20th round of Informal Russia-EU Consultations on EU Regulatory Topics &

13th meeting of the EU-Russia Gas Advisory Council's Work Stream on Internal Market Issues (WS2 GAC)

15 July 2014

E-Control Headquarters (Rudolfplatz 13A, A 1010 Wien, Austria)

MINUTES

The agenda is attached to the minutes.

1. Greetings / Opening remarks by Co-Chairmen

The Co-Chairs Mr. Boltz and Mr. Konoplyanik gave short opening remarks and presented the agenda. It was noted that the representatives of the European Commission were not present at the meeting and that the meeting of the GAC (though not the activities of its technical Work Streams) scheduled for 10 June in Brussels had been postponed at the initiative of the EU side due to the political situation in Ukraine. No new date has been set.

2. EU Gas Target Model (GTM) Review and Update

All presentations were circulated to the participants.

Presentation by Mr. Boltz

Co-Chair Mr. Boltz presented the state of play in relation to the GTM review process. He explained that a number of structural changes occurred in the gas market in the past years, which need to be reflected in a new/updated version of the GTM. Mr. Boltz informed the participants that the new version should be ready by end September/early October. He also clarified that the new GTM is an attempt to draw up possible options of how to enhance market functioning and create a common understanding of how a competitive wholesale and retail market could work (rather than providing binding obligations).

Mr. Boltz particularly pointed to the need of increased upstream competition as effective contribution to a functioning internal market and security of supply. He said that the criteria mentioned in the current version of the GTM in this regard were still valid (e.g. gas being available from at least 3 different sources; residual supply index of more than 110% for more than 95% of days per year). He also noted that the recently published European Energy Security Strategy contained a number of thoughts on how security, of supply could be effectively enhanced on a European level given that a number of Member

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States are still fully dependent on one single source. According to Mr. Boltz, the right strategy to achieve increased upstream competition is to fully implement the internal energy market and the GTM, achieve more diversification (sources, routes, fuels), develop adequate infrastructure (also in exceptional situations), storage and LNG.

In terms of wholesale markets, Mr. Boltz noted that additional criteria defining a functioning wholesale market will be added to the new version of the GTM. These new criteria are still being developed but will likely include a price relevance threshold, a liquidity threshold, and a liquid trading horizon (see slides). Some criteria in relation to hub design are also planned. Mr. Boltz noted that currently only two hubs — NBP and TTF — meet the criteria set out in the first GTM version. As the overall vision is to have functioning wholesale markets allowing for gas to be effectively traded across countries, markets which do not meet the GTM criteria might have to form trading regions, and market areas with neighboring member states (or parts thereof) as we already see in e.g. Germany.

Mr. Boltz also briefly mentioned the role of gas in power production and back up for renewable energy and pointed to new usages of gas (e.g. in transport) that have and will further emerge in the coming years.

The presentation was followed by a number of interventions. Co-Chair Mr. Konoplyanik asked whether the new criteria defined in the updated version of the GTM should be interpreted as a foundation for a possible 4th package or whether these still are to be seen in the framework of the 3rd package. Mr. Boltz responded that the new GTM was fully within the margins of the 3rd package and represented a complementary document seeking to specify key concepts which are not defined in the 3rd package (e.g. what a competitive market should look like).

In relation to energy security, Mr. Konoplyanik proposed to discuss the legal components of reverse flows in more detail in WS2. Mr. Konoplyanik stated that reverse flows are considered one of the instruments to improve energy security of Member States of the EU and Energy Community, yet in some cases implementation of reverse flows creates legal conflicts between public and contractual law obligations. , In Mr. Konoplyanik's view this is the case, in particular, in relations between Russia and Ukraine since Ukraine seeks for reverse flows from the EU Member States as a means to diminish its import supplies from Russia. Mr. Konoplyanik further noted that an obligation of Ukraine to possess physical reverse flow capacities at its interconnection/cross-border points with the EU and Energy Community Member States (Poland, Slovakia, Hungary, Romania, Moldova) after Ukraine became fullmember of the Energy Community since 1 February 2011, on the one hand, comes in conflict with Ukraine's contractual obligation to off-take specific volumes of gas from Russia according to Russia-EU gas supply contract as of 1 January 2009 through the contract period till 2019, on the other hand. Mr. Konplyanik then said that these legal conflicts have been yet undervalued by the parties involved and deserve special examination since this relates to the specificities of the energy acquis implementation in the framework of earlier contractual obligations (pacta sunt servanda (Lat.) - contracts shall be fulfilled) of the parties involved.

Mr. Feigin commented on the role of gas in power generation by noting that prospects were limited if CO2 pricing remained detached/delinked from renewable subsidies policies. Mr. Wood added that it is not only competition amongst producers, but also competition amongst fuels, that is necessary, while current EU CO2 and RES policies might distort such competition. Mr. Stern noted that a significant decline in hub prices in July 2014 (50% compared to December 2013) will provide an indication of how competitive gas versus coal might become in power generation.

Mr. Feigin also inquired about the level of regulated prices in Europe. Mr. Boltz responded that end-user price regulation was still widespread in Europe due to a lack of trust in the market typically dominated by one or very few suppliers. Regulated prices must, however, be abolished to allow customers to benefit from cross border retail competition. According to Mr. Boltz, this process will likely take a number of years. He also noted that the European Commission is currently working on a strategy for retail markets to be published soon.

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Ms. Loudon expressed support for the overall objective of the GTM but cautioned against overly stringent criteria for defining competitive gas markets.

Presentations by Mr. Wagner

Mr. Wagner held two presentations. The first presentation focused on the results of a study¹ which aimed at 1) finding out which criteria should be used to assess the degree of wholesale market functioning and 2) whether these criteria were actually fulfilled in the year 2013. The study is entirely based on input from stakeholders.

In relation to 1) the study found that a functioning wholesale market occurs when the following criteria are given: a price relevance threshold of at least 15 deals per product/hub/trading day; a liquidity threshold of at least 120 MW of gas simultaneously offered/requested per product/hub/trading day; and a liquid trading horizon of at least 36 per product/hub/trading day. These three criteria were also presented as new criteria to be taken up in the revised GTM document (mentioned above). In relation to 2) market analysis showed that in 2013, all European gas markets fell significantly short of all three requirements even at the most developed hubs (i.e. NBP and TTF).

Mr. Boltz explained that, in light of these results, it was important to cling to a set of criteria to achieve market functioning. In this context - and in response to Ms. Loudon's earlier comment - he stressed that the GTM is not about insisting on overly strict criteria but an initiative to allow a move in the right direction given that market functioning is still very far away from optimal results (as shown by the study).

Mr. Wagner then elaborated on two currently discussed alternative market designs for European gas markets and their consequences: Alternative 1: Current gas markets are enlarged so that all European end users are located inside a functioning forward market. Alternative 2: Only parts of European endusers are located in 2 to 3 functioning forward markets; all other European end users are located in non-functioning forward markets (i.e. "balancing only" markets). He reported that under market conditions, end users located in markets without a functioning forward market (i.e. "balancing only" markets) permanently have to pay a premium for fixing their price of gas and are therefore worse off.

Overall, some participants expressed concern on the validity of the study arguing that it might not be representative with input from only 20 stakeholders.

The second presentation focused on the development of a Pan-European Hub Gas Price Index (PEGIX). At present most European gas price indices are calculated on the basis of data from a single hub (usually NBP, TTF and, to a lesser extent, NCG). The aim of developing a pan-European gas price index (PEGIX), which would be based on the data collected from several European hubs, is to offer protection to contractual parties in case anything goes wrong with a single hub used for indexing. Mr. Wagner explained how such an index could be calculated (see slides).

Mr. Konoplyanik asked about the aim of such an index given that gas markets in the EU are not homogenous and prices differ significantly across countries and regions and whether it will be fair/appropriate (if the aim is to do so) to apply PEGIX calculated on the basis of hub behaviour in one EU region (say, in North-Western Europe with already available multiple supplies which pushes the hub prices downward) in, say, Central & Eastern Europe or in Energy Community States where multiple supplies are not yet available (due to the reasons to be discussed under next item of the agenda). Mr. Boltz replied that such an index could replace the oil price index currently in use as a reference index. A new gas index would lead to more market driven prices as price changes would follow gas supply and demand patterns rather than oil supply and demand patterns. Mr. Boltz stressed that such an index

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¹ conducted by Wagner, Elbling & Company at the request of ACER/CEER

would not mean that gas prices were the same everywhere in Europe but that price changes would go in a similar direction and would be based on gas rather than oil market forces.

Mr. Stern added that the Oxford Institute for Energy Studies conducted a price correlation analysis across a number of European hubs in order to determine how well prices are correlated across Europe and whether there is a "European gas price"; this analysis showed good price correlation in north west Europe, but less so in south and central east Europe (e.g. Austrian CEGH and Italian PSV), with further research being underway to explain this discrepancy.

Presentation by Mr. Konoplyanik and Ms. Orlova

Mr. Konoplyanik and Ms. Orlova made a presentation on gas transportation infrastructure density in the EU, focusing on comparing infrastructure density in North-Western and Central and Eastern Europe (NWE and CEE). The presentation argued that the lack of liquidity and competitiveness in CEE markets is largely explained by low density of gas infrastructure, compared to NWE, and not by Gazprom's alleged non-competitive behaviour. The study uncovered a significant time gap between NWE and CEE gas transportation infrastructure density ratios and argued that the gap has been increasing after CEE states has joined the EU. At the end of their presentation Mr. Konoplyanik and Ms. Orlova have suggested to continue this comparative study on the joined Russia-EU basis within the framework of WS2.

The presentation suggested determining the cost of creating additional infrastructure in CEE to match the density ratio achieved in NWE, and analysing what EU regulatory framework might be necessary for achieving this. In particular, whether the current draft of the amended CAM NC (the chapter on incremental capacity) provides an adequate regulatory framework enabling necessary infrastructure construction.

Discussion followed. Mr. Esnault noted that for a comparison of infrastructure density, population density needs to be taken into account. Mr. Stern noted that countries with just one source of supply might be reluctant to invest in new pipeline construction (thus increasing their infrastructure density ratio), which would further increase their dependence on one source. He also suggested that further research could be conducted to determine which infrastructure might be necessary for development of hubs in CEE, as well as its cost. Specifically it is possible to change a supply source without increasing infrastructure density. Mr. Stern noted that most of NWE gas infrastructure was built in a very different regulatory environment by vertically integrated companies, whereas current regulatory environment is very different due to ongoing liberalisation of the EU gas market.

Mr. Konoplyanik noted that no general framework currently exists in Europe for construction of new infrastructure and all major gas infrastructure, which has been built during the liberalisation period, received an exemption from the 2nd and 3rd Package rules. He also noted that, at the next WS2 meeting, the Russian side intends to present its new draft regulatory proposal enabling construction of new mega-projects based on the Open Seasons procedure.

Mr. Boltz noted that further research could also include TYNDP data showing what infrastructure is planned to be built; he also noted that better usage should be made of existing infrastructure including reverse flow, while acknowledging certain legal difficulties in enabling this due to continuing validity of existing capacity contracts. Mr. Boltz also suggested ENTSOG should make a presentation on TYNDP for CEE at the next WS2 meeting, this suggestion was welcomed by the audience.

3. European Energy Security Strategy: key non-EU producer's vision (preliminary comments)

Presentation by Mr. Leonov

Mr. Leonov made a presentation on Gazprom's interpretation of the EU energy security strategy. Several statements were singled out on which further explanation from the EC is being sought by the Russian side:

- identification of possible sources for short-term additional supplies including LNG who are possible alternative suppliers, what will be the price for their gas, and what will be their delivered volumes?
- the issue of infrastructure bottlenecks and limited ability to deliver LNG from European receiving terminals to main centres of consumption;
- protection of critical infrastructure including the issues of non-EU entities' control of such infrastructure – against what kind of threat such protection is being sought, which infrastructure is considered critical, which parties' property rights can potentially be infringed?
- the possibility of development of new rules and more strict application of existing EU energy legislation — is it possible that future EU legislation will establish more strict rules than the rules set by the 3rd Gas Directive?

Mr. Leonov stated that the Russian side views the EU energy security strategy as a politically driven document on the basis of which a new security of supply regulation might be adopted later in 2014, which in turn might lead to unilateral implementation of measures risking the destabilisation of the gas market.

Ms. Zhur made a short follow up presentation on the possibility of replacing the transit of Russian gas exports to Europe from Ukraine via alternative routes which suggested that even if all possible alternative routes were to be used to their full capacity – including OPAL the usage of which is presently capped at 50% by the EC – around 50 bcm would still have to flow across Ukraine. This suggests that in the event of transit interference by Ukraine, European buyers receiving Russian gas via Ukraine will experience shortfalls. Ms. Zhur noted that the EC has indicated that it delayed its decision on allowing Gazprom to use 100% of OPAL capacity (unless capacity is requested by any other party) due to the political/security situation in Ukraine and the role of Russia.

No EC response to the questions posed by the presentation was received during the meeting due to absence of EC representatives.

Presentation by Mr. Esnault

The last presentation made by Mr. Esnault on the potential role of LNG in the EU in case of gas flow disruptions from Russia. Mr. Esnault noted that the EU system resilience was improved in the aftermath of the 2009 gas crisis via (inter alia) the introduction of new infrastructure standards (e.g. obligation to enable reverse flows at interconnection points and to meet N-1 criteria – Security of Supply Regulation), which would enable flexibility-sharing between member states. Further investigations are under way to determine what role LNG could play in strengthening security of supply of vulnerable countries, given the existing level of regasification capacity and geographical flexibility it offers. Mr. Esnault explained that most European regasification terminals are located in Western Europe whereas it is Central and Southern Europe that would need LNG to replace Russian gas in the event of transit disruption across Ukraine. Although in theory EU LNG terminals could receive additional 137 bcm in 2014, the ability to flow this LNG eastward would be limited by transmission network constraints. Although reverse flow capabilities have recently increased (due to obligation imposed by the Security of Supply regulation), significant investment would be required to enable major LNG flow to the CEE region. In addition, the availability and price of these supplies must be looked at and carefully considered.

Mr. Boltz noted that the EC intends to complete its "stress-tests", which aim to demonstrate the degree of resilience of the EU and its individual member states in the events of a) loss of Russian supplies across Ukraine b) loss of all Russian supplies, by the end of August 2014. Mr. Wood noted that in practice reduction of dependence on Russian gas means reduction of dependence on any gas, and thus would

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harm the EU gas industry. He also noted that the replacement of LNG deliveries to Europe could only come at a very high price as European buyers would need to outbid Japan. Mr. Konoplyanik suggested that EU security of supply could be improved by means of: a) improving security of transit across Ukraine via modernizing its transit infrastructure (if this is financeable), b) building a new transit-avoidance export pipeline to Europe, which would allow rerouting flows away from Ukraine (which requests strong cooperation between EU and Russiaa on finding mutually acceptable compromise solution on South Stream), c) sourcing gas from alternative sources (if manageable).

Mr. Stern stressed that the way the EU-Russia gas relationship will develop will significantly depend on the security situation in Ukraine and the role Russia plays in it, stressing that at present the EU political view is that dependence on Russian gas needs to be decreased. Mr. Boltz supported this statement adding that the political intention to reduce dependence on Russian gas will become even stronger should the Ukraine's political/military crisis persist. Mr. Konoplyanik said that despite the strain placed on the EU-Russia political relationship by the Ukraine crisis, the GAC's informed and non-political view on various aspects of the EU-Russia gas relationship (supply/demand, regulation and infrastructure) might contribute towards reducing political tension. Specifically it could demonstrate that reduction of EU dependence on Russian gas might be too costly to be politically acceptable to the EU and its member states.

4. Concluding Remarks/ Follow-Up Proposals by Co-Chairmen

It was agreed to hold three work stream meetings in September:

- WS2 meeting on the 22nd in Brussels;
- WS1 meeting on the 8th in Vienna;
- WS3 meeting on the 17th in Brussels.

For the EU side:

Brussels, 22 September 2014

For the Russian side:

Andrey A. Kohoplyanik

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AGENDA

Time	Items	Presenters
	1. Greetings / Opening remarks by Co-Chairmen	W.Boltz,
		A.Konoplyanik
	2. EU Gas Target Model: Review and Update	· ·
	- Background for and current status of EU GTM	W.Boltz
Morning	Review & Update	
Session	 Liquidity of EU wholesale forward markets in 2013 	A.Wagner
10:00 – 13:00	 How long will it take and how much will it 	É.Orlova,
	cost to adjust infrastructure development in	A.Konoplyanik
	Central & Eastern Europe to the level of	
	North-West Europe	
	- Discussion	
Working		
Buffet lunch		
13:00-13:30		
	3. European Energy Security Strategy: key non-EU	
Afternoon	producer's vision (preliminary comments)	
Session	 New potential/hidden risks and uncertainties 	D.Leonov,
	of the proposed Strategy for Russia-EU gas	E.Medvedeva
L3:30 - 16:30	value chain - and how to escape them	
	(diminish to the tolerable level)	
. 1	- Discussion	EU input from
		B. Esnault
	4. Concluding remarks/Fellow up prosesses by Ca	M/ Dales
	4. Concluding remarks/Follow up proposals by Co-	W.Boltz,
-	Chairmen	A.Konoplyanik



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