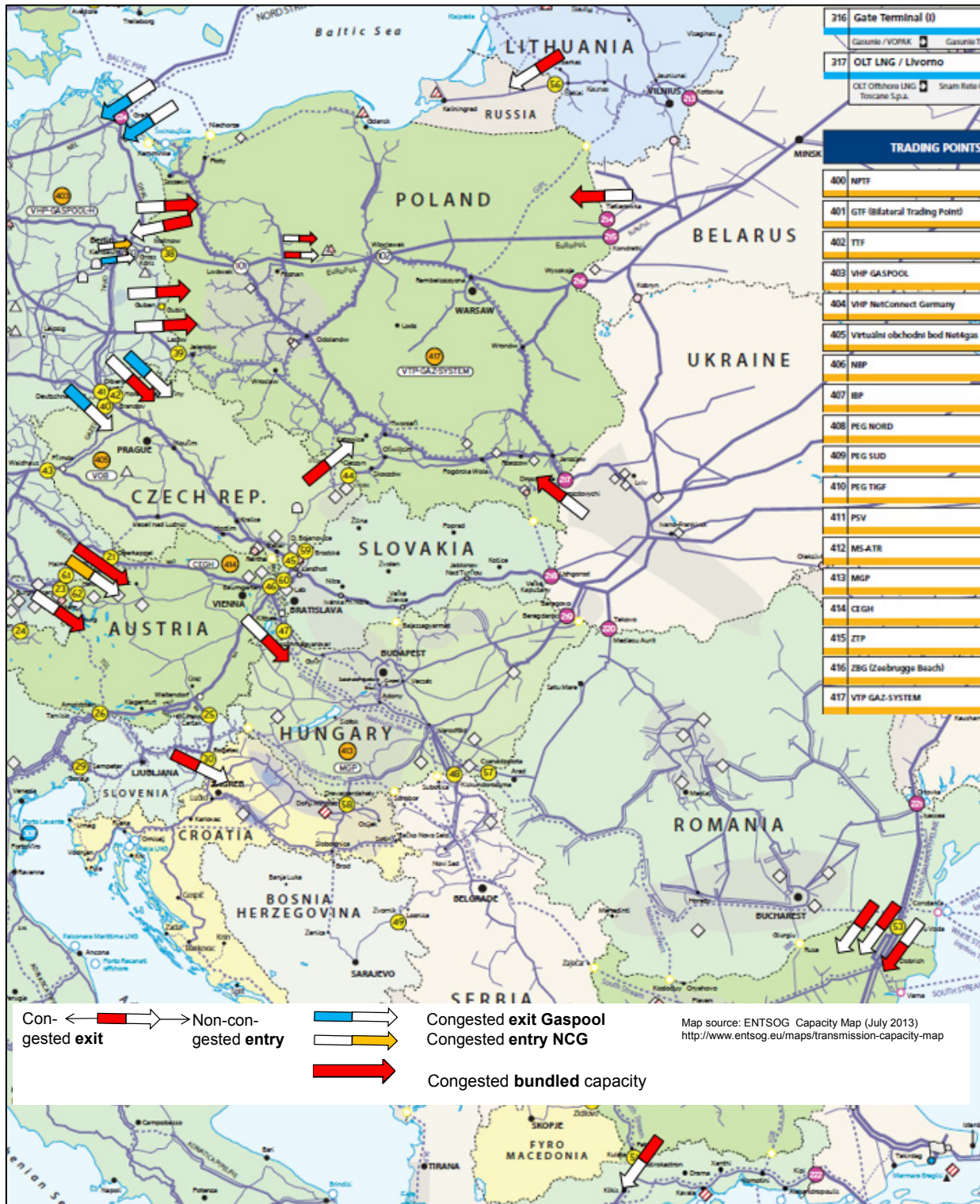


Figure 5: Indicative contractual congestion at interconnection points – South-South East region

4.4 Analysis of offer and use of interruptible capacity and instances of interruptions

- (49) Interruptible capacity was offered for 83% of the instances where contractual congestion was identified, namely for 32 IP sides and 4 bundles. As indicated in Figure 6 below, on average, about half of the congested IP sides or bundles received bookings for interruptible capacity for the monitored period. Only for a few IP sides and bundles data on interruptible capacity was not provided.

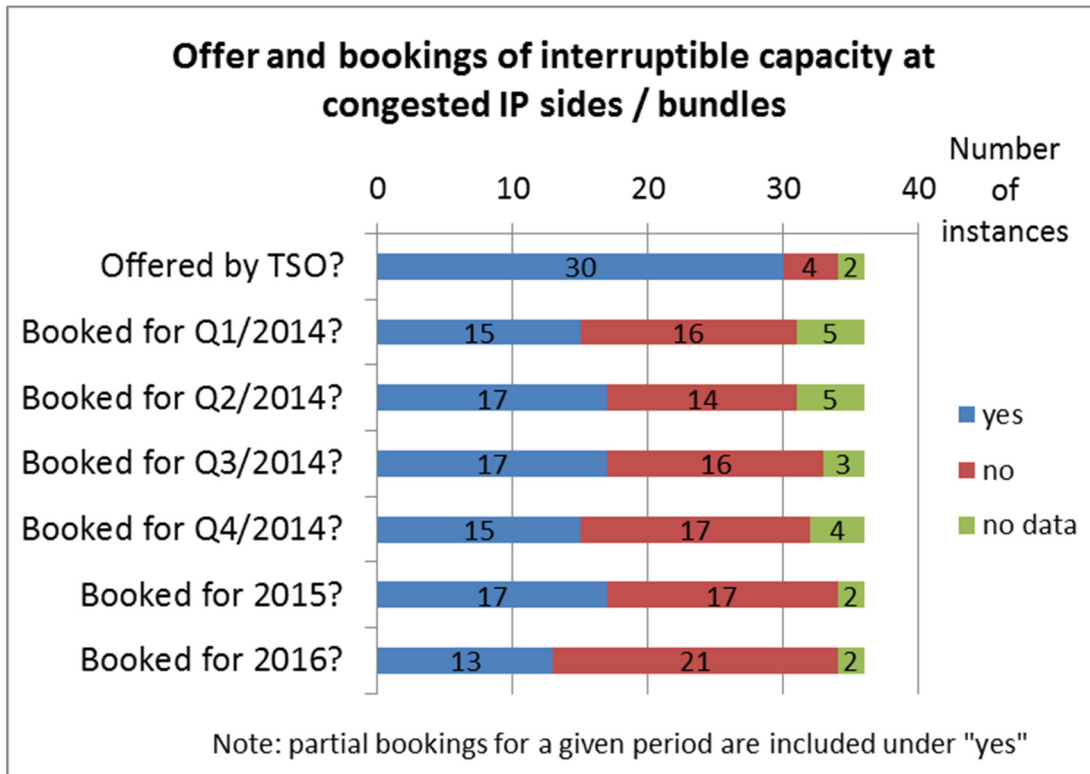


Figure 6: Interruptible capacity offer and demand at congested IP sides & bundles

- (50) In the absence of unsuccessful requests for firm capacity, the booking(s) of interruptible capacity can be used as an indicator for capacity demand exceeding the technical capacity (i.e. contractual congestion) under the assumption that those who booked interruptible would have actually preferred firm capacity²¹.
- (51) Actual interruptions of nominated interruptible capacity only took place at congested IP sides with fully²² booked interruptible capacity, which points to the existence of physical congestion. Such instances of physical and contractual congestion have been observed at 3 IP sides and at 2 bundles, for most of which interruptions only occurred for limited periods. More details can be found in Annex 6 (results table).

²¹ For 8 IP sides and one bundle (cf. Annex 6 results table) existence of contractual congestion as defined in Article 2(21) of Regulation (EC) No 715/2009 could not be proven, because no indicator for demand **exceeding** technical firm capacity could be found, despite the fact that condition d) of CMP GL 2.2.3(1) was fulfilled.

²² A "full" booking requires interruptible capacity to be offered in predefined amounts.

5 Secondary Trading and application of CMPs

5.1 Secondary capacity trading at congested IP sides

- (52) While data availability, and with it the oversight of activities on the secondary market, has increased compared to last year, the total number of congested IP sides for which secondary capacity was either offered, requested or traded, is relatively low. Capacity was traded only for 3 congested IPs (bundled and unbundled capacity) on PRISMA Secondary, and for 8 congested IP sides on other TSOs' venues.
- (53) The trades are summarised in Figure 7, showing that more trades for the congested IP sides took place outside PRISMA Secondary and predominantly for non-standard capacity products. Whereas on PRISMA Secondary mostly monthly products were traded for the 3 IPs mentioned, Figure 7 indicates that 9 non-standard products with duration of a year were traded for 8 IP sides at various secondary trading venues (other than PRISMA Secondary).

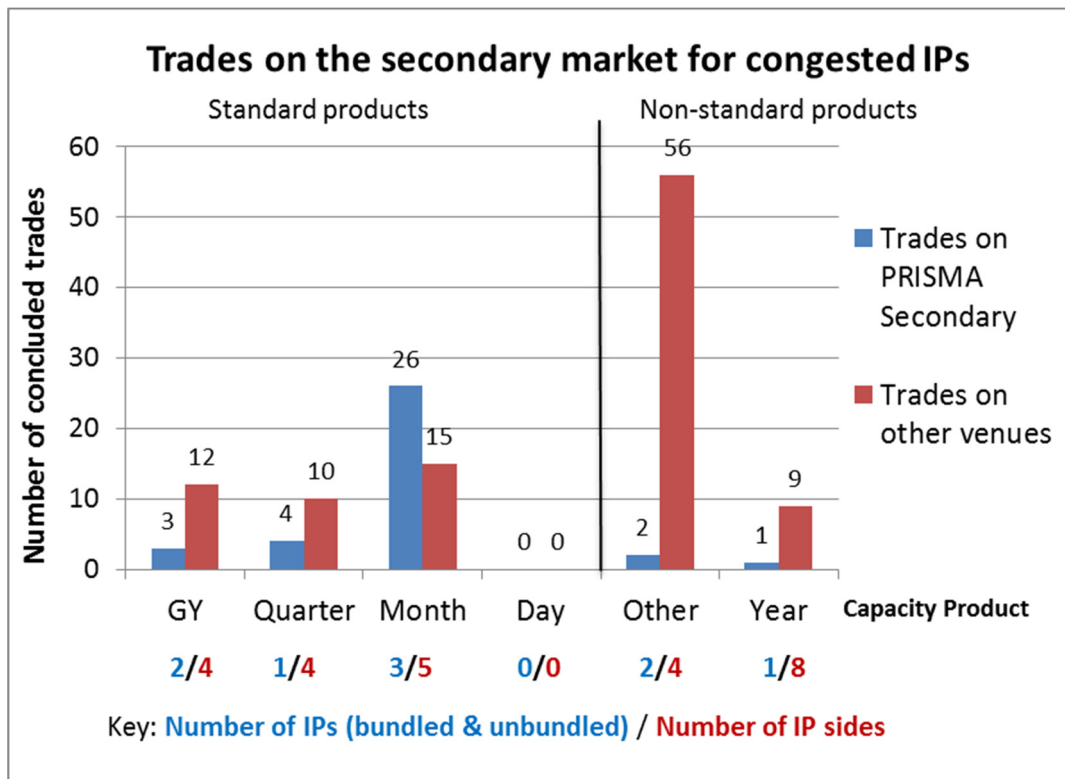


Figure 7: Concluded trades on secondary capacity markets

- (54) Further details on the activities at secondary markets and the products traded, offered or requested can be viewed in Annex 6 (results table).

5.2 Application of CMPs

- (55) According to the ENTSOG TP data, the overall CMP application - and therefore additional offer of capacities – has increased in 2014 compared to the first report of the Agency.
- (56) Figure 8 compares the number of days²³ for which additional capacity was offered through the various CMPs. While the Long-Term Use-It-Or-Lose-It (LT UIOLI) mechanism has not been applied neither in the last quarter of 2013 nor throughout 2014²⁴, the (daily) instances of oversubscription have significantly increased in 2014. The number of days for which capacity was surrendered increased compared to the last quarter of 2013²⁵.
- (57) Taking into account that last year’s first congestion report only covered the final quarter of 2013, and extrapolating the number of Q4/2013 for a full year, the (average) frequency of daily capacity offers due to FDA UIOLI application seem to have actually slightly decreased, which may have different causes (e.g. change in IP scope, utilisation of capacity).

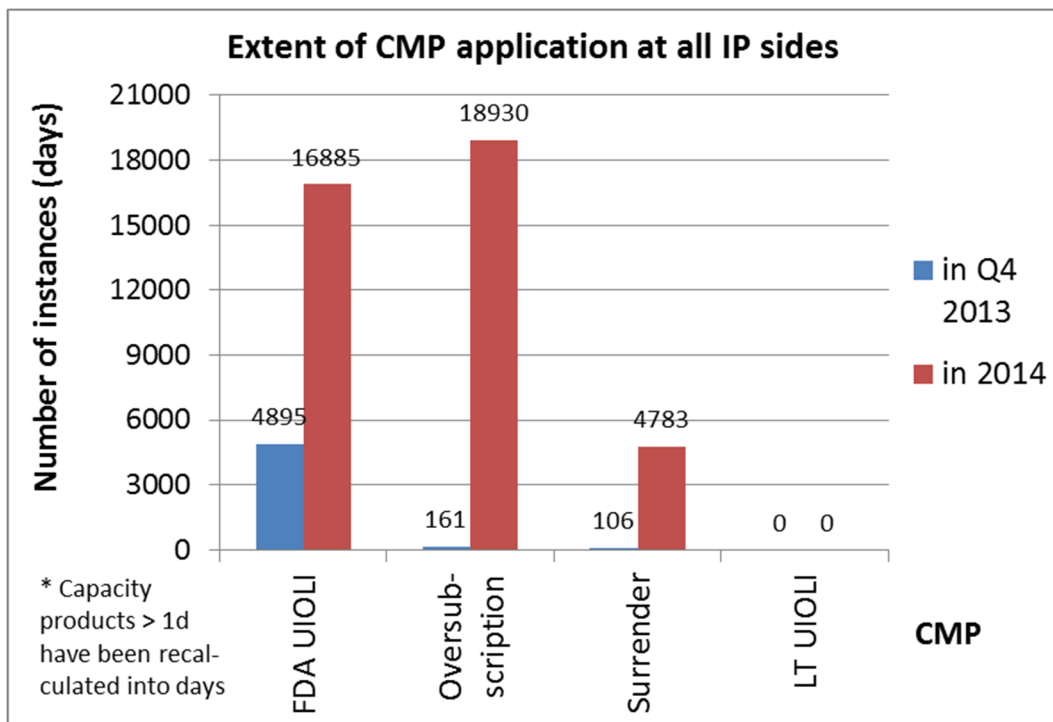


Figure 8: Indicative development of CMP application (number of occurrences at all IP sides)

²³ In case of capacity offers beyond a day’s duration (e.g. months), the longer periods have been converted into days.

²⁴ The Dutch, Belgian and British NRAs have developed a common process to apply LT UIOLI and aligned the necessary conditions that trigger such application.

²⁵ In 2014, also longer term products were surrendered clearly increasing the respective bar showing the number of days, since for example annual products were recalculated into days for better comparison.

- (58) The application of CMPs at an increasing number of IP sides is illustrated in Figure 9. Oversubscription²⁶, in particular, but also the surrender mechanism, are applied at substantially more IP sides in 2014 than in the last quarter of 2013. The extended application may have helped, in some cases, to reduce or prevent contractual congestion.
- (59) At 2 out of 32 IP sides where oversubscription is applied, congestion still occurred in 2014.
- (60) Similarly, at 5 IP sides, where the FDA UIOLI mechanism is applied, congestion occurred in 2014²⁷. Although the FDA UIOLI mechanism cannot resolve the contractual congestion for products beyond the day, it increases the amount of FDA capacity supporting spot market price convergence even in the reverse flow direction at unidirectional IPs.

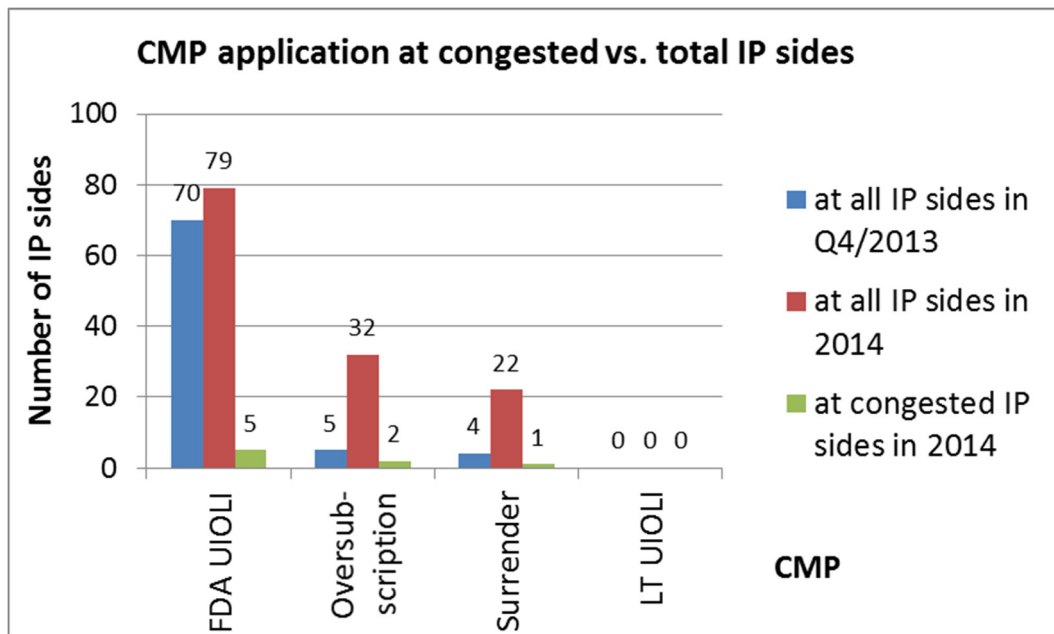


Figure 9: Development of CMP application (number of IP sides)

- (61) The Agency is aware that the implementation of the CMP GL was ongoing throughout 2014. A review of the late implementers and of the state of play of CMP implementation can be found in the Implementation Monitoring Report of the Agency, issued on 13 January 2015²⁸.
- (62) In this context, at 12 out of the 39 congested IP sides, CMPs - and in particular the oversubscription mechanism - had not been implemented by 1 October 2013. The delayed implementation in some of the concerned Member States²⁹ during 2014 and even later could be the reason for the non-application of CMPs and oversubscription in particular.

²⁶ Actual buy-backs of oversubscribed capacity were not assessed in this report as respective data was not requested.

²⁷ FDA UIOLI is implemented at 11 of the contractually congested IP sides (including IP sides of bundles), but data on FDA UIOLI application was only available for 5 IP sides.

²⁸ http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20CMP%20Implementation%20Monitoring%20Report%202014.pdf

²⁹ such as Bulgaria, Hungary, Lithuania, Netherlands, Romania, Spain, and the interconnectors with Great Britain

- (63) Annex 5 provides a table on the use of various CMPs at the congested IP sides. It is worth noting that out of the 39 identified congested IP sides, CMPs only resulted in additional capacity offers at 5 IP sides for unbundled products and for 2 bundles.³⁰
- (64) The amount of capacity released through the application of CMPs at the congested IP sides can be found in Annex 5. Whether and to which extent any of the respective capacity released by CMPs was eventually booked cannot be determined, since publications of capacity offers (at the booking platforms) and of capacity bookings (at the ENTSOG TP) do not differentiate the sources of capacity.

6 Correlation of contractual congestion and market price spreads

6.1 Price spread in congested situations

- (65) The entry points from Germany to Austria, Oberkappel and Überackern were contractually congested in 2014 according to the criteria laid out in paragraph 2.2.3(1) of the CMP GL.
- (66) The average price spread in 2014 between the relevant German virtual trading point NCG³¹ and the Austrian virtual trading point CEGH³² was approximately 1 EUR/MWh. In October 2014, the price spread reached its maximum, where CEGH showed a premium of 4.4 EUR/MWh over NCG.
- (67) The combined network tariff (German exit and Austrian entry) applicable at Oberkappel was 0.582 EUR/MWh in 2014. The combined network tariff (German exit and Austrian entry) at Überackern amounted to 0.34 EUR/MWh in 2014.
- (68) As can be seen from Figure 10 to Figure 13 the large price spreads between the NCG and CEGH spot gas markets triggered a higher demand for and utilisation of day-ahead capacity, resulting in auction premia for the transportation tariffs and therefore indicating contractual congestion at the points analysed.
- (69) The payable price (tariff + auction premium) exceeded the price spread between NCG and CEGH on a number of days, especially in October 2014. A potential explanation for this could be that for some shippers a different price spread was the basis for their willingness-to-pay in the day-ahead capacity auctions at the German-Austrian border (Oberkappel and Überackern). For example, the price spread between NCG and the Italian PSV reached up to 5.6 EUR/MWh in October 2014. In Q4/2014 a high demand for capacity from Germany via Austria and Slovakia and/or Hungary to Ukraine was observed which could also be an explanation for the high auction premia at the German-Austrian border.
- (70) At the entry Überackern SUDAL, 99% of the technical capacity in 2014 was sold as capacity products beyond a day's duration (see blue area in Figure 13). This means that the vast majority of firm day-ahead (FDA) capacity offered (red area) resulted from the application of the FDA UIOLI mechanism. This CMP measure therefore significantly contributed to mitigating contractual congestion as it allowed for the offer of FDA capacity

³⁰ At the 2 bundles, FDA UIOLI was applied on both IP sides (exit and entry) of the bundles.

³¹ Net Connect Germany

³² Central European Gas Hub

of approximately 10% of technical capacity. However, the FDA capacity released through the FDA UIOLI mechanism was less than the total demanded FDA capacity.

- (71) At the entry Oberkappel, the FDA UIOLI mechanism freed up sufficient FDA capacity to meet total demanded FDA capacity from September 2014 onwards, thus fully mitigating contractual congestion at that IP side (see Figure 11).

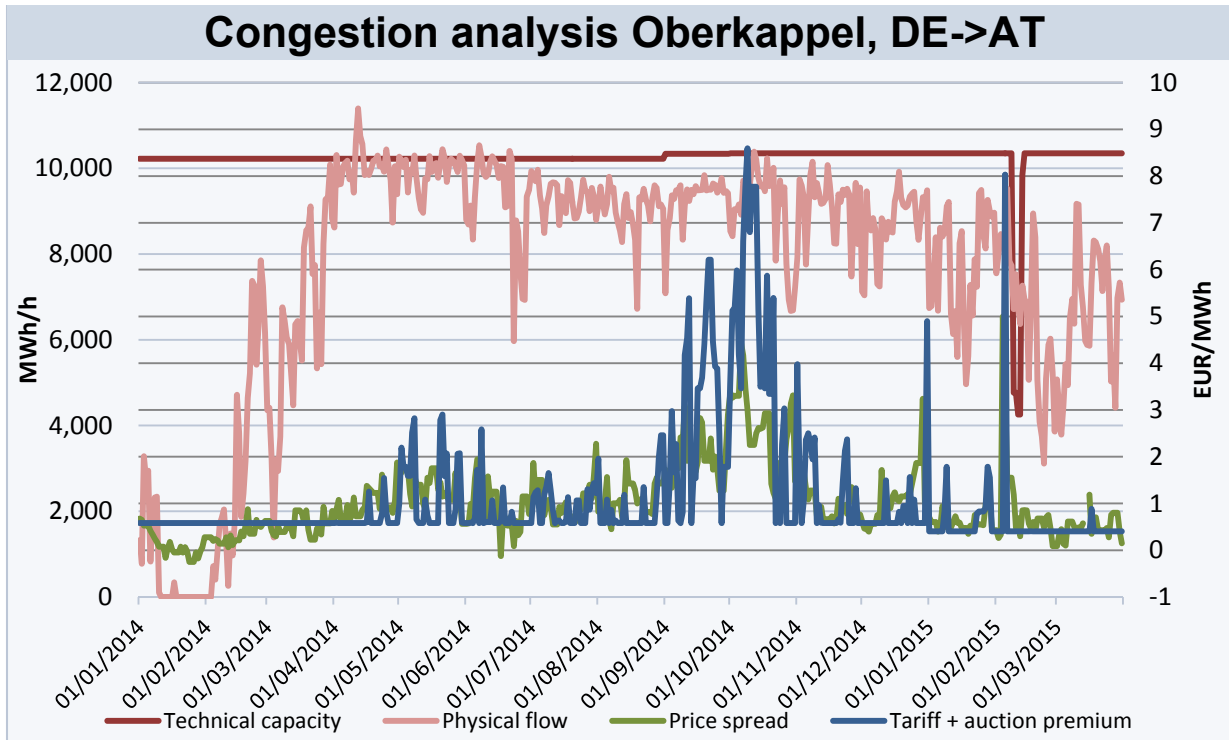


Figure 10: Physical flow and price spread at Oberkappel entry, DE->AT [Source: E-Control]

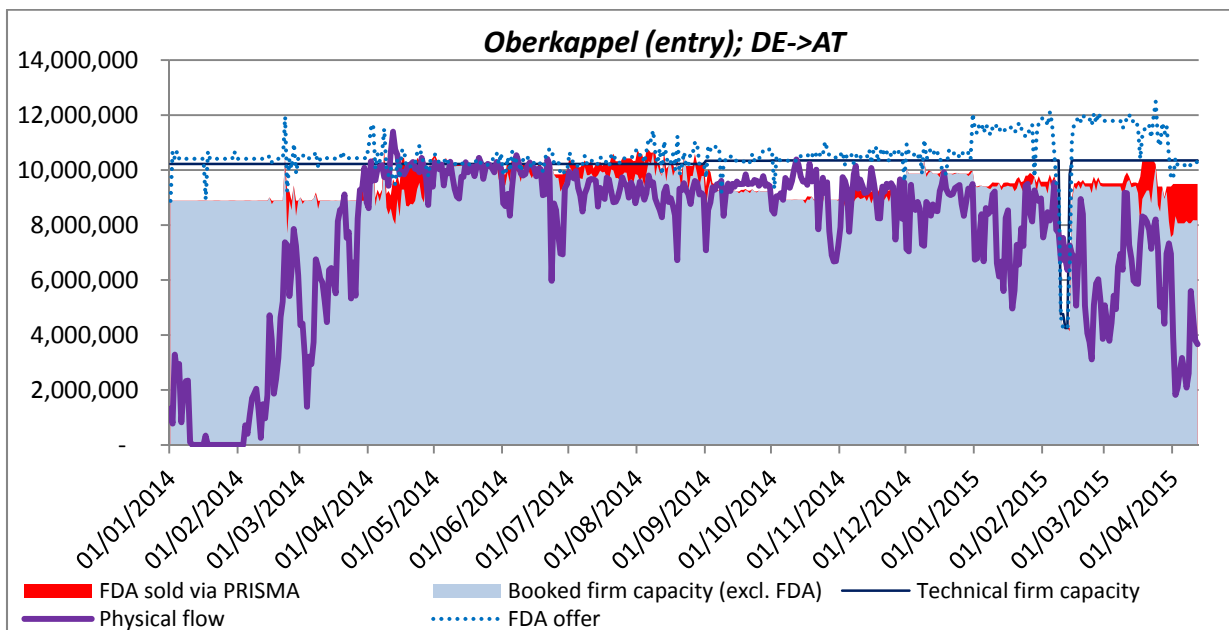


Figure 11: Effects of firm day-ahead UIOLI at Oberkappel entry, DE->AT [Source: E-Control]

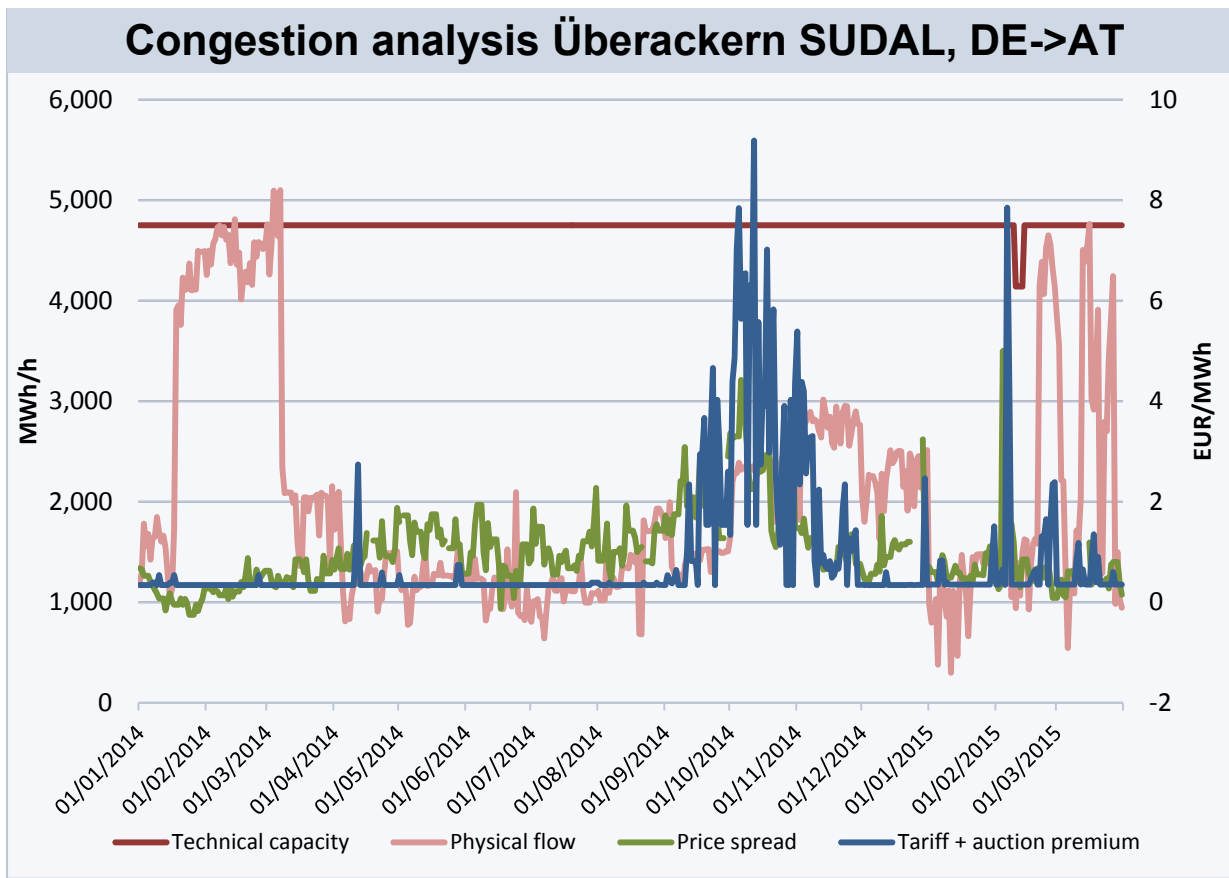


Figure 12: Physical flow and price spread at Überackern entry, DE->AT [Source: E-Control]

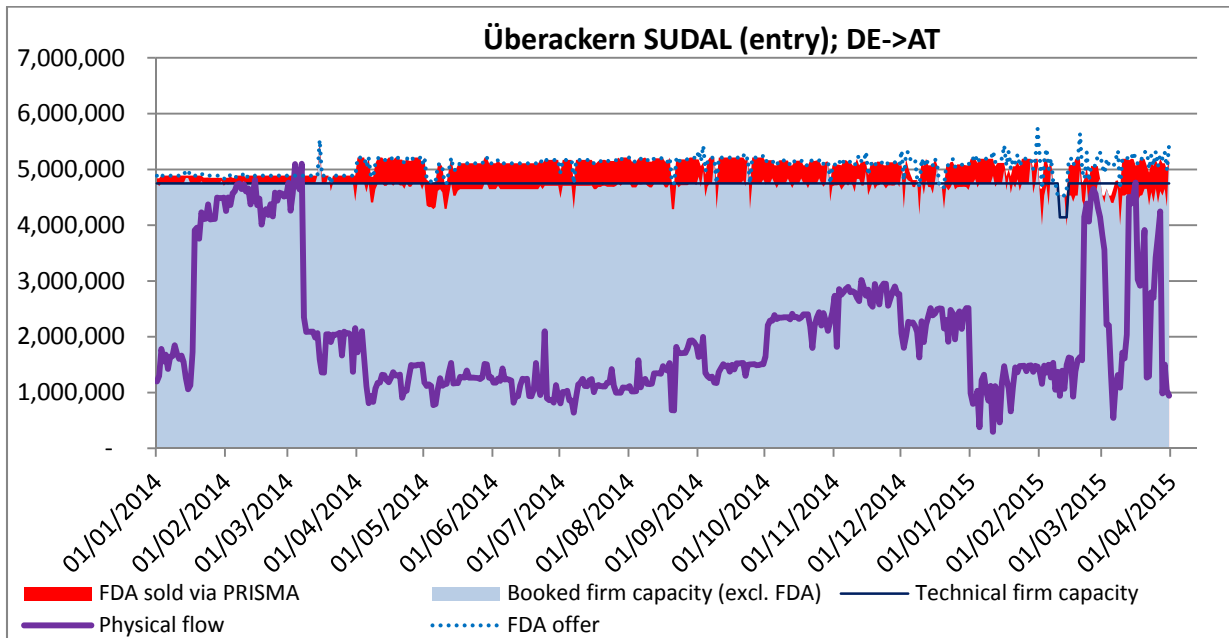


Figure 13: Effects of firm day-ahead UIOLI at Überackern entry, DE->AT [Source: E-Control]

6.2 Price spread in a non-congested situation

- (72) The example below focuses on the German and French hubs NCG and PEG Nord in a non-congested situation.
- (73) Figure 14 illustrates the capacity utilisation at the Obergailbach IP (allocations in dark blue colour) and the spot market price spreads between NCG and PEG Nord (red line). Between those hubs the price spreads are low. However, when the price spread increases, as witnessed for example in September/October 2014, the utilization of capacity (illustrated by the dark blue bars) also increases.
- (74) This observation indicates (at least for the short period analysed for this specific IP) an optimal utilisation of the interconnection capacity, suggesting an effective connection of markets. Prompt market responses have been pushing the hub prices to converge quickly, getting the price spreads down to the minimum level of transport costs.

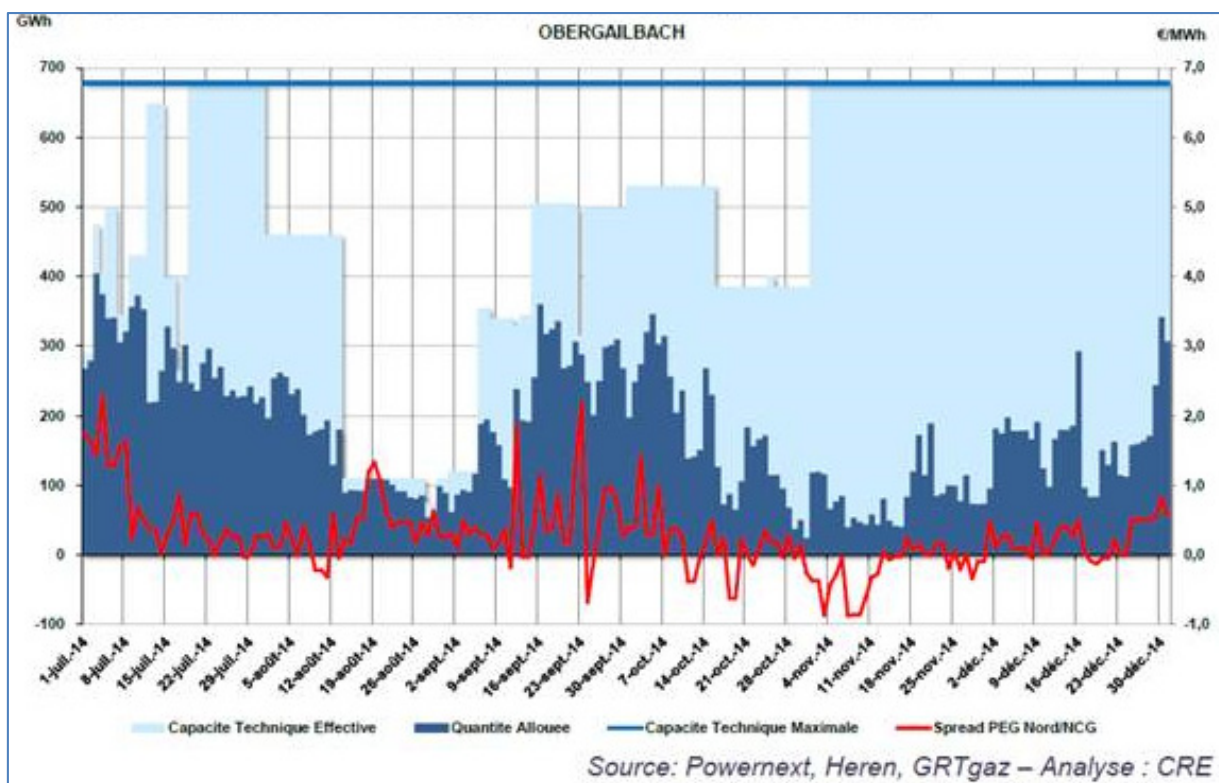


Figure 14: Capacity utilisation at IP Obergailbach (DE → FR)

7 Supplement: Results of the 2015 annual yearly auctions at PRISMA

- (75) In early March 2015, annual yearly capacity products were auctioned at the PRISMA platform. The analysis of the respective auction report, published on 1 April 2015, revealed auction premia and unsuccessful requests for the following 3 IPs confirming the continued existence of contractual congestion:
- The French in-country bundled IP North-South Link (GRT Gaz side): auction premia for the bundled products for GY 2015/16, GY2016/17 and GY 2017/18;
 - The Austrian unbundled entry side of Oberkappel (Gas Connect Austria side): auction premia for GY 2015/16;
 - The Austrian unbundled entry side of Überackern (Gas Connect Austria side): auction premia for both competing auctions from ABG (Germany) and SUDAL (Germany) for GY 2015/16.

8 Recommendations & lessons learnt

(76) **Comparison of results with last year's report:**

Compared to last year's report, where 118 out of 352 IP sides (~33%) were indicatively marked as congested, the level of congestion has decreased. However, several IP sides were excluded from the scope during the congestion analysis, mainly those IP sides for which no firm technical capacity existed (virtual reverse flow directions). Additionally, the criterion d) in paragraph 2.2.3(1) of the CMP GL was interpreted in this report in such a way that, as long as at least one monthly product was offered, no congestion was identified.

(77) **Outlook:**

The remaining 24 contractually congested individual IP sides and the 2 bundles³³ (cf. Annex 9), which have or should have implemented Oversubscription and Buy-Back rules, are potentially subject to FDA UIOLI implementation and application from 1 July 2016 onwards, if contractual congestion persists for the following reporting period. This does not preclude that any further IP side, for which congestion is detected later, cannot fall under the obligation to apply the FDA UIOLI mechanism as well. Moreover, only at two of the congested IP sides, oversubscription has been applied for a period longer than just day-ahead as shown in Annex 5.³⁴

(78) **Recommendations on data & transparency:**

Progress has been made on data availability and transparency at ENTSOG's TP in relation to data required for this report and the amount of missing data has substantially decreased (cf. Annex 8). Concerning secondary capacity trading data, on the PRISMA Secondary the

³³ at least for the congested side of each bundle

³⁴ GTS applied oversubscription at the IP sides Zevenaar and Winterwijk for daily and monthly products,

data was transparently available, whereas for other secondary trading venues the data had to be collected separately.

- A few TSOs³⁵ still do not publish all data required for this report on the ENTSOG TP. ENTSOG shall remind TSOs of the missing data, while the responsible NRAs shall enforce these transparency obligations.
- Automated checks by ENTSOG on the ENTSOG TP data should provide for complete, updated, correct and consistent information.
- ENTSOG should ensure that the PRISMA auction results with premia are uploaded on the ENTSOG TP as required by the CMP GL.
- An alignment of IP names used for the same IP on ENTSOG's TP, in the NC CAM IP scope list and on PRISMA's platform is desirable.
- ENTSOG and ACER shall create an agreed separate CMP IP scope list, which is based on the NC CAM IP scope list³⁶.

(79) **Policy recommendation:**

- The Commission may consider clarifying the scope of criterion d) of paragraph 2.2.3(1) of the CMP GL to align it better with the other congestion criteria. The current reading of criterion d) considers an IP side not congested, if there was at least one out of 12 months offered in the preceding year's rolling monthly auction procedures. All 12 monthly products should be offered at an IP in order for it not to be considered contractually congested, as there is no way to test "demand exceeding offer" in auction regimes if no such product is offered. (Also, no quota applies for monthly products.)
- It should further be clarified, that Article 6 of Regulation (EU) No 984/2013 regarding the joint method to maximise capacity and the dynamic approach to capacity (re-) calculation takes priority over the application of oversubscription at a yearly, quarterly and monthly level.

(80) **Suggestion for future analysis:**

- A congestion analysis at market area (entry-exit zonal) border level (rather than at IP side level) could be additionally performed by the Agency in the future, since market areas are in some cases connected through several physical IPs and congestion at one IP does not mean that there is congestion between the two adjacent market areas. However, the analysis of each physical interconnection will still be necessary as long as not all possible virtual interconnection points are established at the relevant EU borders by November 2018 (as specified in Article 19(9) of Regulation (EC) No 715/2009).

³⁵ BBL, BGE, DESFA, LBTG, Opal Gastransport

³⁶ For example, IP sides where no firm technical capacity exists should be excluded from the scope of the CMP GL.

Annex 1: List of abbreviations

Acronym	Definition
ACER	Agency for the Cooperation of Energy Regulators
CAM	Capacity Allocation Management (Gas)
CEGH	Central European Gas Hub (gas hub in Austria)
CMP	Congestion Management Procedures (Gas)
DZK	Dynamically allocable capacity
E/E	Entry/exit
EC	European Commission
ENTSOG	European Network of Transmission System Operators for Gas
EU	European Union
FDA UIOLI	Firm Day-Ahead Use-It-Or-Lose-It
FZK	Freely allocable capacity (firm)
GY	Gas Year
IP	Interconnection Point
LT UIOLI	Long-Term Use-It-or-Lose-It
NC	Network Code
NCG	Net Connect Germany (one of Germany's gas hubs)
NRA	National Regulatory Authority
OS & BB	Oversubscription and Buy Back
SUR	Surrender of Capacity
TP	ENTSOG's Transparency Platform
TSO	Transmission System Operator

Annex 2: Breakdown of congestion at IP sides

Total # of congested bundles (IP directions)	bundled in-country cross-zonal	bundled cross-border	bundled virtual	Number of congested IP sides	entries	exits	third-country virtual	in-country cross-zonal	cross-border	Total IP sides (unbundled + 2 x bundled)	FDA UIOLI already applied [# of IP sides]	# of IP sides already congested in Q4/14	Justification / Trigger	CMP category	% of congested IP sides (bundles counted as two sides)	% of NC CAM list IP sides considered (257)	Data Source	
0				15	7	8	3	2	10	15		8	no offer of a firm product >= 1 month for 2014 or 2015 or 2016	CMP GL 2.2.3.1 (d)	59%	9%	ENTSOG TP (non-/availability of firm capacity)	
0				5	2	3	1	2	5	4	0	CMP GL 2.2.3.1 (d)		Non-occurrence of these IPs in PRISMA's 2014 auction reports (although respective TSOs have to use PRISMA)				
1	1			1	1		1			3	6	2		CMP GL 2.2.3.1 (d)			Only firm DA capacity was offered in PRISMA's 2014 auctions	
1		1		3	1	2			3	4	4	1	auction premium occurred for at least 3 monthly, 2 quarterly or one yearly product (for 2014-2016 in PRISMA auctions)	CMP GL 2.2.3.1 (a)	10%	2%	PRISMA auction reports 2014	
0				0						0	0	0		CMP GL 2.2.3.1 (b)	0%	0%		
2	1		1	3		3			3	7	0	2	auction premium for at least 3 months (non-PRISMA auctions)	CMP GL 2.2.3.1 (c)	18%	3%	ENTSOG TP (non-/availability of firm capacity + unsuccessful request + auction premium)	
0				5	4	1	2		3	5	0	0		CMP GL 2.2.3.1 (a)	13%	2%		
4	2	1	1	32	15	17	5	2	4	21	39	14	13	Total of contractually congested IP sides (out of 257 qualifying IP sides of NC CAM IP scope list)		100.0%	15%	

Annex 3: Unsuccessful requests & congestion identified in 2014 PRISMA auctions

Identified contractual congestion according to FDA UIOLI criteria (CMP GL 2.2.3.1 a-c) in primary capacity auctions at PRISMA in 2014 [number of occurrences]										
IP name	TSO 1	Direction 1	TSO 2	Direction 2	Product type			Product/s runtime (x2 means firm and interruptible at the same time)	Unsuccessful requests (kWh/h)	Type of capacity
					Monthly	Quarterly	Yearly			
Bundled capacities										
Liaison Nord Sud	GRTgaz (FR)	exit	GRTgaz (FR)	entry	2	4 firm (+4 interruptible)	4 firm (+4 interruptible)	10.14; 11.14; Q4/14 (x2); Q1/15 (x2); Q2/14 (x2); Q3/15 (x2); GY-14/15 (x2); GY-15/16 (x2); GY-16/17 (x2); GY-17/18 (x2)	6809713 (monthly) 7706402 (quarterly/interruptible); 21081068 (quarterly/firm); 21345013 (yearly/interruptible); 52630054 (yearly/firm)	bundled firm (monthly, quarterly, yearly); bundled interruptible (quarterly, yearly)
Oberkappel	Open Grid Europe (DE)	exit	Baumgarten Oberkappel Gasleitungsgesellschaft (AT)	entry	4			05.14; 06.14; 07.14; 08.14	13249195	bundled FZK
VIP PIRINEOS	TIGF (FR)	exit	Enagas (ES)	entry		2	1	Q4/15; Q1/15; GY-14/15	604167 (quarterly); 147905 (yearly)	bundled firm
Non-bundled capacities										
Hora Svaté Kateřiny (CZ) / Deutschneudorf (Sayda) (DE)	Ontras (DE)	exit			4			10.14; 11.14; 12.14; 01.15	2263733	non-bundled FZK
Gubin	Ontras (DE)	exit				2		Q4/14; Q1/15	27098	non-bundled FZK
Oberkappel	Open Grid Europe (DE)	exit			7			05.14; 06.14; 07.14; 08.14; 11.14; 12.14; 01.15	32014678	non-bundled FZK
Rogatec	Plinovodi (SI)	exit					1	GY-15/16	208200	non-bundled firm
Überackern SUDAL (AT) / Burghausen (DE) (2)	Gas Connect Austria (AT)	entry			4 FZK (+3 interruptible)			10.14 (x2); 11.14 (x2); 12.14; 01.15 (x2)	1216000 (FZK); 420000 (interruptible)	non-bundled FZK; non-bundled interruptible
Wallbach	Fluxys TENP (DE)	exit				2		Q4/14; Q1/15	41446	non-bundled FZK
Winterswijk (NL) / Vreden (DE)	Gasunie Transport Services (NL)	exit					1	GY-14/15	360000	non-bundled firm
Zevenaer	Gasunie Transport Services (NL)	exit					1	GY-14/15	40000	non-bundled firm

Annex 4: Unsuccessful requests & congestion identified in GSA & FGSZ auctions in 2014

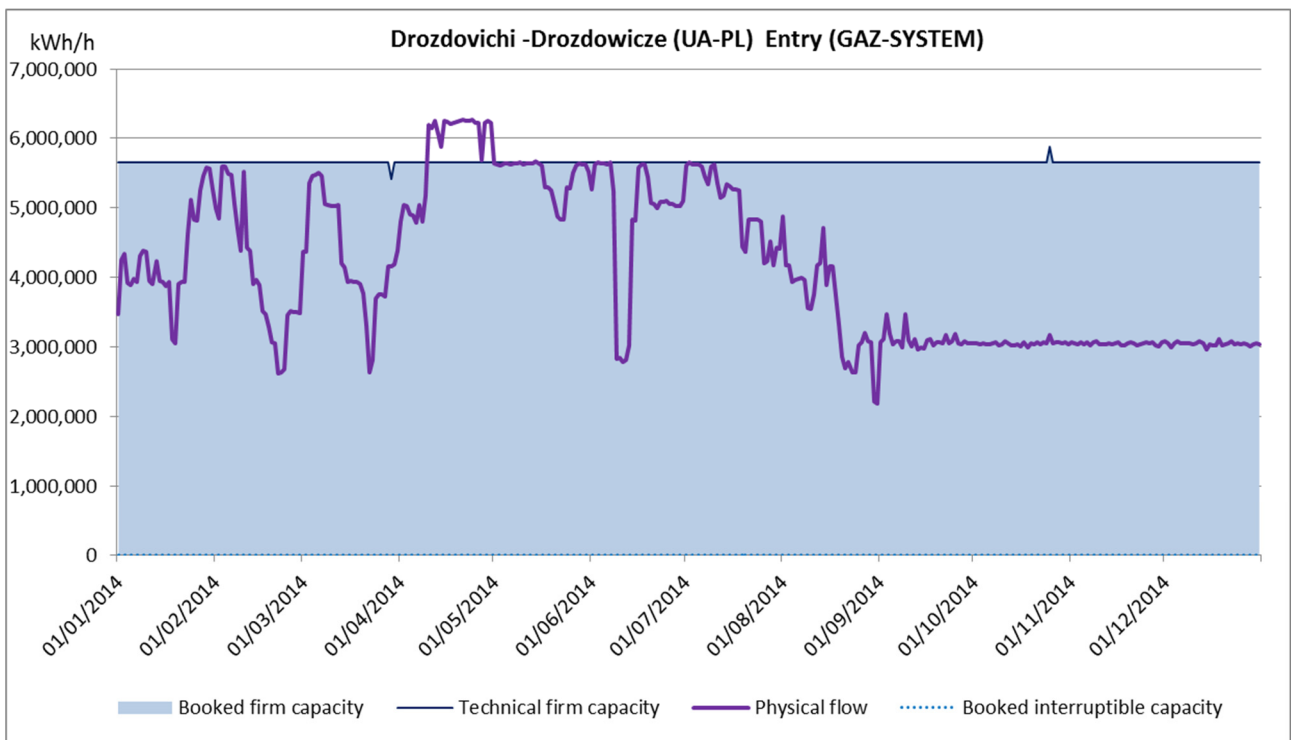
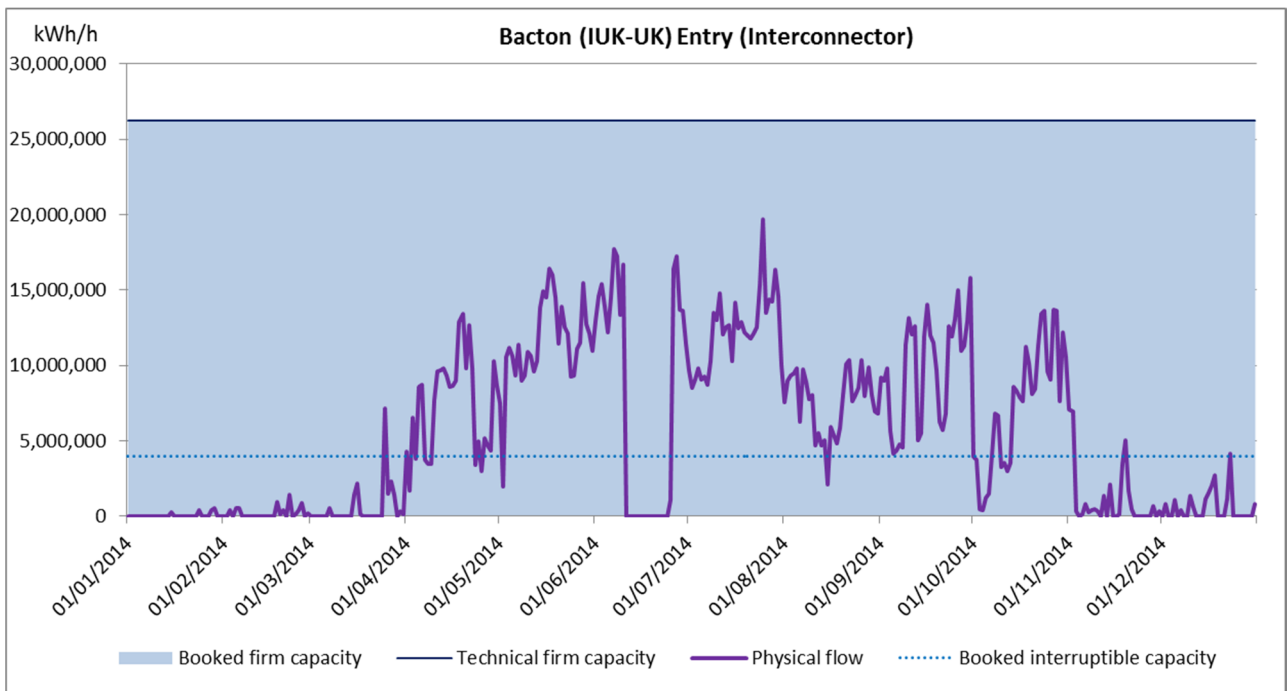
Allocation	Point type	IP name/ location	Direction	From TSO1	From CC1	To TSO2	To CC2	Unsuccess-ful requests [number of occur-rences] in 2014	Unsuccess-ful requests [volumes in kWh/d] in 2014	Unsuccessful requests [Product] M = Month Q = Quarter
via GSA auction platform	virtual	Point of Interconnection (PWP)	exit	Gaz-System (ISO)	PL	GAZ-SYSTEM	PL	3	799974	M-10-2014
								6	536581	M-11-2014
								7	577995	M-12-2014
	cross-border	Lasów	entry	ONTRAS	DE	GAZ-SYSTEM	PL	1	10000	M-10-2014
								1	40000	Q-4-2014
								4	118995	M-11-2014
	cross-border	Mallnow	entry	Gascade	DE	GAZ-SYSTEM (ISO)	PL	6	536581	M-11-2014
								6	536581	M-12-2014
								1	14451	Q-03-2014
	virtual	Point of Interconnection (PWP)	entry	Gaz-System (ISO)	PL	GAZ-SYSTEM	PL	3	799974	M-10-2014
								6	536581	M-11-2014
								7	577995	M-12-2014
via FGSZ Platform	cross-border	Mosonmagyaróvár	entry	Gas Connect Austria	AT	FGSZ	HU	1	23635413	M-1-2014
								1	23635413	M-2-2014
								1	23635413	pM-3-2014
								1	23635413	M-3-2014
								1	23635413	M-4-2014
								1	23635413	M-5-2014
								1	23635413	M-6-2014
								1	16950812	M-7-2014
								1	33837485	Jul-2014-Jun-2015
								1	28768770	M-8-2014
								1	39474458	M-9-2014
								1	51785425	M-10-2014
								1	28308453	M-11-2014
1	13751666	M-12-2014								
Total								75		
non-auction	CROSS-border	Opal (DE)/Brandov Opal (CZ)	entry	LBTG; OPAL Gastra	DE	NET4GAS	CZ	3	42748438	M-12-2014

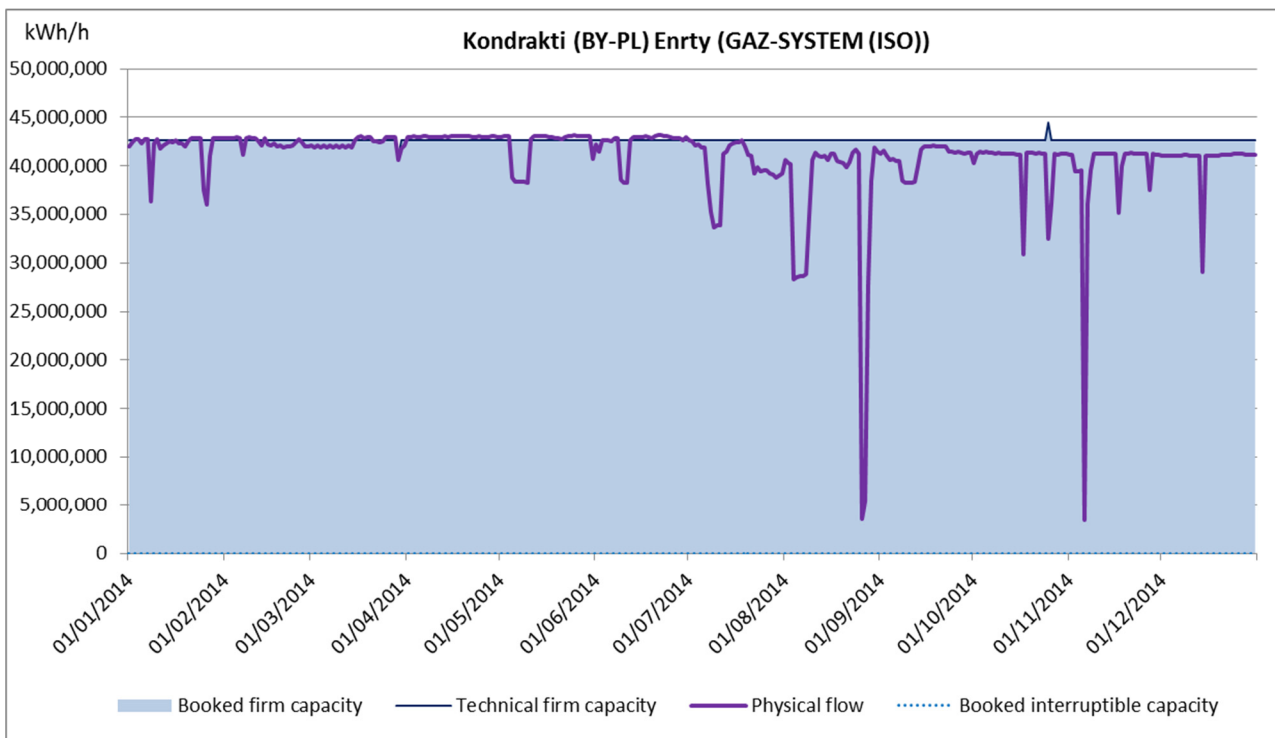
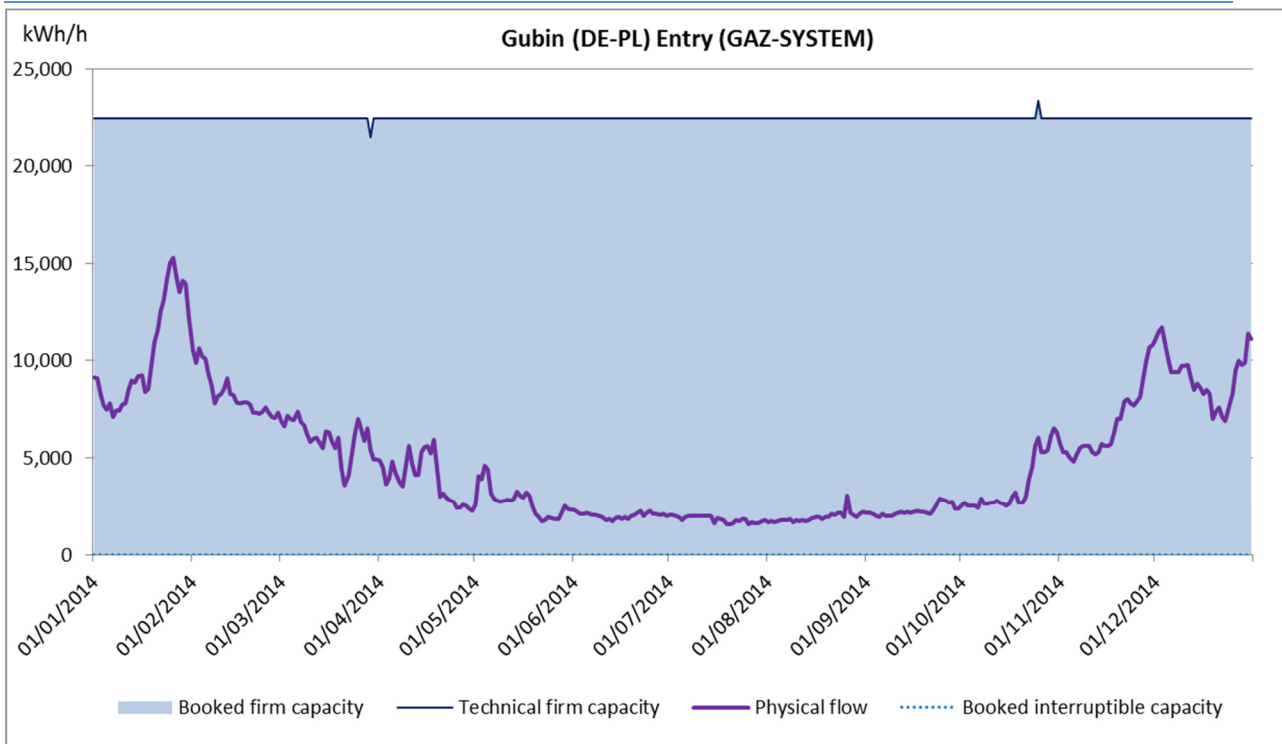
Annex 5: Application of CMPs at congested IPs

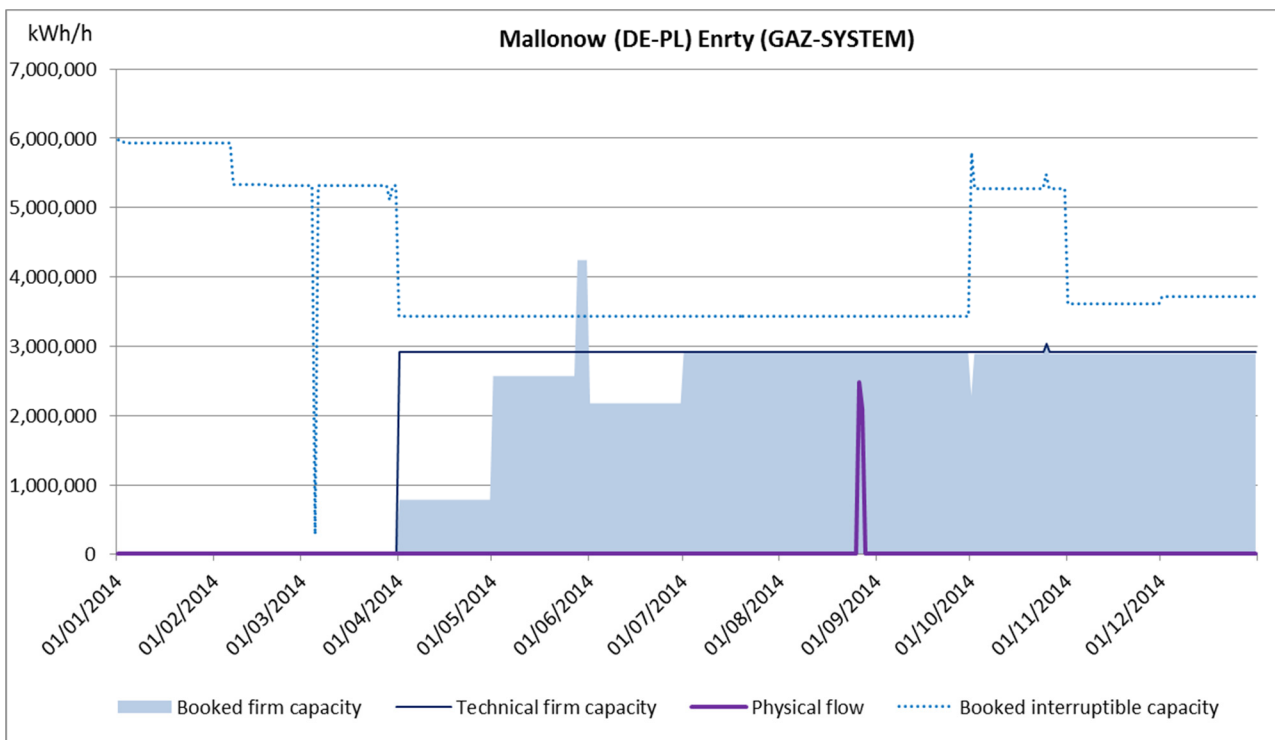
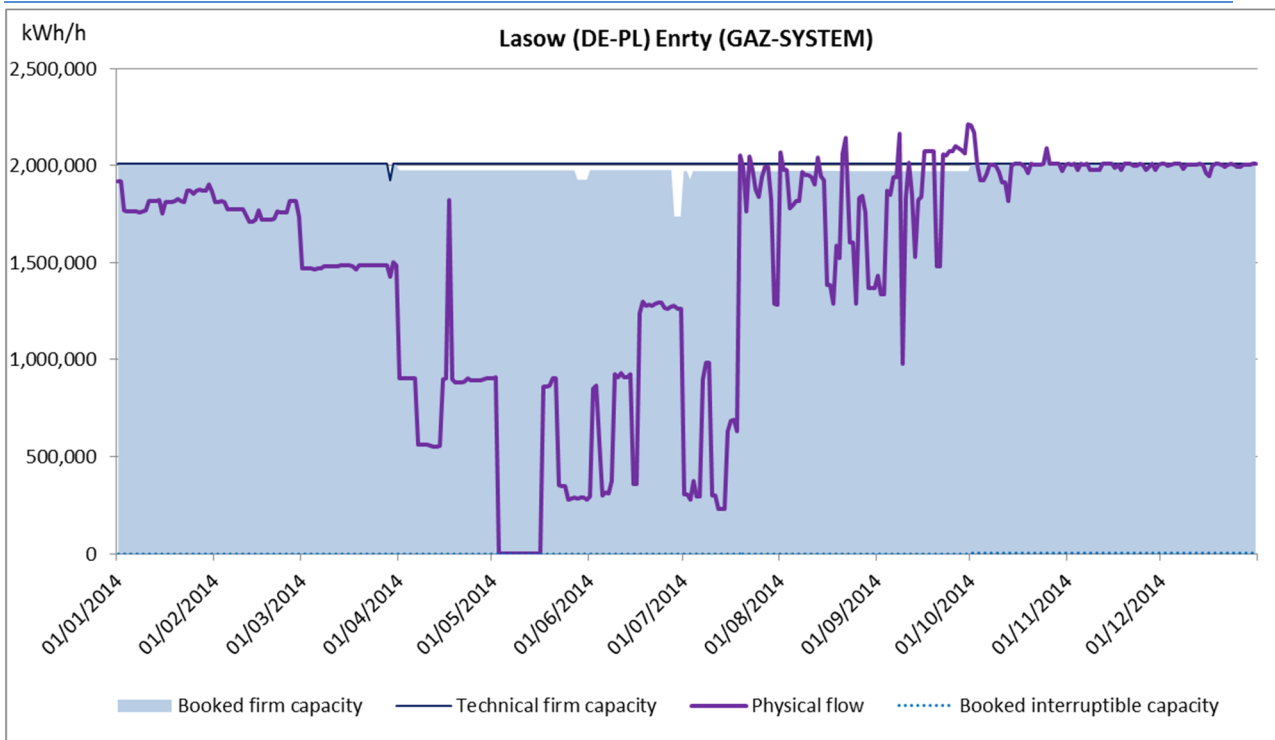
Point type	IP name/ location	Direction	From TSO1	To TSO2	CMP capacity [volumes in kwh/d] made available via																
					OS - total volume	OS - total days	OS - daily products - number of days	OS - daily products - volume	OS - monthly products - number total days in months	OS - monthly products - aggregated monthly volume	OS - yearly products - number total days in years	OS - yearly products - aggregated yearly volume	FDA UIOLI total volume	FDA UIOLI total number of days	FDA UIOLI (entry IP side for bundles) volume	FDA UIOLI (entry IP side for bundles) total days	SUR-RENDER - total volume	SUR-RENDER- total days	LT UIOLI		
Contractual congestion identified: neither firm nor interruptible capacity was offered in 2014 (on PRISMA for "PRISMA IPs")																					
	Kienbaum	exit	GASCADE (DE)	Open Grid Europe (DE)	0										1005238963	231		0	0		
bundled	Emsbüren-Berge	exit	Gasunie Deutschland Transport Services (DE)	Thyssengas (DE)	0										13512000	25	42720584	78	0	0	
Identified contractual congestion according to FDA UIOLI criteria (CMP GL 2.2.3.1 a-c) in primary capacity auctions at PRISMA in 2014																					
	Oberkappel	exit	Open Grid Europe (DE)	Baumgarten Oberkappel Gasleit	0										59415719	341	884990184	96	0	0	
	Hora Svaté Kateřiny (CZ) / Deutschneudorf (Sayda) (DE)	exit	Ontras (DE)		0										24290136	10			0	0	
	Überackern SUDAL (AT) / Burghausen (DE) (2)	entry	Gas Connect Austria (AT)		0										656016432	73			0	0	
	Winterswijk (NL) / Vreden (DE)	exit	Gasunie Transport Services (NL)		1.195E+11	636	330	61968516672	306	57547340664	0	0	0	0					0	0	
	Zevenaar	exit	Gasunie Transport Services (NL)		1.195E+11	636	330	61968516672	306	57547340664	0	0	0	0					368000736	92	0
Sum					2.39E+11									1758473250	927710768			368000736		0	

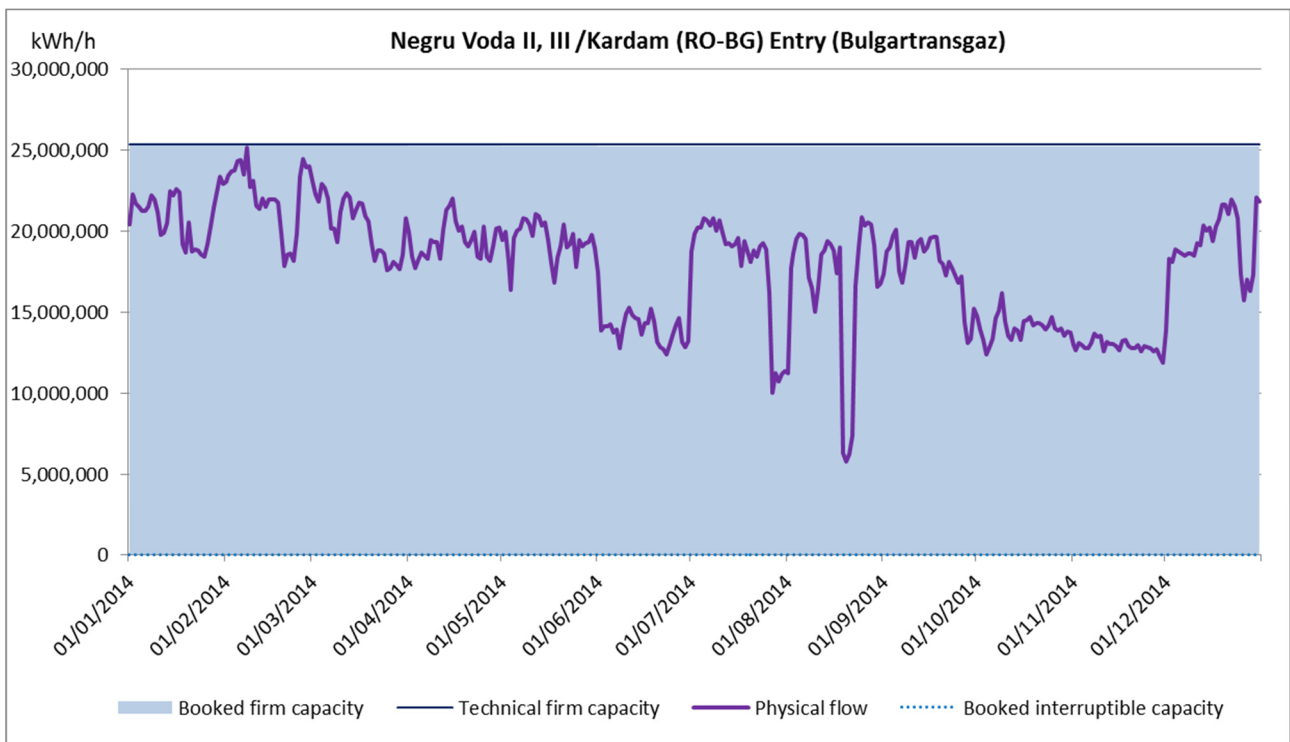
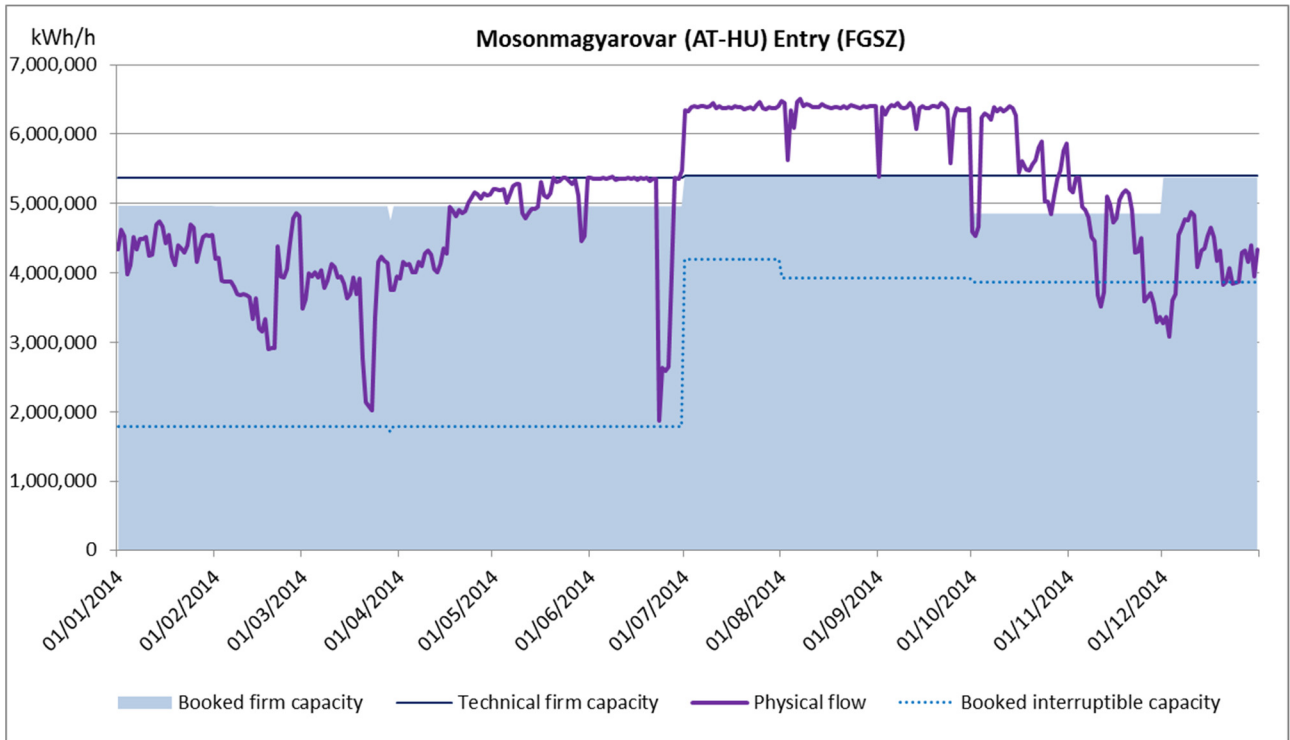
IPs / IP sides	number	CMP application at congested IP sides			
		CMP capacity made available [aggregated]			
		OS	FDA UIOLI	SURRENDER	LT UIOLI
		# of IP sides	# of IP sides	# of IP sides	# of IP sides
Exits	6	2	4	1	0
Entries	1	0	1	0	0
Sum		2	5	1	0

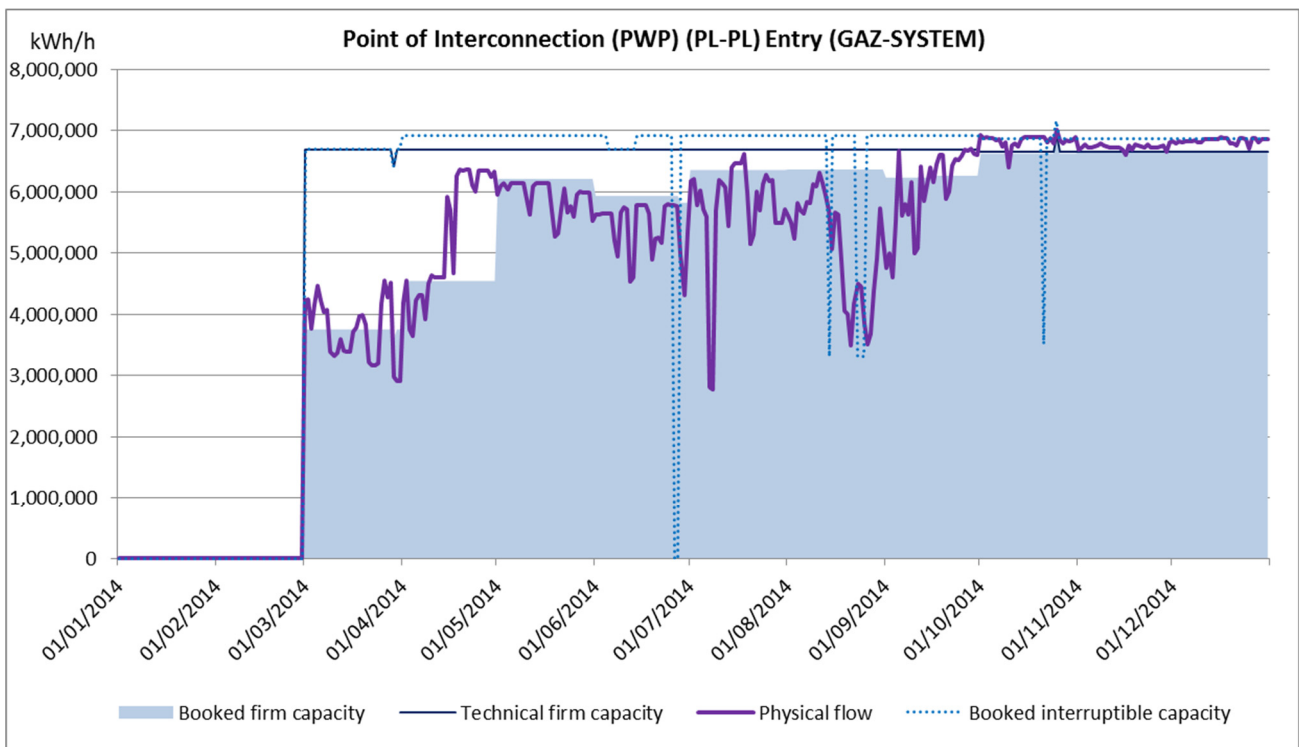
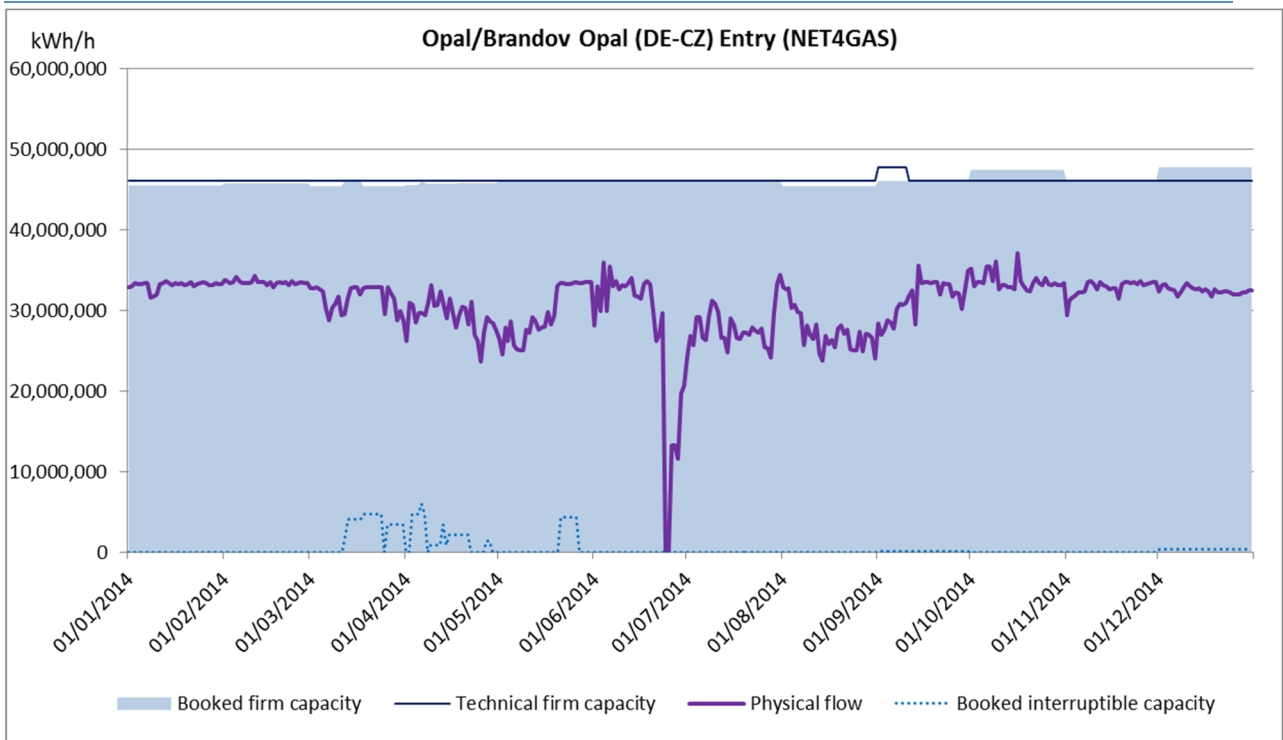
Annex 7: Graphs on congested IPs

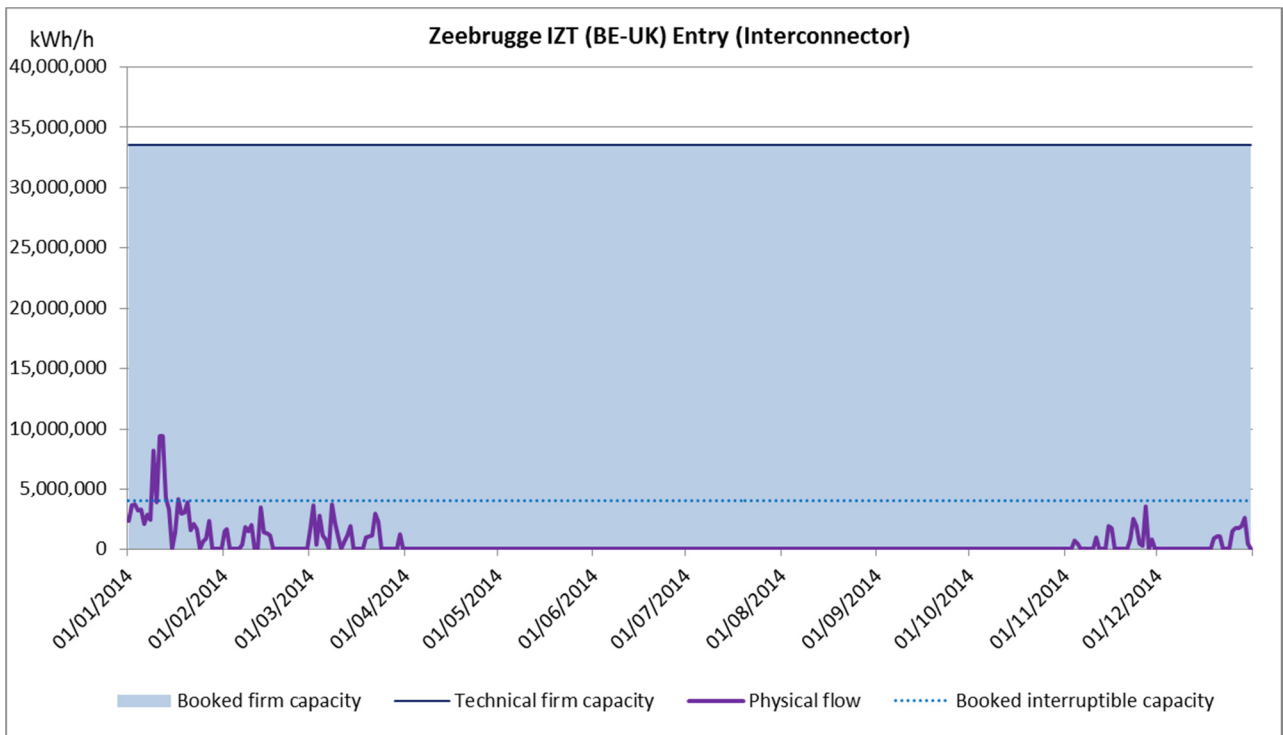
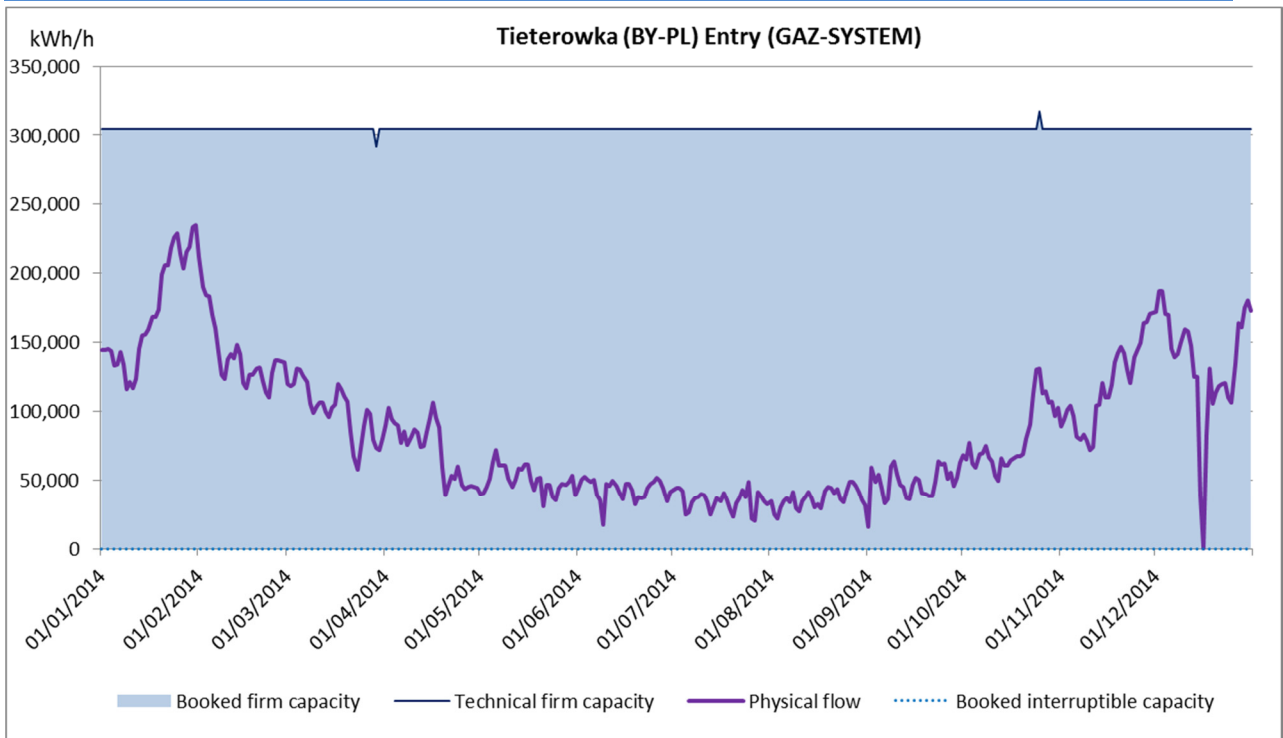


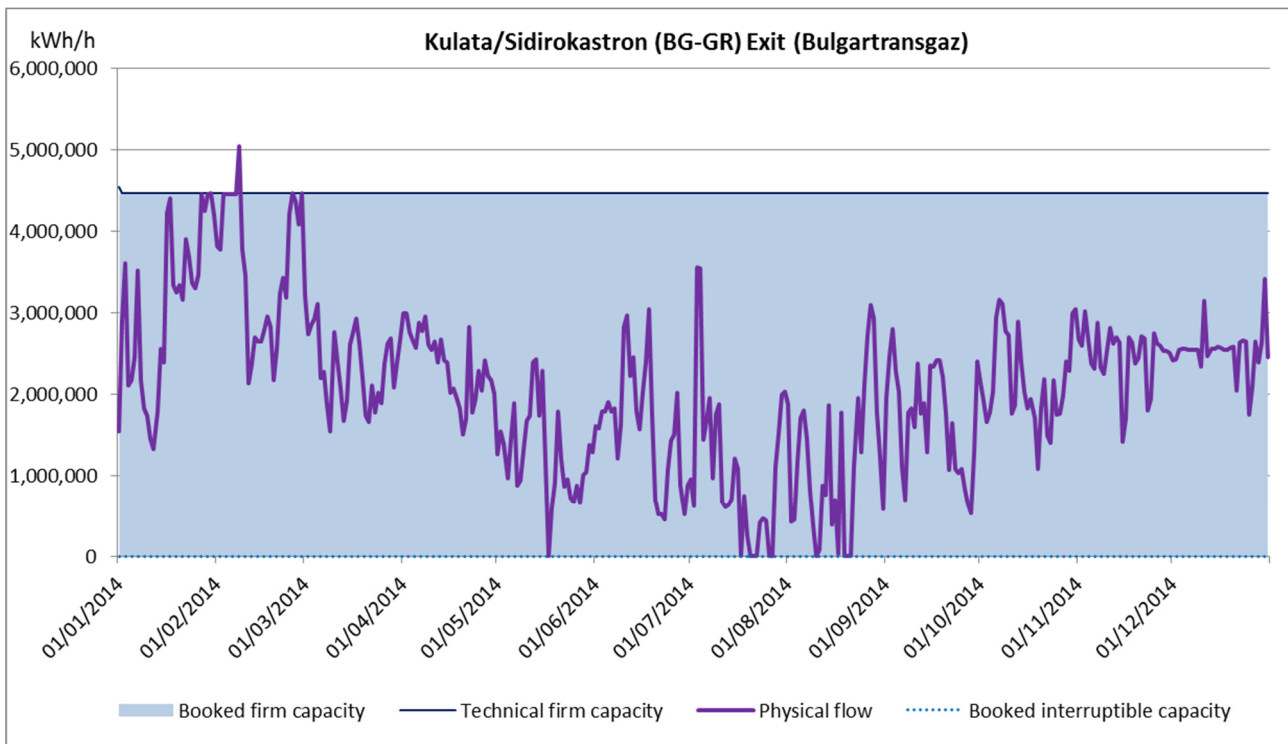
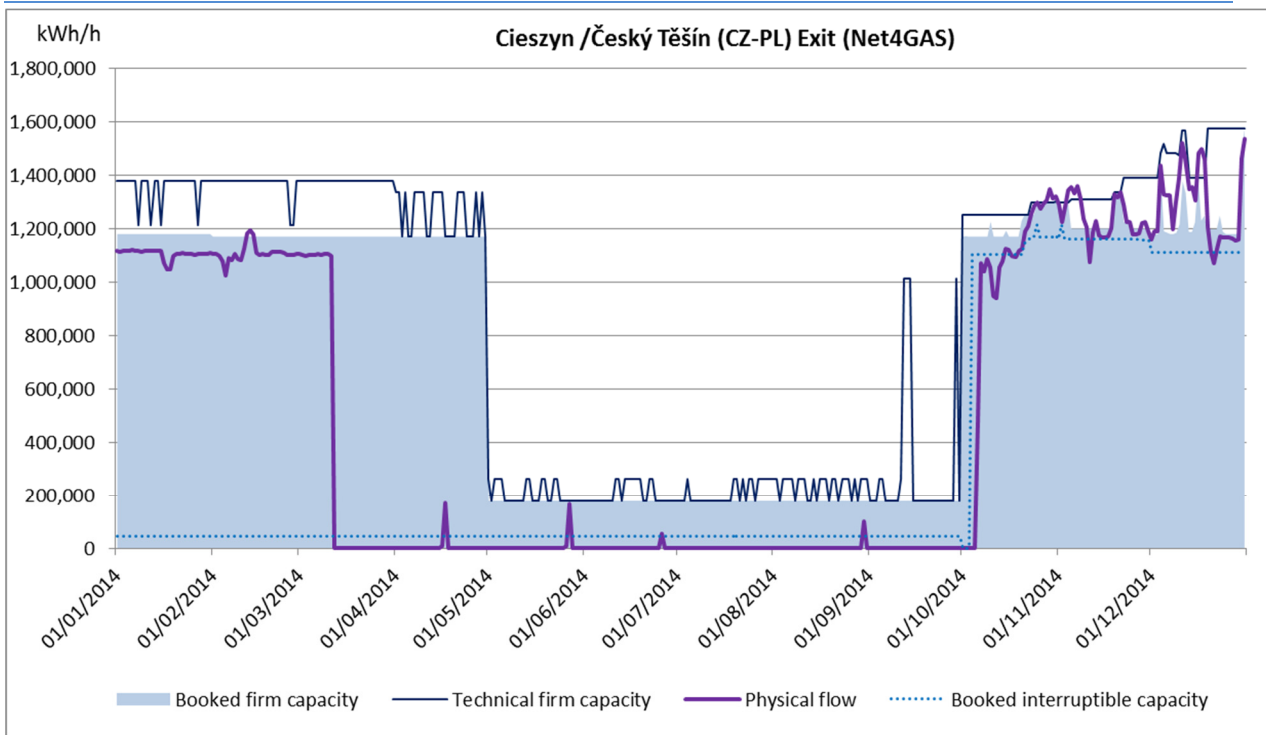


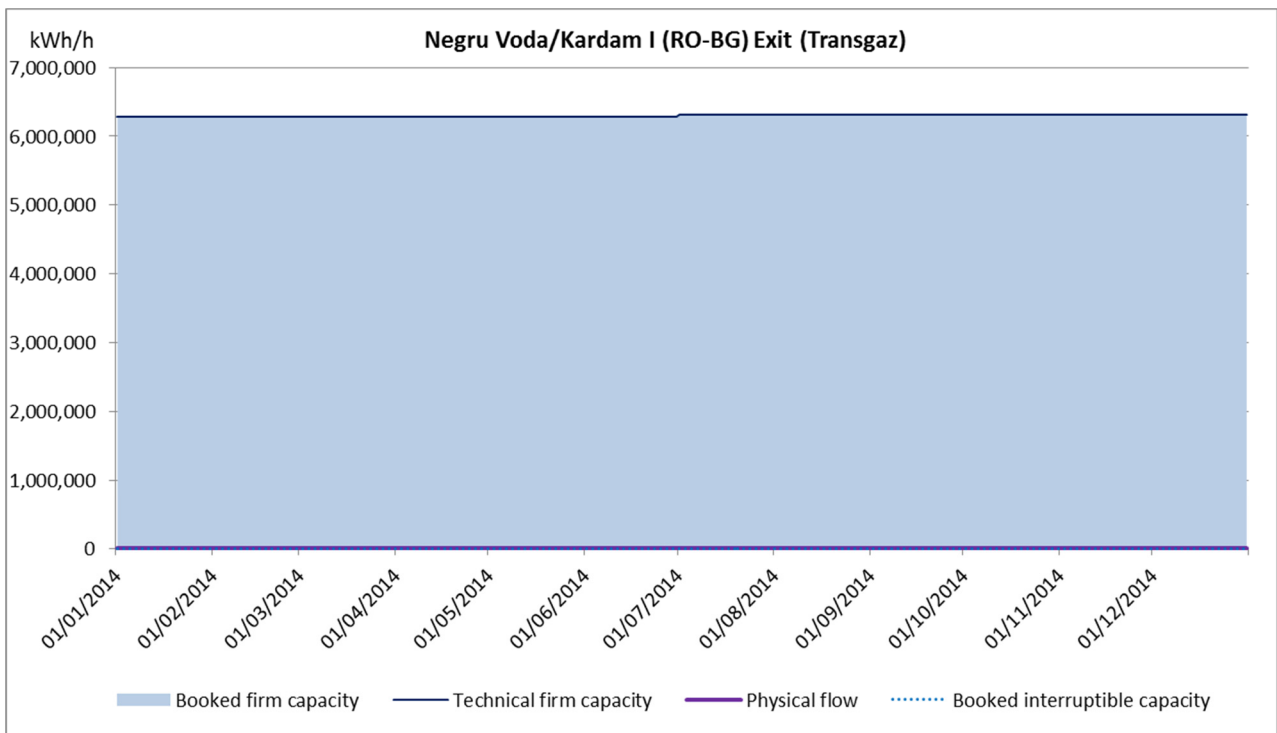
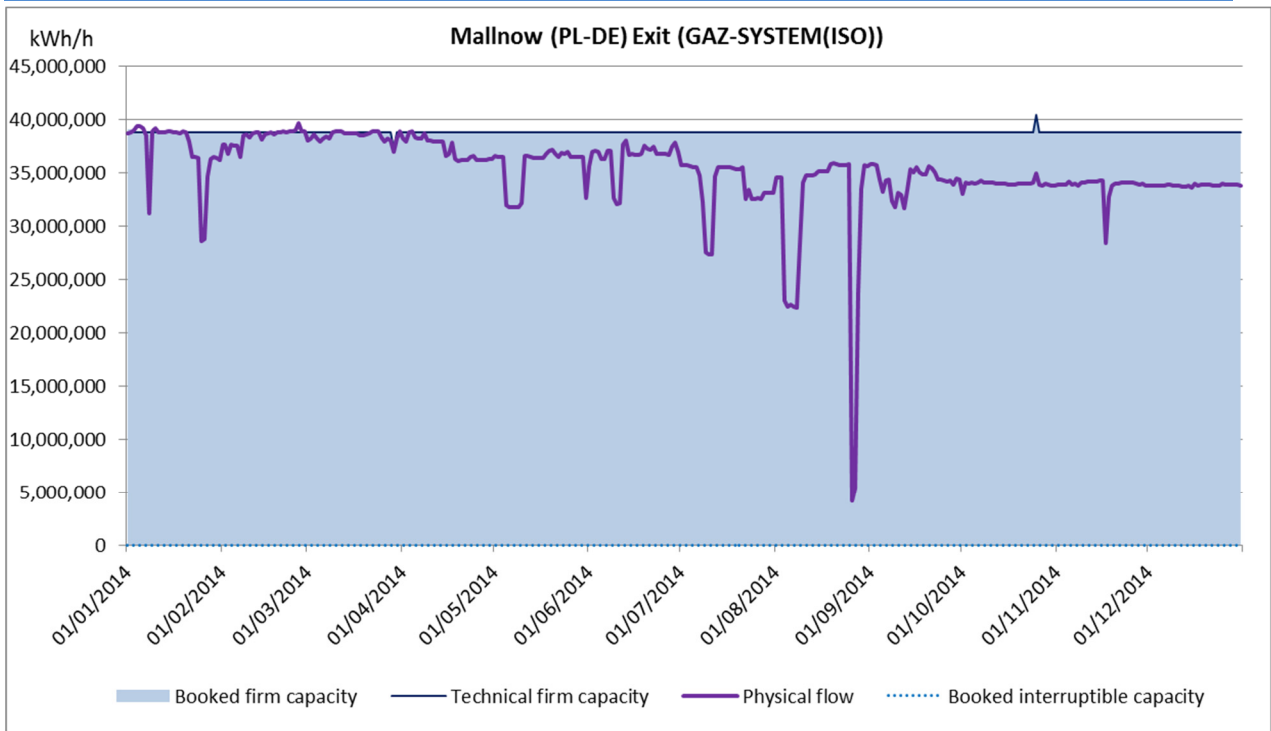


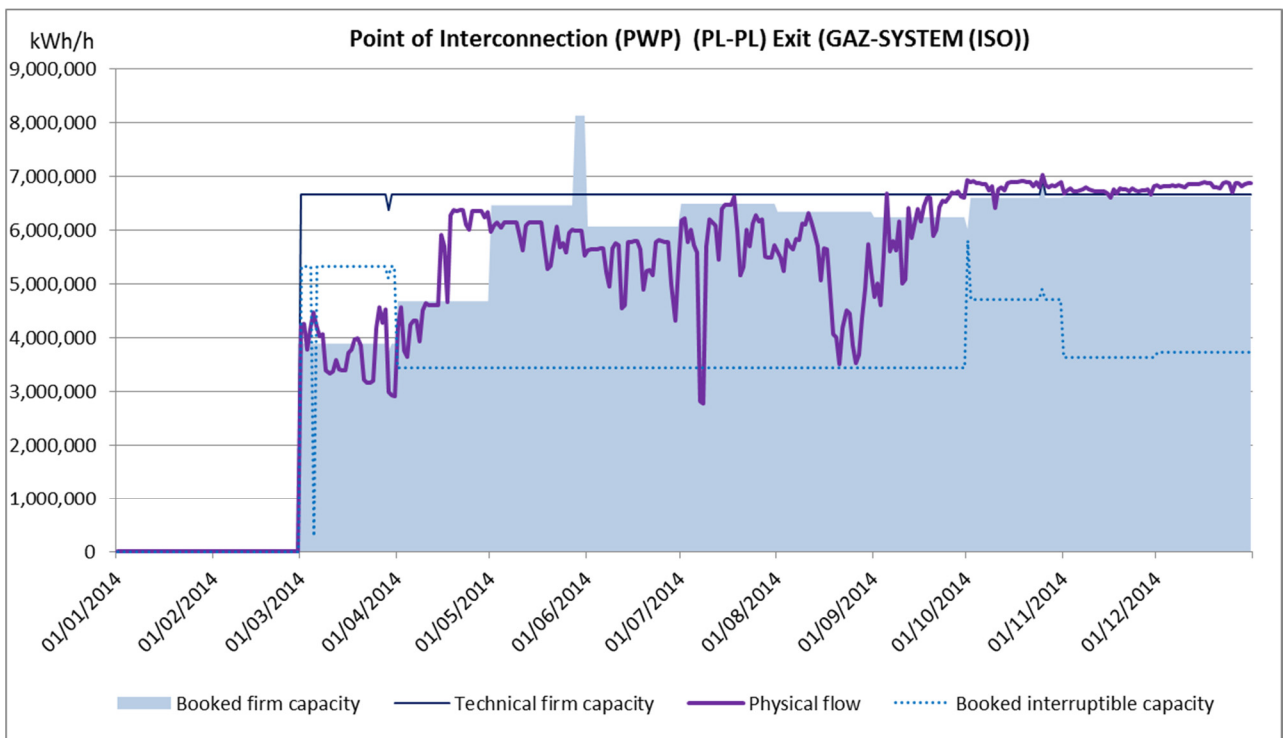
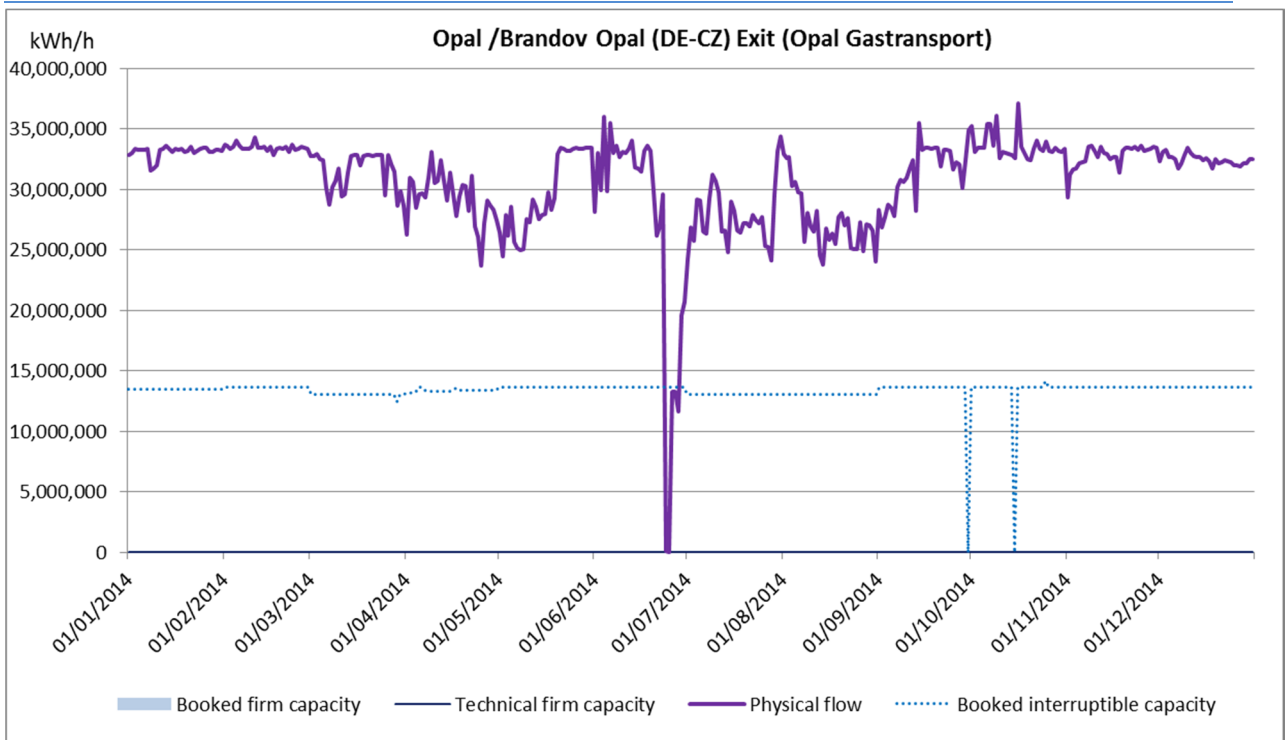


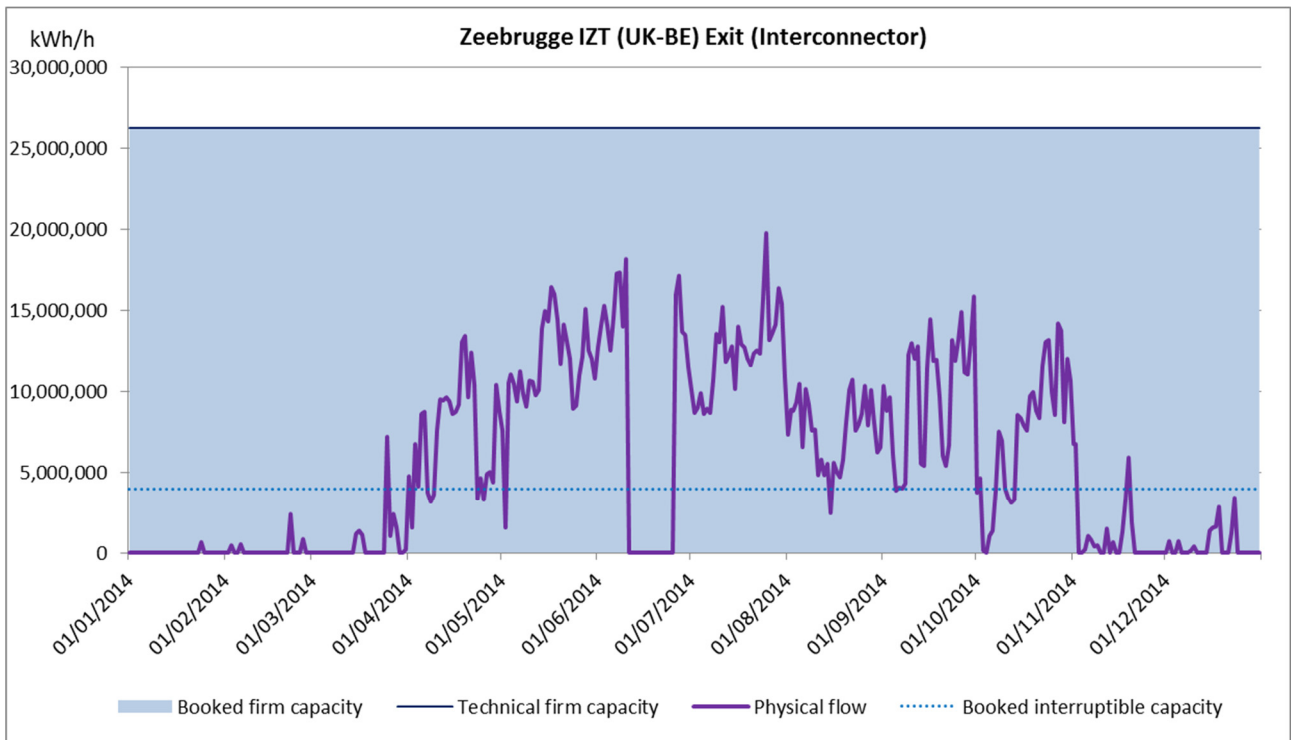
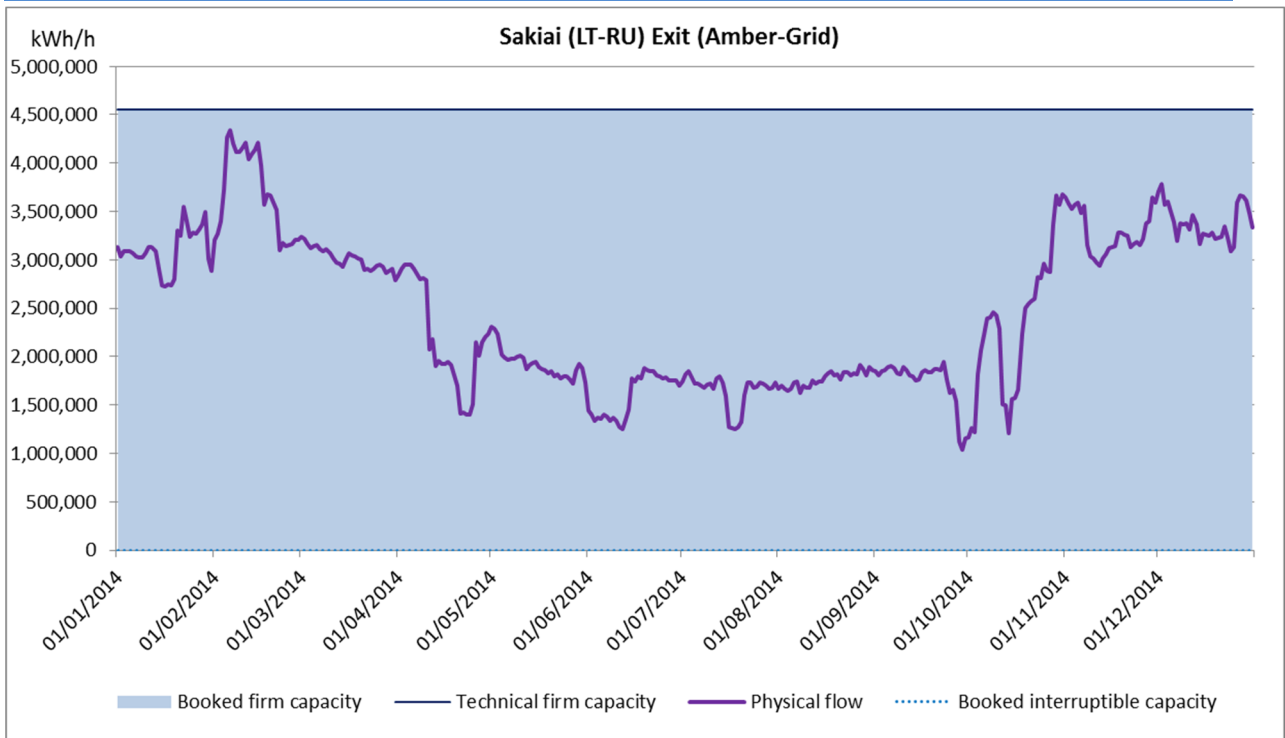












Annex 8: Transport and CMP data availability on the Transparency Platform for Interconnection Points (review)

Although data availability on the ENTSOG Transparency Platform (TP) with regards to basic transport data for the time horizon (2014-16) necessary for this report (e.g. technical firm capacity, booked and available firm and interruptible capacity, flows, actual interruptions etc.) and CMP data (e.g. unsuccessful requests, unavailability of capacity products, auction premia, capacities made available through CMPs) for interconnection points (NC CAM IP scope list) has substantially improved as compared to the beginning of 2014, there is still missing – or sometimes faulty - data on the TP.

The table below reflects the status of the data availability (limited to IPs of the NC CAM IP scope list and to the data mentioned above) as checked by the Agency just after the launch of the updated ENTSOG TP (mid Nov. 2014). Subsequent checks of individual IPs (only of those where previously data was completely missing on ENTSOG’s TP (and therefore also in the bulk TP export files provided by ENTSOG) from mid-February 2015 on have shown that at least the following TSOs do not yet publish transport (and other) data on the ENTSOG TP (status April 2015): BBL company, BGE, LBTG. For some others (marked “p” in yellow in the last two columns) data on some IPs are still missing or are seemingly incomplete or wrong.

For most of the other TSOs (“white areas”) data availability was not further checked, as the required information for the purpose of this report was provided by ENTSOG through the TP export files and/or accessible online at the TP.

TSO	15 November 2014		15 February 2015	
	General data	CMP data	General data	CMP data
Amber Grid (LT)	F	N		
BBL company (NL)	N	N	N	N
BGE (UK)	N	N	N	N
Bulgartransgaz (BG)	P	P		
DESFA (GR)	P	P	P	P
Enagas (ES)	P	P		
Energinet.dk (DK)	P	F		
Fluxys Belgium (BE)	P	P		
Fluxys Deutschland (DE)	P	F		
Fluxys TENP (DE)	P	F		
GASCADE Gastransport (DE)	P	P		
Gasunie Deutschland Transport Services (DE)	P	P		
Gasunie Ostseeanbindungsleitung (DE)	F	N		
Gasunie Transport Services (NL)	P	P		
GRTgaz (FR)	P	F		
GRTgaz Deutschland (DE)	F	P		
jordgas Transport (DE)	F	N		
LBTG (DE)	N	N	N	N
National Grid (UK)	P	P		
NEL Gastransport (DE)	F	N		
OPAL Gastransport (DE)	N	N	P	P
Open Grid Europe (DE)	F	P		
Premier Transmission Ltd. (UK)	N	N		
TAG (AT)	P	P		
Thyssengas (DE)	P	F		
Transgaz (RO)	P	P		

Key: F = data fully available, N = No data available, P = partially available data

Annex 9: Indicative list of congested IP sides, where the FDA UIOLI mechanism is not (yet) applied

The following list classifies the congested IP sides for which the FDA UIOLI mechanism may be triggered by 1 July 2016, if the current situation does not change, according to their individual circumstances. Category 1 includes those IP sides where seemingly no (or very rarely) firm capacity was offered or traded on the secondary market, CMPs were not applied in 2014 and interruptible capacity was (fully) booked. Category 2 includes those IP sides for which more secondary trades occurred, CMPs were applied or at least interruptible capacity was still bookable. Category 3 includes those IP sides where, although condition d) of paragraph 2.2.3(1) of the CMP GL is met, a vivid secondary trading takes place fulfilling all firm capacity demand (except for IP Sakiai).

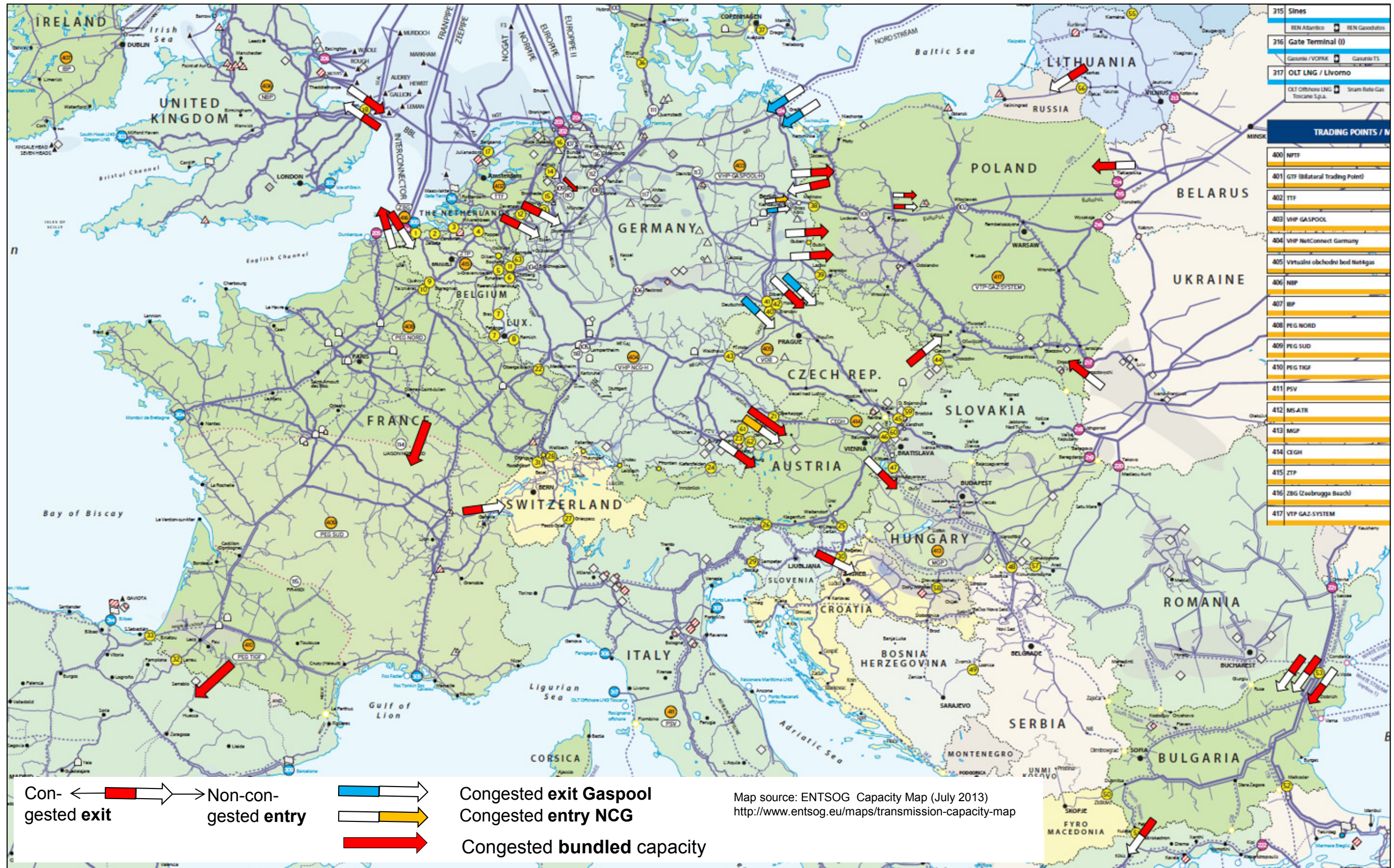
Key: Black TSO = relevant IP side to be considered in each line / Grey TSO = other IP side (for information only) 'p' = partially; 'np' = not possible since not offered

Category	Point type	IP name/ location	Direction	From TSO1	From MS	To TSO2	To MS	Congestion indicated in this report by	CMP GL 2.2.3.1 a) - d) category	Secondary offers + trades in 2014	CMP appli-cation in 2014	Interruptible booked?	CMP implementation by 1.10.14	Congestion in pilot report?	Additional comments
1	cross-border	Rogatec	exit	Plinovodi (SI)	SI	Plinacro	HR	auction premia for GY 15/16	c	0	no	p	yes	yes	
1	cross-border	Cieszyn (PL) / Český Těšín (CZ)	exit	NET4GAS	CZ	GAZ-SYSTEM	PL	no firm capacity available 4/15-12/16	d	0	no	p	yes	no	
1	cross-border	Mosonmagyaróvár	entry	Gas Connect Austria	AT	FGSZ	HU	auction premia for more than 3 months (M-7-8-9-10-11-2014)	a	0	no	p	no	no	
1	cross-border	Opal (DE)/Brandov Opal (CZ)	entry	LBTG; OPAL Gastransport	DE	NET4GAS	CZ	no firm capacity available 10/14-3/16	d	0	no	p	yes	no	
1	cross-border	Negru Voda I (RO) / Kardam (BG)	exit	Transgaz	RO	Bulgartransgaz	BG	no firm capacity available 1/14-9/16	d	0	no	np	no	no	
1	cross-border	Negru Voda II, III (RO) / Kardam (BG)	exit	Transgaz	RO	Bulgartransgaz	BG	no firm capacity available 1/14-8/16	d	0	no	np	no	no	
1	cross-border	Jura	exit	GRTgaz (FR)	FR	Gaznat	CH	no firm capacity available 1/14-12/16	d	0	no	np	yes	no	
1	bundled in-country	Liaison Nord Sud	exit	GRTgaz (FR)	FR	GRTgaz (FR)	FR	auction premia for each GY (14/15, 15/16, 16/17/) also for some Q	c [b]	4	no	yes	yes	yes	
1	virtual	Point of Interconnection (PWP)	exit	Gaz-System (ISO)	PL	GAZ-SYSTEM	PL	auction premia for months 10-11-12/2014	a	4	no	yes	yes	no	
1	virtual	Point of Interconnection (PWP)	entry	Gaz-System (ISO)	PL	GAZ-SYSTEM	PL	auction premia for 3 months (M-10-11-12-2014)	a	4	no	yes	yes	no	

Key: Black TSO = relevant IP side to be considered in each line / Grey TSO = other IP side (for information only) 'p' = partially; 'np' = not possible since not offered

Category	Point type	IP name/ location	Direction	From TSO1	From MS	To TSO2	To MS	Congestion indicated in this report by	CMP GL 2.2.3.1 a) - d) category	Secondary offers + trades in 2014	CMP appli-cation in 2014	Interruptible booked?	CMP implementation by 1.10.14	Congestion in pilot report?	Additional comments
2	cross-border	Kulata (BG) / Sidirokastron (GR)	exit	Bulgartransgaz	BG	DESFA	GR	no primary capacity available 2014-16	d	0	no	no	no	yes	
2	cross-border	Mallnow	exit	GAZ-SYSTEM (ISO)	PL	GASCADE	DE	no firm capacity available 1/14-12/15	d	0	no	no	yes	yes	
2	cross-border	Gubin	entry	ONTRAS	DE	GAZ-SYSTEM	PL	no primary capacity available 2014-16	d	0	no	no	yes	yes	
2	cross-border	Negru Voda II, III (RO) / Kardam (BG)	entry	Transgaz	RO	Bulgartransgaz	BG	no primary capacity available 2014-16	d	0	no	no	no	yes	
2	bundled virtual	VIP PIRINEOS	exit	TIGF (FR)	FR	Enagas (ES)	ES	auction premia for 2 quarters and 1 GY (Q4/14; Q1/15; GY-	c [b]	0	no	no	no	no	
2	third country	Drozdovichi (UA) -Drozdowicze (PL)	entry	Ukrtransgaz	UA	GAZ-SYSTEM	PL	no primary capacity available 2014-16	d	0	no	no	yes	no	
2	third country	Tieterowka	entry	Gazprom Transgaz Belarus	BY	GAZ-SYSTEM	PL	no primary capacity available 2014-16	d	0	no	no	yes	no	
2	cross-border	Winterswijk (NL) / Vreden (DE)	exit	GTS (NL)	NL	OGE	DE	auction premia for GY 14/15	c	0	yes	no	yes	no	
2	cross-border	Mallnow	entry	Gascade	DE	GAZ-SYSTEM (ISO)	PL	uction premia for 3 months (M-10-11-12-2014)	a	4	no	yes	yes	no	
2	cross-border	Lasów	entry	ONTRAS	DE	GAZ-SYSTEM	PL	uction premia for Q-4-2014; M-10-11-12-2014	a	9	no	no	yes	no	1 unfulfilled 2ndary request
3	third country	Sakiai	exit	Amber Grid	LT	Gazprom	RU	no firm capacity available 1/14-12/14 and 1/16-12/16	d	0	no	np	yes	no	FDA UIOLI would not increase competition
3	cross-border	Zevenaar	exit	GTS (NL)	NL	Thyssengas, OGE	DE	uction premia for GY 14/15	c	16	yes	no	yes	no	
3	cross-border	Zeebrugge IZT	exit	Interconnector	UK	Fluxys Belgium	BE	no firm capacity available 1/14-12/16	d	39	no	yes	no	yes	no unfulfilled requeste on 2ndary market
3	in-country inter-TSO	Bacton (IUK)	exit	Interconnector	UK	National Grid	UK	no primary capacity available 2014-16	d	55	no	yes	no	yes	no unfulfilled requeste on 2ndary market
3	cross-border	Zeebrugge IZT	entry	Fluxys Belgium	BE	Interconnector	UK	no primary capacity available 2014-16	d	55	no	yes	no	yes	no unfulfilled requeste on 2ndary market
3	in-country inter-TSO	Bacton (IUK)	entry	National Grid	UK	Interconnector	UK	no primary capacity available 2014-16	d	67	no	yes	no	yes	no unfulfilled requeste on 2ndary market

Annex 10: Indicative map of contractually congested IPs in Europe





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