



Report on the transmission pricing (for Transit) and how it interacts with Entry-Exit Systems

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1 Preface

Around 60% of the gas consumed in the EU crosses two or more country borders. This means that the development of a functioning internal gas market is vitally linked to ensuring that arrangements for transporting gas across borders is efficient (including where appropriate harmonisation of arrangements) and that costs are properly allocated..

The current picture of the European gas market is however still far from being sufficiently in line with these requirements. Monitoring of market participants' behaviour¹, indicates a considerable lack of transparent TPA-rules in Gas Transit leading to significant differences between individual systems – which may be impacting upon on the efficient flow of gas. The remaining obstacles were highlighted – among others – by the interim results of the EC's energy sector inquiry².

Effective TPA and tariff rules may consequently call for closer cooperation between stakeholders involved in arranging for gas to be flowed across European transit pipelines; some form of inter-TSO cooperation is one possible way of improving arrangements. It is evident that 'pancaking' of transaction costs (associated with booking capacity in several systems) and of access tariffs may be a significant barrier to cross-border trade. It is therefore important that the rules for third party access and principles used for tariffs take properly and efficiently allocate costs. This may include looking at harmonising certain aspects of tariff arrangements.

This report will identify key requirements on how transit and regulated entry-exit systems could encourage competition and support a competitive market for natural gas.

¹ E.g. CEER, Monitoring Report 2004 concerning Compliance with the Guidelines For Good Third Party Access Practice to Gas Transmission Systems

² EC (Competition DG – Energy, Water), Energy Sector Inquiry Draft Preliminary Report, published 16 Feb 2006, http://europa.eu.int/comm/competition/antitrust/others/sector_inquiries/energy/#16022006

2 Executive summary

The term transit means transportation of gas from one boundary of the network and/or entry/exit zone to another boundary, potentially the transport of large volumes over long distances.

Directive 2003/55/EC has abolished the distinction between gas flows in transit and gas flows in transport. The scope of the Regulation also covers long-term contracts for gas transit flows in high-pressure pipeline systems³. Several issues of the coexistence of these legacy contracts with the Directive 91/296 EEC and the Regulation 1775 need further analysis.

The Regulation 1775/2005 allows Regulators to take the instrument of benchmarking of tariffs into account. TSOs requesting benchmarking of tariffs and citing effective pipeline-to-pipeline competition should clearly mention the competing pipeline routings, its available capacity and applicable tariffs in their requests. Requests should be submitted to public consultation.

New infrastructure as such does not entail the entitlement to a different tariff treatment. If the level of risk to the investment is such that the investment would not take place under the normally applicable regulatory regime of TPA for transmission systems, an exemption according to Art. 22 of Directive 2003/55/EC may be granted and special tariff methodologies or incentives can be designed.

In Europe distance-based tariffs have been used by a number of transmission systems. It was argued that distance-based tariffs involve the advantage of being rather simple, transparent and cost reflective in an apparent way for one directional flows. This might in principle be true for systems in which gas moves only in one direction, with rather few intermediate takeoff points. Consideration of distance as a factor might be justified for the unidirectional pipelines crossing Member States if they are only used for carrying transit gas without any connection to the gas supply system of the transit country.

To maximize efficient use of capacity a prerequisite is capacity planning on a regional level. Capacity planning will have to take into account such factors as future demand and alternative supplies in other countries. The planning process has to ensure proper involvement of regulators on a European level with the aim to avoid cross-subsidies between network users.

Seven stakeholders, including network users, submitted written comments to ERGEG's Report on the Transmission Pricing (for Transit) and how it interacts with Entry-Exit Systems. Comments representing the views of transmission system operators (TSOs) have been received from GTE as well as 2 individual TSOs: RWE Transgaz Net (CZ) and Gaz de France (F). Four stakeholders submitted comments on the report representing the viewpoint of network users: Centrica (UK), GEODE (B), Scottish and Southern Energy (UK) and VIK (D). A summary of the comments can be found at the end of each section.

³ Compare Article 32 of Directive 2003/55

3 Introduction

3.1 Background

1. The 8th Madrid Forum in August 2004 discussed the compatibility of transit and transportation tariffs⁴. The European Commission and network users invited ERGEG to present a report outlining how to deal with transit under a regulated access regime.
2. In June 2005 the association of European Gas Transmission System Operators (Gas Transmission Europe, GTE, as a sub-organisation of Gas Infrastructure Europe, GIE) published a report⁵ on gas transit issues which was presented at the 10th Madrid Forum in September 2005. The report can be summarized as follows:
 - The specific situation varies significantly from country to country; therefore it is not possible to have a “one size fits all” approach.
 - In most cases, transit routes of natural gas are competing with alternative transit routes and LNG supply sources in other countries, therefore the ability to apply market price is of primary importance.
 - An appropriate regime should be 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.
 - In cases where, taking into account the specific conditions in a Member State, the cross-subsidization is clearly identifiable and produces unacceptable distortions, the application of specific tariffs for transit could be more appropriate.
3. The 10th Madrid Forum took note of GTE’s report and invited CEER “to present a report to next Forum [...] on how transit and regulated entry-exit systems could encourage competition and support a competitive market for natural gas”⁶.

3.2 Scope and structure

4. Taking into account the results of the GTE report on gas transit issues ERGEG will ensure in its work that appropriate arrangements are in place for dealing with cross border trade – in particular developing appropriate charging arrangements for transit that ensures that costs are allocated efficiently. In this context it is important to consider whether appropriate arrangements exist for ensuring that necessary investment in cross-border infrastructure are brought forward on a timely and efficient basis.

⁴ Conclusions of the 8th Madrid Forum, point 16, http://europa.eu.int/comm/energy/gas/madrid/8_en.htm

⁵ GTE Report on Gas Transit, June 2005, <http://www.gte2.be>

⁶ Conclusions of the 10th Madrid Forum, point 35, <http://europa.eu.int/comm/energy/gas/madrid/doc-10/conclusions.pdf>

5. The Report will be split into two parts:

- Part 1 identifies key requirements on how transmission pricing for cross border transport (transit) and regulated entry-exit systems could encourage competition and support a competitive market for natural gas. Starting from the assumption of Directive 2003/55/EC⁷ which abolishes differences between transit flows and national transports but considers them in a unique category "transmission" this will involve an assessment whether there is a reason which might justify different treatment of transit flows within the system of regulated tariffs. The prohibition of discrimination requires that comparable situations are not treated differently (e.g. charges different prices) unless such difference in treatment is objectively justified on the basis of differences in service levels and/or costs⁸. If recognised, it has to be analysed to which cases this might apply and under which conditions it might be justified/appropriate to set different tariff structures for different networks overlapping the same area, owned or not by the same system operator.

The report will also include an analysis on how tariffs for transit capacity should be structured in order to increase the efficiency of pipeline usage and to avoid undue "pancaking". Finally it will examine how entry-exit areas would actually interact with transit flows with the aim to identify possible remaining distortions to cross-border transport and geographic scope of the entry exit zones.

Part 1 of the report is aimed for presentation shortly after the 11th Madrid Forum in May 2006 as a consultation paper; stakeholders will be invited to provide comments in accordance with the usual ERGEG consultation procedure.

- On the basis of stakeholders' reactions part 2 will focus on recommendations on tariff principles covering the question to which degree harmonisation and/or convergence (tariff methodologies and cost calculation) is necessary to meet the requirement of Regulation 1775/2005⁹ to avoid distortions to cross-border trade and what impact on allocation of costs, the efficient use of capacity and possible incentives for investors in infrastructure could be derived from harmonized tariff methodologies and cost calculation in gas transit.

⁷ Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC, OJ L 176/57 (15 July 2006)

⁸ See as well Art 48, case c17-/03 ECJ

⁹ Regulation 1775/2005/EC of the Parliament and the Council of 28 September 2005 on conditions for access to the natural gas transmission networks, OJ 289/1 (3.11.2005)

4 Part 1

4.1 Definition and Classification of Gas Transit Flows

6. As a legal definition Directive 2003/55/EC abolishes differences between transit flows and national transports but considers them in a unique category “transmission”. Article 2.3 defines “transmission” as follows:

‘transmission’ means the transport of natural gas through a high pressure pipeline network other than an upstream pipeline network with a view to its delivery to customers, but not including supply;

7. Regulation 1775/55/EC bases on the definition of Directive 2003/55/EC and provides more in detail in Article 2.1:

‘transmission’ means the transport of natural gas through a network, which mainly contains high pressure pipelines, other than an upstream pipeline network¹⁰ and other than the part of high pressure pipelines primarily used in the context of local distribution of natural gas, with a view to its delivery to customers, but not including supply;

8. As a consequence, the concept of transmission in the Regulation encompasses all high pressure pipelines, unless they are used for production or processing of gas or are primarily used in the context of local distribution of natural gas, with a view to its delivery to customers¹¹.

9. Since Directive 2003/55/EC has abolished the distinction between gas flows in transit and gas flows in transport. In this text, where the term transit is used, it means transportation of gas from one boundary of the network and/or entry/exit zone to another boundary, potentially the transport of large volumes over long distances.

10. The scope of the Regulation also covers long-term contracts for gas transit flows in high-pressure pipeline systems¹². In case tariffs of existing contracts were different from the tariff of new or renegotiated contracts, shippers applying contracts concluded pursuant to Article 3.1 of the repealed Directive 91/296 EEC it is up to regulators to make transparent for standard transportation cases the difference between actual and regulated tariffs according to the Gas Regulation. TSOs may have an interest in changing (renegotiating) these contracts in order to avoid discrimination. In case contracts concluded pursuant to Article 3.1 of the repealed Directive 91/296 EEC were applied, regulators should not recover any lost TSO-revenue by increasing tariffs applicable to other flows.

11. From a practical point of view two types of gas transit systems can be classified:

- A pipeline crossing a member state and carrying transit gas without any connection to the gas supply system of the transit country. This kind of transit system is rare in practice.

¹⁰ See the definition of “upstream pipeline network” in Directive 2003/55/EC, which pursuant to Article 2(2) of the Regulation is also applied in the Regulation

¹¹ In theory, Directive 2003/55/EC would allow regional transmission pipelines to be covered by the definition of “distribution” contained in the Directive (see Article 2, point 5 of Directive 2003/55/EC). According to this definition, “distribution” means the “transport of natural gas through local or regional pipeline networks...” The definition of “transmission” used in the Regulation does not allow such an approach

¹² Compare Article 32 of Directive 2003/55

- A transit pipeline which is predominantly used for gas transit, but also used to supply gas to the transit country.

Most of the transit lines for Russian gas are examples for the second type – e.g. TAG, WAG pipeline system taking Russian gas across Austria to Italy and Germany respectively; MEGAL taking Russian gas further across Germany; or the TENP taking Dutch gas to Switzerland and Italy.

12. Table 1: EU transmission system operators with gas transit flows

Country	TSO
Austria	OMV Gas
	TAG GmbH
	BOG GmbH
Belgium	Distrigaz SA
	Fluxys
Czech Republic	RWE Transgaz Net
Denmark	Dansk Naturgas A/S
Finland	Neste Oy
France	Gaz de France
	GRT Gaz
	Total Infrastructures Gaz France
Germany	Bayergas GmbH
	BEB Erdgas und Erdöl GmbH
	Erdgas Verkaufs-Gesellschaft mbH
	Gas-Union GmbH
	Mobil Oil AG
	E.ON-RuhrGas AG
	Saar Ferngas AG
	Thyssengas GmbH
	Vereinigte Elektrizitätswerke Westfalen AG (VEW)
Germany	Westfälische Ferngas AG
	EWAG, Nürnberg
	Gasversorgung Süddeutschland
	Schleswig AG
	Thüga AG
	Verbundnetz Gas AG
	Wingas GmbH
	RWE Transportnetz Gas
Greece	DEPA
Hungary	MOL Földgázzszállító Zrt.
Ireland	Bord Gais
Italy	Snam Rete Gas
	Edison Gas SpA
	Società Gasodotti del Mezzogiorno SpA
	SNGSO

Luxembourg	SOTEG
Poland	Gaz System
Slovak Republic	SPP
Slovenia	Geoplin plinovodi
Spain	Empresa Nacional de Gas SA (Enagas)
	Catalana de Gas
	Gas de Euskadi
Sweden	Noval Naturgas
	Sydgas AB
The Netherlands	Gas Transport Services
	Zebra Pijpleiding
United Kingdom	Interconnector
	National Grid

Summary of stakeholders' comments

TSOs are against the review of legacy contracts and stress their sanctity. One TSO pointed out that transit and national transport are two different products. On the other hand, some network users suggest that there should be no distinction between tariffs for transit and transport (to regional, local or industrial customers) in a high pressure pipeline.

QUESTION: How can discrimination between old and new contracts can be avoided?

4.2 Requirements on Gas Transit

Legal Requirements

13. Directive 2003/55/EC abolishes differences between transit flows and national transports but considers them in a unique category "transmission". Simultaneously the Directive establishes a regulated Third Party Access (TPA) regime for all transmission flows including transit.
14. Regulation 1775/2005 requires tariff methodologies for transit to be developed consistent with the provisions of said Regulation.
15. With a set of (draft) explanatory notes on Art 3 of Regulation 1775/2005 the European Commission has already launched a set of principles to be followed by national regulators with tariffication of transmission flows.
16. Based on the general requirements for tariff setting as explained by the EC's draft explanatory note detailed methodologies of tariffication have to be developed. Objective of Regulation 1775/55/EC includes the setting of harmonised principles for tariffs (Art 1.1) to be applied by national regulators (Art 3.1).

Market requirements

17. Effective gas to gas trade simultaneously requires efficient TPA rules. Cross border trade could be simplified by efficient inter-TSO co-operation allowing market participants to contract only with a single TSO or other independent entity with subsequent contractual matters being dealt with between the relevant TSOs involved in transportation from the entry to the exit point. In the long term, a related development could be the promotion of a single European TSO (which could be a single operator, separate from existing system owners), or an interface so that network users would have a single contract with the network operator rather than multiple contracts, with each national TSO.
18. Tariff design significantly affects TPA. As a general requirement tariffs must not distort cross-border trade. It is evident that 'pancaking' of transaction costs – associated with booking capacity in several systems – and of access tariffs would result in barriers to trade and thus restrict competition. It is therefore important that the rules for third party access and principles used for tariff setting take account of the need for harmonisation where cross-border trade would otherwise be distorted. Where there is pancaking effective and efficient solutions should be developed and brought forward. In the long term, pancaking of network access tariffs for gas flows crossing one or more national borders could be avoided by a Europe-wide entry–exit system. This would require a corresponding system of inter-TSO payments in order to allow national TSOs to recover the costs of their networks. For the purpose of capacity planning and security of supply, TSOs could be required to co-operate in long-term planning on a European level to determine necessary investments in infrastructure. In the short term, entry-exit tariff systems for each TSO or TSO-grouping should take into account the consideration of paragraph 49 – 53.

Specific aspects with regard to gas transit - Pipeline competition

19. An often used argument against the regulatory intervention in natural monopolies – such as gas transport systems – is to deny the fact of a monopolistic situation as such and arguing pipe to pipe competition. The GTE report on gas transit in this context argues that there is some competition by gas suppliers including other pipelines or LNG deliveries.
20. In this respect Regulation 1775/2005 allows “where appropriate, taking account of the benchmarking of tariffs by the regulatory authorities”¹³. Recital 7 of the Regulation sheds some light on when the Regulation considers the application of benchmarking as an element for setting up tariffs appropriate: it says “in particular, if effective pipeline-to-pipeline competition exists, the benchmarking of tariffs by the regulatory authorities will be a relevant consideration”.
21. Against this background, the question may arise what should be considered to be “effective pipeline-to-pipeline competition”, notably bearing in mind that Directive 2003/55/EC does indeed consider transmission networks a natural monopoly subject to regulation. Criteria for effective pipeline-to-pipeline competition”, should at least take into account the questions:
 - whether sufficient available capacity for access to the alleged competing systems exists, implying a real choice of the user which system to use;

¹³ Benchmarking in relation to setting up tariffs complying with the Regulation must be carried out by the regulatory authorities in charge of tariff setting

- whether the level of services available from the systems concerned is broadly equal;
- whether the customers (consumers of gas) of the network user are connected to the systems concerned.

This list is non-exhaustive and could be supplemented by the relevant national regulatory authorities in line with the prevailing situation. The regulatory authority setting the tariffs should clearly indicate which entry and exit points he considers to qualify in this respect following a detailed examination of the networks concerned.

22. If effective pipeline competition exists this shall not serve as an argument against the regulatory intervention. But it does justify different treatment of tariff setting¹⁴ but shall allow regulators for use of benchmarking instruments. TSOs requesting benchmarking of tariffs and citing effective pipeline-to-pipeline competition should clearly mention the competing pipeline routings, its available capacity and applicable tariffs in their requests. Requests should be submitted to consultation with affected stakeholders at their request. If competition arises from foreign competitors the regulators of the countries concerned will inform each other of such a request.

Summary of stakeholders' comments

Inter-TSO cooperation is generally seen positively. For TSOs however, the need for increased coordination of regulators is equally important. In addition, one TSO stated that inter-TSO cooperation does not necessarily lead to one single TSO.

TSOs stress that pancaking is not undue since a gas transport through several systems unavoidably incurs costs in several systems. One TSO agrees on the legitimacy to fight against a build up of administrative costs.

A European-wide entry-exit system and inter-TSO payments are criticised by TSOs as being neither realistic nor feasible at this stage.

Network users interpret the Regulation 1775/2005 that benchmarking of tariffs should be considered an additional option where appropriate (and not an alternative) and stated that clear criteria for the assessment of pipeline-to-pipeline competition must be set.

Enhancement of investment in infrastructure

23. The GTE report on gas transit 2004 calls for a tariff regime ensuring that new investments are stimulated. In this context one has to assess whether this requirement consequently suggests different treatment of new infrastructure.
24. Regulation 1775/2005 acknowledges the need that tariffs should bring about incentives to construct new transit infrastructure. However, new infrastructure as such does not entail the entitlement to a different tariff treatment. If the level of risk to the investment is such that the investment would not take place under the normally applicable regulatory regime of TPA for transmission systems, an exemption according to Art. 22 of Directive 2003/55/EC may be granted and special tariff methodologies or incentives can be designed. In case an exemption is granted, also medium- and long-term capacity can be disposed by the owner of new infrastructure under its "own use" regime as well, if justified according to the criteria of Art. 22.

¹⁴ Setting of tariffs or methodologies to calculate tariffs by the regulatory authority, Art 25 Directive 2003/55/EC

Summary of stakeholders' comments

According to network users, in the case of rTPA exemption for new infrastructure, essential requirements (such as transparency, non-discrimination and congestion management) should be maintained.

GTE refers to the higher risks associated with non-domestic investments (NDI) and stresses the importance for regulatory co-ordination in order to allow harmonised treatment of NDI risks. It should be defined who bears the investment risk in order to avoid under-investment.

National specificities

25. The GTE report on gas transit 2004 assumes that specific situation for transit varies significantly from country to country; therefore it could not be possible to have a "one size fits all" approach.
26. In Europe distance-based tariffs have been used by a number of transmission systems. It was argued that distance-based tariffs involve the advantage of being rather simple, transparent and cost reflective in an apparent way for one directional flows. This might in principle be true for systems in which gas moves only in one direction, with rather few intermediate takeoff points.
27. It has to be pointed out however, that according to Regulation 1775/2005 tariffs must not be affected neither by any type of demand characteristics – such as size, portfolio considerations in the case of large system users or similar. To a certain extent this involves as well distance: distance of transportation may only be a factor in case of a not sufficiently meshed transportation grid.
28. Consideration of distance as a factor might be justified for the unidirectional pipelines crossing Member States if they are only used for carrying transit gas without any connection to the gas supply system of the transit country.
29. However, for most of the transit system in Europe there is not one simple route between entry and exit points or where linear gas flows may be subject to some kind of displacement. Transport systems are widely meshed to a certain extent, whereby the precise extent is simply depending on the perspective: a system might not be considered meshed if looked at with a very limited geographic scope but may simultaneously be strongly meshed if considered in a wider regional or European approach. In principle a meshed system can be claimed for every case effective pipeline competition is assumed as the latter immanently involves the existence of alternative routes. For all these reasons distance-based tariffs have been abandoned by a large majority of TSO. Moreover, they are less favourable to the development of liquidity at cross-border points.
30. Furthermore, effects that can be seen in the market are that point to point reservations with distance-based tariffs favour incumbent users on the basis of the so-called portfolio effect under which shippers with multiple contracts based on several entry/exit points can minimise their transport charges by implicit swaps within their contract portfolio.

Summary of stakeholders' comments

On the issue of distance-related tariffs different opinions have been voiced. TSOs argue that distance should be taken into account while network users are against distance-related tariffs.

TSOs also disagree on the ERGEG view that a sufficiently meshed gas network is like a tub because there will always be large dominant flows across Europe where distance related costs have to be recovered.

4.3 Increasing the efficiency in the usage of the pipeline

31. To facilitate efficient gas trade and competition tariffs shall be designed in a manner which facilitates capacity trading, exploiting short notice market opportunities and quickly reacting to market developments. Composing supply portfolios and serving them in a flexible manner may also represent a useful element in this regard.
32. Under the entry/exit tariff system, capacity booking can be done separately for each entry and exit point, with actual movements being based, ex-post, upon combining a shipper's portfolio of capacity contracts. The split of entry and exit booking makes it more difficult for one single TSO to know whether entry capacity booked can be served, because it depends finally on the total balance between entry and exit capacity booked but could be solved by closer cooperation between stakeholders involved in arranging for gas to be flowed across European transit pipelines.
33. Innovative commercial instruments may also contribute to the creation of capacity or efficiency improvements. Such instrument – as for instance correlating capacity or commitments to nominate on request – improve the predictability of flows and therefore contributes to the level of available capacities.

Summary of stakeholders' comments

Network users favour the establishment of a system where booking can be done separately for each entry and exit point.

One TSO argues that it is not clear whether innovative commercial instruments, which will place certain obligations on network users, will be accepted by network users.

Capacity planning

34. To maximize efficient use of capacity a prerequisite is capacity planning on a regional level. Capacity planning will have to take into account such factors as future demand and alternative supplies in other countries. The planning process has to ensure proper involvement of regulators on a European level with the aim to avoid cross-subsidies between network users.
35. In order to ensure a comprehensive examination of the relevant market demand TSOs have to carry out an open season process allowing potential shippers to indicate:
 - the intake and offtake points capacity should be allocated at and the relative amount of capacity requested at each point;
 - the minimum lot size to be offered in order to meet their respective demand;
 - for which period the season remains open;

- the products to be offered in order to meet their respective demand: long term/short term down to a minimum period of [...], firm/interruptible.

36. The open season process should already inform potential users about:

- the product portfolio the TSO plans to offer (long term/short term down to a minimum period of [...], firm/interruptible);
- the allocation procedure to be applied, including the possibility of further expansion of the capacity offered.
- the indicative tariff to be applied.

37. Regulators of the neighbouring countries shall co-operate effectively to validate the result of the open season. Each regulator has to review if the future supply demand in the country is corresponding to the transport demand and the capacity offered.

Summary of stakeholders' comments

Open seasons are generally welcome as an instrument for assessing the market demand for capacity. However, TSOs are against compulsory open seasons. Regular consultations with network users should be held and TSOs would then decide to hold an open season or not.

Open seasons leading to long-term capacity contracts are one way for TSOs to cover investment risks. Financially binding signals from open seasons must be designed carefully and depend on the degree of market opening.

The need for regulatory co-operation where several markets are concerned by a capacity expansion has been brought forward by a network user.

Cross subsidies between network users

38. Cross subsidies for network users would not provide a level playing field for competition, since some users would pay less than the costs of the service they enjoy to the detriment of other users paying more than the costs of their transportation service would actually require. For this reason, postage stamp systems in large transmission systems, which per definition would result in the same level of transportation costs while transporting gas over long distances and irrespective of the entry and exit points contracted thus do involve cross subsidies between system users and are not in general considered compatible with a fair and non discriminatory access to transit systems. Postage stamps may be acceptable though for small systems or where calculated entry and exit tariffs are geographically uniform across the transmission system.

39. The stipulation to avoid cross subsidies may also be considered as an indication that entry-exit systems with specific tariffs, such as backhaul and short haul tariffs are needed.

Summary of stakeholders' comments

For GTE entry-exit tariffs taking distance into account are capable to avoid cross-subsidies to a large degree. Also the introduction of point-to-point tariffs could meet this objective.

Backhaul flows

40. Where costs related to backhaul flows are not already considered in the entry-exit matrix, specific tariffs shall be applied on backhauls. In the event of predominant physical flows in a network where congestion occurs, additional marginal cost provoked by backhauls should be taken as basis for the calculation of the cost for backhaul flows. This proceeding should be used as long as the backhaul flows do not exceed the probable capacity of the predominant physical flow or do not exceed the effective physical capacity limit of the reverse flow.

Summary of stakeholders' comments

Network users commented that when entry and exit charges are properly designed there should be no need for backhaul tariffs. Also, a fair key to divide the profit among the grid users which make backhaul flows possible and grid owners should be found.

Trading of Unused Capacity

41. Regulation 1775/2005 requires TSOs to facilitate trading of unused capacity at least on a month-ahead and interruptible basis. Capacity trading must be compatible with the requirement of an effective and efficient use of the system. The Regulation requires TSOs however not only to allow for capacity trading but calls them to actively discourage capacity hoarding and facilitate reutilisation of un-used capacity.
42. As with respect to TPA on the primary market and its effect on gas to gas trade, the liquidity of capacity trading on the secondary market highly depends on the efficiency of access rules. In order to allow network users to re-sell or sublet their unused contracted capacity in an easy way on the secondary market the TSOs shall organize a bulletin board for a secondary market. All network users who offer capacities are obliged to use the bulletin board organized by the TSO. This will simultaneously allow for necessary transparency with respect to the offer of unused capacities to third parties and avoid discriminatory transfer of secondary market capacities to a restricted circle of interested buyers.
43. In case of non-use of contracted capacity by a system user and the contractual paths involved in the case of contractual congestion and no available capacities on the secondary market, TSO shall make contracted but physically un-used capacity available to the primary market (Use-it-or-lose-it principle, UIOLI). Detailed procedures to be applied for re-utilisation of unused capacities shall be designed by TSO and included in the TSO's standard transportation contract under the oversight by the Regulatory Authority.
44. It should be noted that ERGEG (in its Capacity Task Force) is currently looking at how best to give incentives to TSOs to maximise the amount of capacity that is made available to the market – including the efficient use of UIOLI mechanisms.

Summary of stakeholders' comments

TSOs stress that secondary markets are a voluntary step and that it is not possible to oblige network users to use the bulletin board. A bulletin board/secondary market involving more than one transmission system should be developed by an independent entity.

Network users are very much in favour of a standardized European system of capacity trading. However, instead of the mandatory use of bulletin boards market rules should be sufficient to encourage capacity trading.

New pipeline infrastructure – setting tariffs

45. The tariff that is levied on users of infrastructure must reflect the underlying costs of its provision – e.g. the present value of the operational and capital costs including an allowance for tax (where appropriate) and a fair rate of return and divide the present value by the sum (present value) of the contracted (forecasted) medium- and long term capacity over the entire timeframe of the regarded infrastructure. In case it is assumed that the tariff (and or costs) will increase (mainly maintenance and operating costs) over the entire timeframe, this has to be taken into account. A significant part of the infrastructure capacity has to be reserved for short term, non allocated TPA.
46. In order to give the project sponsors an incentive to increase the load factor, as a possible measure of special regulatory treatment¹⁵, the revenues generated from the short term non-allocated TPA (the tariff per capacity unit is the same regardless of duration of transportation contracts) could cover more than the regulated costs. The value of the reserved capacity (capacity which is exempted from rTPA) shall be considered a source of implicit or virtual revenues to the shareholders, which should contribute to bearing the costs of the pipeline. In case short-term contracts exceed a specified percentage of the annually contracted long- and medium-term capacity, the revenues generated from the excess of the specified percentage shall be considered.
47. The tariff shall be adopted and reviewed regularly, also to take account of the impacts of possible deviations of contracted capacity from forecasts. The total rate of return should consider cost and volume risks of the project. These principles shall not be restricted to the initial investment but shall also apply to all extensions of the system. Such an analysis should also assess any possible impact on entry-exit systems involved, in order to avoid potential cross subsidisation among users in different counties.

Summary of stakeholders' comments

TSOs raise the question of who takes the risk/cost of short-term contracts not being sold.

4.4 Interaction of transit flows with Entry Exit Areas

48. The Entry Exit Approach can be seen as a specific form of point-to-point system, as a full point-to-point matrix can be constructed by adding together the two charges. Under the entry/exit tariff system, capacity booking can be done on the same basis, that is, booking is done separately for each entry and exit point, with actual movements being based, ex-post, upon combining a shipper's portfolio of capacity contracts.

¹⁵ see DG TREN, Interpretative note relating to Directives 2003/55 concerning exemptions from certain provisions of the third party access regime, chapter "Special treatment without exemption": „Before considering when the [Art 22] exemptions are justified it is necessary to point out that, even without an exemption of this type, the regulator already has the possibility to choose specific rules for specific pieces of infrastructure, both existing or new. Therefore, there is considerable scope for flexibility even without using the possible exemption", http://ec.europa.eu/energy/gas/legislation/notes_for_implementation_en.htm (30.1.2004)

49. The entry/exit system allows for the development of a much more flexible market in capacity contracts, allowing new entrants easier access to the system without incurring the risk of onerous balancing charges (eventually at the expense of system operability). The split of entry and exit booking may also apply provided the system operator knows whether entry capacity booked can be served.
50. Where the natural gas grid is not sufficiently meshed and flows- particularly transit flows- are uni-directional and there is a threat of significant cross-subsidisation between different network users, tariffs could take into account the load factor, the distance of transportation, the capital investment per capacity unit and volumes; the reasons for applying distance as a factor have to be justified to the regulatory authority. Distance based tariffs could also be used for exclusively linear long-distance transit in order to avoid their cross-subsidization by shorter distance.
51. For exclusively linear long-distance transit not interconnected with other domestic transmission systems, distance could be taken into account to avoid cross-subsidisation of long-distance shipments by shorter distance. In case distance is used as a factor for the tariff calculation the existing contracts shall be transformed in product units (P) which represent equivalent capacity contract stipulations and consist of the capacity (Q) multiplied by the length (L) of transportation ($P = Q * L$). The product units represent a constant and shall be transformable into another length and capacity although the product units remain the same. New contracts shall be concluded on “equivalent capacity” basis.
52. On the other hand, where transit systems are sufficiently meshed or relevant multidirectional flows exist, so that the system may work like a tub where extra gas put into the system raise the overall level and can be taken out of the tub anywhere without causing any specific costs distance of transportation shall not be a significant factor for deriving tariffs.

Summary of stakeholders' comments

TSOs stress that the design of the tariff system should take into account not only the size of the transmission system but also the structure of the network. They see a need for clarification on the issue when a network can be considered as sufficiently meshed.

Geographic Scope of the entry exit zones (TSO, national, regional zones)

53. As a general rule there shall be at least one entry and one exit point per country with published tariffs on each entry and exit point to national markets. The concrete number of entry and exit points per country shall be approved or proposed by the responsible regulatory authority upon suggestion submitted by each TSO on a case-by case basis. Determination of entry and/or exit points shall among others take into account both the economic feasibility and specifics and requirements of national and regional markets with a view to facilitate competition and security of supply.

5 Part 2: Recommendations on Tariff Structure for Cross Border Flows

The responses received from stakeholders on the “Report on the Transmission Pricing (for Transit) and how it interacts with Entry-Exit Systems” within the public consultation process underlined the need for a harmonised regulatory approach with regard to tariff treatment of gas flows crossing borders. The responses highlighted that differences in regulatory treatment may result in market distortion and create restrictions in investment.

An assessment of the stakeholders’ positions consequently suggest recommendation on the tariff treatment of gas flows crossing borders covering the following questions:

Harmonised regulatory tariff treatment shall be developed in the following areas under the current legal framework

- Incentives for non-domestic investment
- Methodologies for OPEX and CAPEX
- Methodologies for tariff setting covering:
 - Duration of contracts and consequences for tariffs
 - Interruptible contracts
 - Backhaul flows
 - Use of auction revenues
- Requirements on methodologies of tariff benchmarking

In depth analysis of further questions concerning the interaction of cross border flows and entry exit systems require a separate assessment in context with the possible development of an EU grid. With respect to cross border tariffication it has to be evaluated:

- Whether closer TSO co-operation in cross border tariffication would be sufficient to meet the requirements of efficient cross border flows.
- If not, whether it is possible to introduce a European Entry Exit System for Gas Transit flows under the current legal framework (national and European legislation, EU Gas Regulation 1775/2005/EC)?
- If not, which legal requirements would be necessary on a European level to establish a European Entry Exit System for Gas Transit flows (European Grid Code, Inter TSO cooperation and payments, Regulatory competences on European level)?