THE ISSUE OF TRANSIT IN LIBERALISED EU MARKET – IS IT REALLY POSSIBLE TO FORGET OF TRANSIT AND TO SPEAK OF GAS TRANSPORT ONLY?

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ABSTRACT

This paper details analyses the relationship between gas transit and gas transport for domestic market in Europe. The conclusions of the 8th meeting of the European Gas Regulatory forum, held at Madrid, July 2004, decided to focus in the future on the issue of treatment of transit when compared with treatment of transport.

This paper analyses this regulatory trend and the reasons, on the basis of which could be justified the different treatment of transit to transport. The different treatment of gas transit vis-à-vis gas transport is concluded from the standpoint of entry-exit tariff system, balancing regime, investment requirements and security of supply. The real-life example of entry-exit tariffs for transit and balancing services for transit in transport system of Slovak republic were chosen to illustrate the difficulties and challenges which have risen during the implementation of uniform one size fits all treatment for transit and transport of gas.
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1. INTRODUCTION

The conclusions of the 8th meeting of the European Gas Regulatory forum, held at Madrid, July 2004, decided to focus in the future on the issue of treatment of transit when compared with treatment of transport. This paper aims to assess this regulatory trend and to analyse the reasons, on the basis of which the concerned parties could justify the different treatment of transit to transport. The different treatment of transit vis-à-vis gas transport is concluded from the standpoint of entry-exit tariff system, balancing regime, investment requirements and security of supply.

2. DEFINITION AND IDENTIFICATION OF TRANSITS

The debate about this issue is a continuation of long-lasting continuous debate how the transit should be treated on European level. The GTE as an umbrella organisation for European TSOs responded by the status paper /1/, providing its position into this discussion.

The underlying question is whether transit differs to transportation – i.e. is there really a need to think about these differently? Before further analysis there is a clear need for definition of transit and also brief introduction of the problem of identification of transit volumes within the integrated meshed transportation networks of some countries.

The term “Transit” can be defined as covering the transport of gas from a country, through at least one other country, to a third country. In the case of transit of natural gas across national boundaries via pipelines there are two sets of rules that may apply:
- Firstly, those contained in international agreements between the states involved and in customary international law;
- And secondly, those contained in private commercial contracts between market participants, including governments and state companies.

The above stated definition is in compliance with the European charter treaty and Article V, Freedom of Transit in GATT, which says: “Goods (including baggage), and also vessels and other means of transport, shall be deemed to be in transit across the territory of a contracting party when the passage across such territory, with or without trans-shipment, warehousing, breaking bulk, or change in the mode of transport, is only a portion of a complete journey beginning and terminating beyond the frontier of the contracting party across whose territory the traffic passes. Traffic of this nature is termed in this article "traffic in transit"."

The definition of the cancelled Transit Directive 91/296/EC was: “Every transaction for the transport of natural gas under the following conditions shall constitute transit of natural gas in grids, for the purpose of this Directive, without prejudice to any special agreements concluded between the Community and third countries:
- transmission is carried out by the entity or entities responsible in each Member States for high-pressure natural gas grids, with the exception of distribution grids, in a Member State’s territory which contribute to the efficient operation of European high-pressure interconnections;
- the grid of origin or destination is situated in the Community;
- this transport involves the crossing of at least one intra-Community frontier.”

This definition is obsolete and generally unsuited. A definition of transit based on the crossing of one border point is absolutely not sufficient, as it does not take into account the specific situation of gas producing countries like Netherlands. The absence of gas transit definition within /1/ shows, that transit is a very complex issue and can have many different characteristics.

Conclusion: In this report transit is defined as the carriage of gas through the territory of one or more countries, crossing at least two borders.

Identification of transit

In general, four kinds of transit system can be distinguished:
- a pipeline crossing sovereign territory and carrying transit gas without any connection to the gas supply system of the transit country. This provides the clearest definition of a transit line, but is rare in practice.

– a transit pipeline which is owned by a separate entity and which is predominantly used for gas transit, but also used to supply gas of the same origin to the transit country. Most of the transit lines for Russian gas are examples, but also the import project pipelines in EU, such as TAG, WAG, MEGAL and TENP lines. These lines with regard to the single European market become subject to EU regulation, however with long-term transport commitments reflecting their original purpose.

– a transit pipeline system which is integrated into the domestic supply system and which is owned and operated by the main national transmission operator, where the transit gas flow can still be traced. The Ukrainian and Belgian systems are examples of this type of system.

– Systems where transit volumes commingle with a highly meshed national grid, (e.g. in UK, Germany, France and Italy).

These four transit systems imply different methods and approaches to the transit tariffs and eventually require that gas transit should be treated differently from domestic flows. In general, the ability to identify transit may significantly differ from country to country and becomes especially difficult if a TSO has an integrated transmission network, i.e. that transit, transport for domestic market and (if applicable) production simultaneously make use of the same gas transmission infrastructure. Then identification of transit could be difficult.

This situation is described by figure, depicting the general situation of country, which imports the gas for internal market, has some domestic production from which also exports some share, and also has some pure transits. And to make the situation worse, the liquid trading virtual point functions within the country.

In this case the clear separation of flows on everyday basis is even impossible and the definition of transit could lead to impracticability. But in long-run the regulatory framework is designed on the basis of global data. Below we tend to design a set of rules, analysing the European gas markets and setting the measures for objective assessment of role of transit in different European countries. The table is on the basis of 2004 data /10/, /11/ summarising the gas balance of selected European countries.

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Although there are some inconsistencies in data due to different statistic approaches and commercial operations like swaps, these differences do not influence the basic trend of results. The Table is in the last columns providing the assessment of importance of transit for the individual countries:

The criterion of size of gas transit: This criterion gives some information, but generally provides only rough idea, how big volumes of gas transit crosses the respective country. The best example is Germany, which has impressive volumes of gas transit, but compared to the overall gas balance and size of the market could not be treated as a major driving force for the market.

The criterion of relationship between transit and gas market of the country: This measure is based on the calculation of the ratio between gas transit and gas consumption in the respective country. This parameter suits better for evaluation of transit. The example of Switzerland shows the enormous importance of gas volumes compared to the internal market of Switzerland. The next table shows the results of this rating, thus providing the list of importance of gas transit for individual countries.
The gas flow analysis shows that the transit volumes have varying degree of importance vis-à-vis overall gas flows in the transit country (including domestic supplies). Transit volumes are much larger than domestic volumes in Austria, Belgium and Poland. Moreover, in Slovakia and the Czech Republic, transit volumes are very much crucial when compared to domestic supplies. By contrast, in certain EU transit countries (Germany, France, Spain) domestic supplies are considerably larger than transit.

3. CURRENT REGULATORY REGIMES AND TRENDS FOR TRANSIT

Most transit lines were built for large import projects often also supplying the transit countries. However, the emergence of a single gas market in the EU raises new aspects of transit as transit through member states increasingly becomes part of an integrated system.

Gas demand is forecasted to increase considerably over the next 20 years /5/. Equally, the import dependence of many industrialised nations and the need for producers to improve their access to markets will rise. New gas supplies will have to be transported over longer distances, increasing risks. Political developments and the emergence of new states have increased the number of land-locked nations that possess significant gas resources and, thus, the number of transit states. At the same time, global trends stemming from competition and liberalisation create pressure to keep costs down. Against this background, gas transit has been and will continue to be the vital link between producing and consuming countries.

Access to transit pipelines

Access to networks connecting national markets is a vital prerequisite for cross-border sales and imports of gas. Indeed, as no further major EU gas finds are expected, competition on national wholesale markets will originate mainly from imported gas. In the early 1990s, EU legislation was targeted at facilitating transit of gas without touching the supply monopoly rights within member states. With the adoption of gas directives 98/30/EC and 2003/55/EC, as well as the other implementing measures, it was expected that access conditions for national transport and transit would converge. In several countries (like Austria, Belgium, the Czech Republic) different conditions persist for gas transit /4/ through a country (without access to customers located within that country) and for gas transport within that country. The effect is that regulated third party access conditions as implemented by the regulators on the basis of the EU directives do not apply fully to transit pipelines or transit contracts.

International transit law and regulation

Transit by its very definition involves international cooperation. Multilateral treaties have in the past tried to establish a set of basic norms for the reasonable and prudent behaviour of parties involved in transit. The most important development in this context is the Energy charter treaty. This treaty signed at Lisbon on 17 December 1994, establishes a legal framework to promote long-term co-operation in the energy field where the Contracting Parties shall work to promote access to international markets on commercial terms and to develop an open and competitive market for energy materials and products.

4. TRANSIT AND THE SECURITY OF SUPPLY

Transit contributes to security of supply for consumer countries. Because of the geography of Europe, as well as the location of major gas reserves, transit is of paramount importance for many European countries, particularly those relying on a single supplier for their imports.

From the security of supply point of view the transit provides:
- physical transport capacity from producing countries to consumption areas;
- physical link between different trading places and as such facilitating the liquidity of markets by connecting those.

Therefore transit is a prerequisite for Security of Supply and facilitates competition.
Transit pipelines are often built to ensure the transportation of gas across countries and therefore provide an important contribution to the Security of Supply of the importing countries. In this context, long-term purchase contracts play an important role. To ensure transmission of quantities under long-term purchase contracts, long-term transit contracts are needed. Taking into consideration the increase in European import volumes, huge investments in transit infrastructure will be needed.

5. INVESTMENTS INTO TRANSIT INFRASTRUCTURE

Future investment in gas transit through third countries will, to a large extent, depend on investor confidence. Investors, seeking to minimise risk, feel confident in countries that have a clearly defined energy policy and a positive investment climate. Among main elements of these policies is a stable legal, regulatory and institutional regime.

It is generally accepted (e.g. Security of Natural Gas Supply Directive 2004/67/EC) that long-term commitments have been and will remain the basis of the long-term balance between demand and supply, whereas medium-term and short-term agreements and trading will be used to balance demand and supply on a medium-term and short-term basis. The Directive 2004/67/EC in its preamble, paragraph (9), acknowledges that “In order to meet growing demand for gas and diversify gas supplies as a condition for a competitive internal gas market, the Community will need to mobilise significant additional volumes of gas over the coming decades.”

Historically, long-term natural gas contracts were the only type of contract available in the natural gas market. The future of the so-called long–term natural gas supply contract has, for the last decade, been subject to international debate. For example, in the Joint Statement issued after the Russia-European Union Summit, Moscow, May 29, 2002, the following statement /8/ was made regarding long-term natural gas supply contracts: “We underline the importance of long-term contracts for natural gas, in particular to guarantee the financing of identified ‘projects of common interest’. The limited question of destination clauses is moving towards a mutually acceptable agreed solution. Technical assistance to ensure the swift joint examination of the projects of ‘common interest’ will facilitate their realisation by bringing together all interested parties.”

The granting of exemption from the TPA provisions of the Gas Directive is an important element for the feasibility of many transit projects. The granted exemptions provide for the preservation of long term contracts, which underpin the significant investments required for pan-European projects. It should also be recognised that the majority of these projects will not be limited to one EU member state and will require a co-ordinated approach from TSOs and other gas industry players.

Due to the competition that mostly exists on the market for transit capacity, transit may have different risks from domestic transportation, which need to be recognized. There is thus a need for limiting the risks attached to transit, in order to make the financing of the projects possible. Possible means /1/ for limiting risks are:

- exemption from regulation for new projects; in some cases, such exemptions are the only way to realise the investment and should not be subject to excessively restrictive conditions;

- transportation contracts on a long-term basis provide the basis for recovering the capital costs, the operating costs, meeting the debt service obligations and providing a return to the investors being acceptable from an investor’s point of view;

- providing a predictable and stable regulatory;

- specific long term agreements on regulatory treatment of the investment.

Concluding this point on risks, depending on the specific situations, there may be a need to treat investments in transit infrastructures differently from investments in domestic transport infrastructures.

6. TARIFF SYSTEMS FOR TRANSIT
When one speaks about the implementation of entry-exit system for transit pipelines, cross-subsidisation issue starts to be of fundamental importance. In its report “Potential Shortcomings of the Entry-Exit System”, dated 15 September 2003, GTE showed that in an entry-exit system short distance transmission prices are generally too high and long distance transmission prices are generally not cost-reflective. With respect to transit, two main consequences are to be considered:

- If the length of a transit route is large with respect to the size of the entry-exit system, a transit shipper may be charged a non-cost-reflective price, being cross-subsidized by transportation for the domestic market;

- If the length of a transit route is short with respect to the size of the entry-exit system, a transit shipper may be charged too high a price, cross-subsidizing transport for the domestic market.

The organisation CEER stresses in its papers the point that “as far as tariffs are concerned and since transit flows typically use the same infrastructure as domestic transport, there is little reason for using separate tariffs for transit”. The only exception admitted seems to be related to the flexibility options.

On contrary, GTE’s opinion is that the situation is much more complex than the statement: “no separate tariff for transit and for transmission within the internal market”. Generally speaking, transit and transmission within the internal market can be different concepts with regard to the volumes, the distances to cover, the investments attached and the general conditions (capacity booking regime, regulatory regime, flexibility, balancing requirements). There is then no reason for a systematic equivalence on tariffs for both cases.

To focus on tariff, it should be noted that the entry-exit system, by its mechanism itself, introduces an averaging of the charges between high-cost routes and low-cost ones. As a result of this averaging effect, high-cost routes are usually charged at a lower level than costs and symmetrically, low-cost routes are usually charged at a higher level than costs. This kind of cross-subsidization is not a real problem for the internal market. The situation may be completely different in case of transit.

In order to demonstrate the harmful effect of entry-exit system for transit pipelines, the case study of Slovak republic is described in detail. The figure shows the transit system of Slovakia, bringing from East to West about 80 billions of cubic meters of Russian gas, from that 73 billions of cubic meters as a pure transit and 7 billions of cubic meters for domestic consumption of Slovakia. The current entry-exit system implemented because of demand by regulators is shown.
The system is symbolically simplified to four entry and exit points, with route from A to D and A to C the main transit route, route A to B the route for supply of domestic market and route C to D the requested route for export from Baumgarten hub westward.

The effect of entry – exit system is following. The entry tariff at A must be as low as possible in order to keep the transport price for transport to domestic market B cost reflective due to the short route. Then exit tariff at C and D must be high in order to fully reflect the long transport route from A to C and D. As an inevitable consequence the short route from C to D starts to be illiquid and over-priced beyond any limit, subject to criticism of shippers.

No practical remedy exists for this situation /7/, only artificial measures like introduction of more zones et cetera, all of them with side effect of being heavily criticised by shippers. Any further adjustments of parameters have destroying effects on the system, like decrease of entry tariff at C and D deforms the transport pricing for imports to domestic market etc.

7. **Other barriers for one-size-suits-all treatment of transit**

Shippers often have different options to transport gas across countries. Tariffs play an important role in the shipper’s decision on which alternative route to use. If a specific transit tariff is low compared to the tariffs of competing routes, the operator of the transit infrastructure may be confronted with capacity congestion; if it is high compared to the tariffs of competing routes, the operator of the transit infrastructure may be confronted with idle transport capacity. Competition is present at three levels:

- before a transit pipeline is developed, several projects usually compete;

- once the pipeline is in place, it will have to compete with other transit pipelines; in many cases, different companies compete with each other through pipe-to-pipe competition;

- besides pipe-to-pipe competition, LNG routes also offer flexible alternatives to transit through pipelines.

This leads to the conclusion that transit is generally a competitive activity in Europe. Very often services rendered in a transit contract may be different from the services offered on a domestic transportation contract, for instance:

- balancing regime may be different; a lower balancing tolerance may allow a higher capacity to be offered on the market;

- Public Service Obligations for delivery to residential customers apply to domestic transportation; and may lead to differences between the services offered to transit and to domestic transportation.

8. **Central European case study**
The first example in tariff part of this article explained the Slovak gas transit system and the effects of the implementation of entry-exit system and of uniform treatment of gas transit and transport.

The second example puts in evidence the need, in case of relatively high transit volumes, to differentiate transit with regard to the balancing regime.

Let us again assume a TSO operating in Slovakia with 80 bcm annually in transit and another 7 bcm as a transport for domestic market. There is absolutely no liquid gas market available in the neighbourhood. The TSO is offering tolerance of 5% to domestic transport, and only very small tolerance for transit customers, since there are no reasonable market rules to accomplish balancing service in a similar scale also for transit customers. Equal treatment could mean:

- offer 5% balancing tolerance also to transit customers, which leads to the need of storing the gas volume of at least 4 billions of cubic meters for this purpose. This is impossible, since there is no so large underground storage in Slovakia and also not connected directly to the transit system;

- stop to provide the balancing service to domestic transport because of the need of equal treatment.

The annoying result is that the strict request of equal treatment will either deteriorate provision of gas transit through the country and jeopardise the security of supply of Europe or complicate and worsen the situation of country consumers due to no balancing service provided for them.

9. CONCLUSIONS

In conclusion, the transit of natural gas is a fundamental aspect of the European gas market, which is required to underpin Security of Supply and to create a competitive European gas market. In many cases transit of natural gas is a competitive activity, competing with alternative pipeline routes and LNG supply sources in other countries. In addition, as the characteristics of transit vary from country to country, there may be significant differences between transit and national transportation and it is not possible to have a “one size fits all” approach.

The specifics of each transit should be recognised and an appropriate regime applied to ensure that existing investments are protected and new investments are stimulated. Due to the size of the investments involved, the use of long term contracts to secure the investments will remain an essential element of existing and future pipeline projects.

Competition and/or regulatory authorities will have to help safeguard the operation and expansion of transit capacity by ensuring free and undisturbed transit, objective terms and conditions of capacity utilisation, fair and equitable capacity allocation, and just, non-discriminatory and reasonable transit tariffs.

Depending on the evaluation of the objective criteria, country may decide to implement one unique network access and/or tariff system for transit and transportation, or to implement different systems. It may be difficult to distinguish transit from the transport for the domestic market. As the specific situations differ very much across countries, no unique solution can be developed at the European level.

Transit through an entry-exit system may lead to cross-subsidization between transit and transportation for the domestic market. In cases where, taking into account the specific market conditions in a country, the cross-subsidization is clearly identifiable and produces unacceptable distortions, the application of specific tariffs for transit could be more appropriate.

REFERENCES:

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