europex
association of european energy exchanges

Response to:

2nd ACER Gas Target Model Workshop

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Introduction

KEY MESSAGES:

- Criteria of the Gas Target Modell 1 (GTM 1) are not suited to evaluate the functioning of gas wholesale markets. They are criteria for the solution of a problem that is not clearly defined.
- The wholesale market has specific characteristics, such as the difference between spot/balancing markets and forward markets and regional differences.
- There are integrated forward markets.
- Spot/balancing markets are in the end physical markets, bound to locations.
- To integrate spot/balancing markets, physical capacity needs to be available.

- Europex is representing the interests of wholesale electricity, gas and environmental exchanges / market operators and is determined about being proactive throughout the review process of the GTM 1. Europex offers itself as sparring partner to contribute with exchange know how to facilitate the review process. Europex hereby welcomes the opportunity to give feedback to the questions raised in the 2nd ACER Gas Target Model workshop.

- Europex takes the view that notwithstanding the measures for creating a single European gas market, that are currently being implemented (e.g. Network Codes), the GTM 1 has taken - from today's perspective - a too formalistic approach in laying out success criteria for "*well-functioning gas wholesale markets*".

- In particular when evaluating trade data, Europex would like to emphasize that an important distinction between spot markets and futures market has to be made, since these markets fulfill very different needs in terms of customer demand / inherent market functioning. Forward markets are typically used for hedging purposes and the physical location is not comparably important as on spot markets. Spot markets that fulfill physical needs of market participants are more regional focused markets with different characteristics and fundamentals.

- Europex considers that spot markets address the needs of market players to flow gas, and should provide for supply security. Security of supply is a physical challenge, requiring specific local / regional solutions, for instance, ensuring

availability of, and access to reliable transportation infrastructure and flexibility services. Infrastructure constraints will need to be addressed where these exist, and hence would need to be identified, and mitigation may require some level of regulatory intervention, which is ultimately to be assessed on a case by case basis. Where no such issues exist, no regulatory intervention is needed, as there may not be a problem to solve.

- At this stage we feel that the individual gas market areas in Europe require rather a fine tuning on an individual bases - taking into account the specific and unique regional challenges - instead of an overhaul of already existing concepts and criteria. Therefore Europex favors and advocates for a more flexible and tailor-made approach that provides for the possibility to assess different situations and problems on a rather practical than on a theoretical market design level.

- A prerequisite for an update of the GTM 1 would in our view be a clear and transparent assessment of the shortcomings of the measures already taken for the implementation of the 3 Energy Package, together with a clear, practical identification and definition of the remaining problems that require further intervention. From this starting point it should be assessed and explained how new regulation (including adaptation of already existing regulation) could bring about positive effects to the already heavily regulated gas market. To put it a bit provocatively: a re-fit of the GTM criteria at this stage (before the full implementation of the Network Codes) would seem as “addressing yesterday’s problems with today’s answers”.

- In particular Europex calls upon ACER that all data that is used for reevaluation of the GTM is made publicly available well before and not only in the course of the review process and that the actual conclusions drawn from such data are subject to a wider stakeholder discussion.

Chapter I

Questions "Opening Presentation" by Walter Boltz - 2nd ACER Gas Target Model Workshop - Opening

Question 1
Besides the GTM 1 criteria, which other criteria are relevant in your view for the assessment of the functioning of wholesale gas markets?

EUROPEX believes that the criteria set by GTM 1 are from a theoretical point of view - to a certain extent - suitable to assess central factors of wholesale gas markets. However, in the recent years of ongoing market integration in Europe, and before the background of regulatory developments (EC Network Codes etc.), we have developed the view that in terms of market definition a more differentiated approach should be adopted. In particular, it is questionable whether it is advisable to apply for regions with large consumption areas such as North Western Europe "NWE" region (e.g. with hubs: TTF / NBP / NCG / Gaspool / Zeebrugge / ZTP / PEG North) the same "success" indicators as for smaller regional areas such as Central Eastern Europe "CEE" and South East Europe "SEE" region. However it should be clearly emphasized that in the Eastern Europe liquid and competitive markets are currently being developed and it is vital to reflect their needs while assessing the GTM criteria.

Observations regarding the criteria of the GTM 1:

Churn rate vs liquidity:

The GTM 1 foresees a churn rate of 8 as indicator for a liquid gas market. In principle, a churn rate in itself does not determine whether or not a market area is well-functioning and liquid; a churn rate is merely an indicator of the market's turnover, which may, or may not, relate to market circumstances. In smaller market areas and in transit countries, the churn rate will not be comparable with market areas in which demand for bigger consumption is sourced and/or futures trading occurs. If also in the revision of the GTM 1 the churn rate criteria shall be used as an assessment factor then a qualification in terms of regional circumstances should be made. An example of different regional circumstances can be given when looking at the CEE region, with comparably limited local consumption and limited differentiated supply sources compared to the NWE region. Also under conditions with a considerably lower churn rate (then foreseen in the GTM 1) a vivid trading place that fulfils local requirements in terms of customer needs could be established. Furthermore, the use of the churn rate as liquidity measure should distinguish between spot and future markets. Due to the different purposes these markets serve, it is obvious that spot markets will usually have a lower churn rate than

futures markets. Similarly, in some European countries and/or regions only spot markets exist, while futures markets may or may not occur. We would like to also draw attention to the statement already made by Europex at the occasion of the GTM 1 discussion (see below). In particular it is worthwhile to mention that different Exchanges / hubs / TSOs use different counting methods which lead to non-comparable figures in terms of traded volume / churn.

> **Considerations on churn-ratios and measures of liquidity*1**
>
> *[…] It is important to note that no scientific threshold exists to decide whether a market is sufficiently liquid (or not). Indeed, in numerous publications, churn ratios are computed based on traded volumes reported by transmission system operators (TSOs). These volumes are actually not "traded" volumes but "nominated" volumes declared on the delivery day for scheduling and balancing purposes. This information thus corresponds to the net of transactions between pairs of operators and some of the underlying transactions may have been contracted months (or even years) before through futures or forward contracts. Moreover nominated quantities to TSOs also integrate transactions between entities of the same group for accounting purposes. Therefore, "traded" volumes reported by TSOs are not a measure of liquidity for a given month and does not represent anything objective. Moreover, churn ratios based on TSO data flattens the difference of liquidity between European hubs which many have a churn ratio around 2 and 3. In order to measure or assess liquidity appropriately, several indicators are relevant such as traded volume on the wholesale market for a given month (OTC and exchange traded volume, where all traded volumes should be taken into account – spot and forward / futures trading), and also number of trading parties active on both sides (offer/demand), new trading parties, number of transactions concluded, price volatility, spread size per product, opportunity to trade derivatives.*

- **<u>Market zone size / consumption of gas by consumers within a market zone</u>**

The underlying assumption of the 20 bcm criteria of market zone size was that in a zone of such size functioning market conditions are likely to apply. Yet, it is our view, that the consumption of gas by consumers within a market zone is not in itself a sufficient factor for a functioning market, as a lot of other criteria such as supply, flexibility, availability of gas trading counterparts/market makers, and access to infrastructure are more important factors then the relatively static criteria of market size. When assessing market functioning in a certain geographical area, the particularities of that individual region / area are to be considered as decisive factors, as well as the purpose of the market. For example, balancing markets are physical markets that are bounded by geographical location, and it remains to be seen whether balancing markets will reach the 20 bcm.

- **Number of supply sources**

  Requirements of gas supply and measures to safeguard security of supply are already addressed by EU regulation. The GTM 1 requirement of 3 independent supply sources is not suitable as factor to determine functioning market conditions. As an example, in a scenario where different independent supply sources base their pricing to a significant extent on the same index formulas (e.g. oil index), competition amongst suppliers might be very limited since the gas is not reflecting different price levels. A genuine market price that is based on actual supply and demand (e.g. agricultural products) will only develop, when the pricing is not based on external reference source such as oil indexation.

  For market prices to develop, prices of term contracts should be indexed according to actual costs and not unrelated factors (such as oil prices). A pricing that is based on hub prices alone would reflect supply and demand in correlation to the availability of volumes ensuing from term contracts. In order to pay hub prices the gas needs to be able to flow from that hub to the place of destination, which requires the presence of reliable infrastructure and access thereto. Perhaps an index based on exchange prices would be more appropriate.

  Such market price setting through interplay between term contracts and hub pricing can also be observed with regard to the US gas prices. Gas prices in the US are delinked from oil prices which is - inter alia - one of the reasons for low US gas prices and high liquidity. Similar circumstances can be observed on European electricity markets, which are determined by supply and demand and not secondary price signals.

- **HHI (Herfindahl Hirschman Index)**

  Is a measure of concentration amongst suppliers. In principle this is a good measurement for identifying market concentration. However, it should be recognized that concentration in itself does not prevent well-functioning markets to develop. It is important to not only focus on current situations, but also to observe market trends and future developments.

For a complete assessment, the HHI for capacity and storage market should also be evaluated and put in correlation with the HHI of the gas commodity markets. This would allow for more comprehensive identification of market concentration. For an in depth assessment of market activities a differentiation between traded and long term contracted volumes and capacity should be made.

- **RSI (Residual Supply Index)**

This index defines the share of consumption which can be met without largest supplier based on supply capability.

Since the RSI Index is generally not evaluated for different market segments, its value is limited. Segments such as spot / forwards / long term contract would need to be assessed separately to gain more market information. Switch capacity should not be taken into account, since it could be misleading (e.g. power plant switching from gas to oil/coal thus showing different demand side of market and correspondingly different RSI). It should be assessed whether regional gas trading fulfils the needs of customers both on a wholesale level and also in terms of end customer prices. The existing GTM criteria shall only be adjusted, if it can be concisely proofed that new regulation is likely to bring benefits for consumers and trading parties.

Question 2:
What criteria are relevant and should be taken into account when assessing whether a market merger should be envisaged?

As a starting point, it should be clarified what scenario can be considered to fulfil a market merger: e.g., full merger of whole market architecture and systems with one single European hub versus partial integration on transmission and / or distribution system level. In particular the joint balancing of market areas could be seen as important step towards regional integration, given the prerequisite that there is sufficient access to capacity.

In principle enhanced integration between two market zones should bring about additional benefits. The merger of markets is a good idea to promote the developments of energy markets and gain synergy effects. In this respect the Network Codes will play an important role that may already be sufficient in terms of interconnection of regions.

Another relevant aspect is that a market merger will have positive effects if the markets to be merged are economically interlinked. Only in case of such interlinkage additional benefits will

materialize (e.g. merger of German markets). A merger would also from technical perspective have to feature certain core elements such as bi-directional interconnections without bottlenecks.

One important aspect that cannot be overlooked when integrating markets is the availability of infrastructure/capacity. Integration is only possible if there is sufficient (cross-border) capacity accessible for all market parties, and at fair, transparent and non-discriminatory terms.

To summarize, the relevant criteria are:

- Individual assessment
- Upside potential due to market structure
- Economical related markets
- Technical infrastructure (connection, bi-directional flow, capacity, availability)
- Feasibility of a successful new market area (certain preconditions have to be fulfilled e.g. min. trading activity on relevant Exchange / Hub / OTC)
- Stakeholder support on market participant and political level
- Cost-benefit analysis
- Clear definition of the remaining problems

Question 3:
It is conceivable that a market with significantly less than 20 BCM total gas demand within the entry-exit zone would develop a liquidity to provide confidence for the market?

The 20 bcm criteria set by the GTM 1 seems from a today's point of view, taking into consideration the experience of the last years, an arbitrary figure. The size of the consumption market is only one amongst many factors that are decisive for the establishment of a vivid trading area. (Please see also answer to question 1). Especially for the SEE region the 20 bcm criteria is not likely to bring about further benefits. However, it might be used as a traffic sign regarding national gas market development or integration, either by merger of markets/zones or by increasing interconnectivity.

In principle, qualitative factors for assessing markets should be used rather than inflexible criteria. The potential and liquidity of a market area cannot be reduced and assessed in a consumption figures.

Question 4:
Do you think that the competitive situation of gas-fired power plants in comparison to coal will change in the coming years? Why?

Natural gas power generation is a sustainable source of energy, characterised by high efficiency and flexibility (especially CHP installations), as well as low environmental and social costs. (two times lower emissions than coal fired power plants). Europex therefore sees natural gas power generation as important source for the energy market. In particular in occasions or at times when renewable energy sources (RES) are not available to a sufficient extent. Gas fired power plants can rapidly produce the required energy in case essential preconditions (suitable pricing, physical infrastructure, access to gas) are given. For the industry to effectively utilize gas to power, the market based pricing of renewable energy sources is a key factor. The pricing of power regardless of its source should consequently relay on genuine market price signals without deterrence by subsidized tariffs.

In principle the competitive situation of gas-fired power plants depends to a large extent on the underlying economics and prices for:

- Gas (including LNG imports)
- Generation capacity situation
- CO2 Emissions
- Electricity
- Coal
- Incentives / taxes / subsidies

Europex as association of European Energy Exchanges cannot provide qualified forecasts for the developments of above mentioned factors. From an exchange perspective equal treatment of all costumers is of paramount importance to ensure working of market forces within the given regulatory regime.

Question 5:
What do you consider as the main difficulties / barriers for gas-fired power plants to fulfill their role as back up to intermittent renewables electricity generation?

The role of gas fired power plants should in general not be seen as limited to a backup role. In principle, competition between different electricity generation sources should occur on a level playing field. Subsidies can bring efforts only at the early stage of introducing renewable energy sources (RES) into the market. However as the recent experience shows subsidization leads later to distorted market conditions, therefore the adequate remedies shall be put in place. We see gas to power as a future orientated option for electricity generation with minimal

environmental and social costs. The market based pricing of RES is one of the most pressing issues that the gas industry faces today. Without accurate market based price signals market failures are likely to occur that will drive up consumer costs.

Question 6:
Does a lack of coordination between (intraday) gas and electricity markets expose gas-fired generators to significant imbalance risks? How should coordination of gas and electricity markets (intraday) balancing markets be improved?

Since exchange based cross commodity trading is possible throughout Europe we do not see a lack of coordination between gas and electricity markets. Intraday products for balancing are highly harmonized in Europe. The implementation of the Network Codes will facilitate transfer of energy for balancing purposes. One of the major challenging is to introduce a market based pricing for RES that ensures viability of non-RES energy generation and to keep sourcing option beside RES capacity.

The limitations that are relevant in terms of balancing are:

- Totally harmonized lead times (harmonization gas / electricity)
- Gas day Definition vs calendar day (electricity)
- Tradable products specifications

Question 7:
What could be specifically done to improve retail market competition for gas besides addressing issues relating to end user price regulation and consumer switching behavior? Should this be done at EU or national level?

Europex fully supports market based pricing on retail markets, since price regulation does in its view not bring about further benefits and may lead to / foster distorted market conditions. Unsuitable incentives signals may be sent out by price regulated markets and integration / further developments may be hampered. The following factors are decisive in terms of facilitation of retail market competition:

- Facilitation of market access to new market players.
- Free available gas on spot markets.
- Non-discriminatory access of market players (shippers) to necessary transport capacities, flexibility and other infrastructure.

Implementation of measures to promote retail market competition should be done on a national level to best accommodate regional needs and particularities.

Question 8:
What other issues should be considered in the process of updating the GTM?

One size fits all approach in terms of GTM criteria should be changed to a differentiated assessment of regional needs. Since the update of the GTM model is a resource intensive process the resources should be directed to key areas that should be assessed on an individual and regional basis. This is also backed up by the fact that in Europe we clearly face very different market conditions and trading patterns with a west – east incline. Additionally we also see relatively big consumption markets that are situated well beyond the 20 bcm criteria that show significant levels of concentration in various aspects even though different supply sources are available.

Question 9:
Which regulatory actions are needed to ensure a well-functioning gas market, which should have the highest priority?

A harmonized regulatory approach taking into consideration market feedback should be adopted. In Europex view no further measures beyond the implementation of the 3rd Energy package and the implementation of Network Codes should be taken since we believe that the measures suffice to provide for a framework in which the gas market can appropriately develop. Give the Network Codes time to proof themselves. Furthermore, changing or adding new regulatory actions will increase the uncertainty in the market.

Question 10:
We witness uneven progress in the implementation of 3rd Package provisions and early Network Code implementation between EU Member States. In your opinion, what could be done to narrow the gap?
Discussion

As an association of European Energy Exchanges Europex does not express a view on question 10.

Chapter II

Competitive and integrated wholesale markets - Forward markets and hub trading

Question I
Are there any views on the preliminary result that on various hubs offers for the sale of gas seem to be concentrated to a very limited number of players at any time and on what (if anything) should be done about this?

The concentration regarding offers for the sale of gas is related to number and size of player's active on a particular market. In smaller consumption areas typically the number of suppliers is lower than in bigger areas. However this situation does not necessarily lead to higher gas pricing. In principle, competition will be developed by market forces, if the market design itself is sufficiently open and new players do not face atypical entry barriers or measures having equivalent effect, which would result in additional / excessive costs for market entry.

If measures by the EU should be taken, then the market access in specific countries, where there are indications that barriers exist, should be studied / compared and possible impediments should be addressed appropriately (e.g. requirement of storage for active market access, extensive licensing requirements with national regulators, onerous strategic reserve obligations and other forms of asymmetrical measures with a potential market foreclosing effect).

Question II
Are there any views on the preliminary result that on various hubs offers for the sale of gas at any time of the trading day seem to be substantially lower than the total volume of gas bought on that day and on what (if anything) should be done about this?

Hidden quantity volume orders (i.e. ice berg order) are common practice in financial and commodity markets and are available as default setting trading system. In principal there is no deterring element in such order policy.

Question III
Are there any views on the preliminary result that less liquid hubs seem to have substantially higher bid/ask-spreads than more liquid hubs (which increases the cost of buying/trading gas on less liquid hubs) and on what can be done to bring bid/ask-spreads on all hubs down to the level of the currently most liquid hubs?

In terms of an analysis regarding welfare losses / gas prices the bid/ask-spreads may not be a decisive factor. The reason for this is that from a macroeconomic perspective as long as the "mid-price", i.e. the average price of best bid / best ask spread, is comparable, the actual commodity price is not higher than in a situation with a very narrow bid/ask-spread. A wider bid/ask spread will normally indicate a higher (perceived) risk premium that typically results from

there not being a great extent of liquidity. Such absence of liquidity can have different causes, which should be assessed on a case by case basis if conclusions are to be drawn.

Question IV
Are there any issues that you suggest should be looked at closely when analyzing the functioning of gas wholesale markets on the basis of quantitative data?

When analysing quantitative data, emphasize should be given to the fact that different sub-market segments with very different inherent trading patterns exist. E.g., forward markets versus spot markets as well as exchange based markets versus OTC markets, each with completely different characteristics including products, trading participants, level of transparency and regulation etc. For the time being, no harmonized trade data reporting exists in Europe, which makes data comparison on a level playing field difficult.

Therefore an in-depth market analyses - that is based on consistent data - should only take place once REMIT transactional data will be available at ACER on a large scale covering both structured products and term contracts, i.e. capturing both exchange-traded and brokered markets. Any evaluation before such data is available seems premature and may unnecessarily create potential distortion since REMIT data should be available by 2014 / 2015.

Discussion questions
A. Can the business requirements of gas market participants be adequately fulfilled by having only a few (e.g. NBP and TTF) functioning gas forward markets in Europe (next to functioning spot markets in every market)?

Since gas forward markets fulfil different needs than spot markets a limited number of viable forward market places should suffice. Typically forward markets are used to hedge risks along the curve. Regional forward markets are not required since a party seeking risk hedging may buy and timely sell forward contracts for the purpose of hedging. In a converged market scenario such party may, after selling forward contracts, acquire regional spot market positions to fulfil physical requirements. In case prices between spot markets are comparable the party will not suffer any negative effect due to the hedging of positions on a geographical distant forward market, given there is sufficient access to capacity to flow the gas to the destination. Consequently there is no need for physical delivery of forward contracts used for hedging. Empiric evidence shows that only very low percentage (~5%) of forward contracts are physically settled (long term future products cascade into more short term future products and thus remain therefore tradable).

B. Is the diversity in the set-up of European gas hubs a barrier to trade? Which elements should be harmonized (e.g. products, type of regulatory oversight, etc.)?

Following the implementation of the Third Energy Package entry/exit regimes have been introduced all over Europe thus eliminating relevant differences between member states e.g. flange / border based trading versus virtual / notional points. Therefore no relevant diversity between trading places themselves exist.

Swap and spread trading between market places is already a viable and widely used option and shows clearly that there are no barriers to trade on the account of European gas hubs / exchanges. The existence of a number of European market places / gas exchanges / hubs ensures competition and thus working wholesale gas markets which are the main drivers for competitive consumer gas prices.

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