

## **GIE answer to CEER consultation paper “Draft Vision for a European Gas Target Model”**

---

### **Introduction**

At the 4th workshop on the Gas Target Model organised by CEER in Brussels on 28 June 2011, CEER first presented its views regarding security of supply and investments. CEER then presented the current state of discussion and its draft vision for the Gas Target Model. CEER announced that further feedback from stakeholders is expected by answering a public consultation that has been launched on 11 July.

Having in mind several deficiencies during the TM development process, especially in respect of its organisation and structure, GIE welcomes the opportunity to respond to this public consultation and provide more detailed comments on the main discussion subjects regarding the Gas Target Model. GIE appreciates improvements in the process to deliver a Gas Target Model in line with the requirements of the conclusions of Madrid Forum XIX<sup>1</sup>, in advance of the further discussions in September at Madrid Forum XX. This document should be considered in addition to the several contributions that GIE has already provided in the Gas Target Model process.<sup>2</sup> The contents of this document have been provided to CEER through the online questionnaire.

### **What is GIE?**

Gas Infrastructure Europe (GIE) is an association representing the sole interest of the infrastructure industry in the natural gas business such as Transmission System Operators, Storage System Operators and LNG Terminal Operators. GIE has currently 70 members in 25 European countries.

One of the objectives of GIE is to voice the views of its members vis-à-vis the European Commission, the regulators and other stakeholders. Its mission is to actively contribute to the construction of a single, sustainable and competitive gas market in Europe underpinned by a stable and predictable regulatory framework as well as by a sound investment climate.

---

<sup>1</sup> Point 6 of the conclusions of Madrid Forum XIX states : “*The Forum encourages regulators to continue the work in ACER and with the appropriate involvement and consultation of Member States and stakeholders to further improve the transparency of the process and to present to the next Forum the results of the Gas Target Model process.*”

<sup>2</sup> “GIE’s response to CEER’s Call for Evidence” of 14 January 2011; “GIE feedback on CEER workshop #2 on Target Model held on 22 February 2011” of 8 March 2011; “GIE views on Gas Target Model – Focus on storage” presentation delivered at the 11 April workshop; “GIE feedback on CEER workshop #3 on Target Model held in London on 11 April 2011” of 26 April 2011; “GIE views on Gas Target Model”, presentation delivered at the 28 June workshop.



## **General comments on CEER's consultation**

Operators and investors of natural gas infrastructure need clarity on the scope and content of the Target Model as well as coherency between all European – and national – initiatives aiming at introducing new access rules. The current uncertain situation is detrimental to operators and investors as it could possibly impact the present and future economic value of natural gas infrastructure, increasing thereby the risk of these activities.

The Third Energy Package has introduced the concepts of Framework Guidelines and Network Codes to progressively harmonise access conditions to transport gas across Europe. There is no such process for storage, which is often subject to negotiated TPA, nor for LNG terminals.

As access to the transport side of the interconnection points with storage or LNG terminals has to be consistent with the provisions of the Network Codes, the Target Model may indirectly impact on the access to storage or LNG facilities. However that would modify the present and future economic value of these facilities.

Given the above, the Target Model should not affect competitive activities which are key elements for the development of the internal gas market and for the provision of security of supply in Europe. The future gas supply of Europe will require many new investments in upstream production and infrastructure, LNG terminals and storage. The Target Model should consistently take into account possible interaction with storage and LNG terminalling but should not negatively impact on competitive activities. The Target Model should leave full freedom to LNG activities for defining and implementing access rules that are consistent with the access rules on the transmission side.

## **Answers to consultation's questions**

### **Question 1: What are stakeholders' views on the definition of a "functioning wholesale market"?**

CEER proposes three indicators to assess the absolute and relative functioning of wholesale gas markets: the HHI index, the number of gas sources and the gas demand within the zones. GIE has the following comments on the proposed indicators:

- The *HHI index* can be defined in several ways, each one leading to differing results, i.e. wholesale volume sold within the market; retail volume sold within the market; booked entry capacity (including or not production and storage); booked exit capacity (including or not cross-border capacity); traded volume (bought / sold / both)... It is important that the definition is clear and that reliable figures can be used, in line with the aim to measure the "sufficient presence and low concentration of gas traders active in the wholesale market".<sup>3</sup>
- The *number of gas sources* also deserves further refinement: an LNG regasification terminal can be considered as more than one source as LNG can come from various countries; storage allows time-swaps and stored gas to compete with pipeline gas on the same market; a gas source immediately connected to one market can compete with sources in other markets if

---

<sup>3</sup> The chart "HHI in national gas wholesale markets" on p. 5 of the CEER presentation "Vision for a European Gas target model – State of discussion" of the 4th CEER workshop, coming from p. 8 of the Commission Staff Working Document "2009-2010 Report on progress in creating the internal gas and electricity market" of 9 June 2011 contains obvious errors. The EC report and its Technical Annex references the source as "Regulators data" without describing the methodology used for the HHI calculation.



sufficient interconnection capacity is in place. Note that the Energy Infrastructure Package considers that “[e]very European region should implement infrastructure allowing physical access to at least *two* different sources”.<sup>4</sup>

- The *gas demand within a market* does not play a significant role regarding the functioning of the market: in the CEER statement, gas demand is only represented by the “volume of gas consumed”, but the “total volume of gas traded” and the “churn ratio” are more important. Even more significant is the level of interconnection capacity with neighbouring markets, enabling competition with gas from these neighbouring wholesale markets, improving the “total volume of gas traded” and the “churn ratio”.

Let us recall that, according to economic principles, goods markets are integrated if the price difference between markets is lower than the transaction costs of moving goods from one market to the other. Assuming that the transaction costs for gas transmission between market zones is mainly composed of exit and entry transmission tariffs, gas wholesale markets are thus to be considered as integrated if the price difference between market zones is lower than the transmission tariffs between those market zones. In this case, the indicators have to be calculated on the effectively integrated markets, consisting of the several wholesale markets where price convergence (within the transmission tariffs) is achieved.

As it tries to catch a complex reality in one small number, any quantitative Indicator has to be used carefully. First, each indicator has to be defined unambiguously in order to be calculated reliably in every wholesale market. Second, several indicators should be proposed, covering several aspects of the complex reality. The absolute value of these indicators has to be interpreted taking into account the highly concentrated gas production market outside the EU.

**Question 2: What are stakeholders’ views on the three options identified to enable functioning wholesale markets, i.e. (i) creating market areas at national level for Member States not able to meet the criteria of a functioning wholesale market; (ii) creating a trading region covering more than one country; or (iii) creating cross-border market areas?**<sup>5</sup>

Option (i) stems from requirements of the Third Energy Package. Options (ii) and (iii) can be envisaged if the resulting gas wholesale markets are not meeting the criteria for “functioning wholesale markets” (see also answer to question 1).

Several issues have to be solved in order to achieve the trading region model or cross-border market zones:

- An extensive alignment of many TPA rules is needed: all rules related to access to entry capacity have to be completely harmonised as well as most balancing rules – even if several balancing zones remain – in order to prevent inappropriate balancing incentives from market participants. We note that the concept of “trading region” is not fully clear; the main difference between the two options seems to lie in the requirement for common balancing rules in option (iii).

---

<sup>4</sup> European Commission, “Energy infrastructure priorities for 2020 and beyond – A Blueprint for an integrated European energy network”, ref. COM(2010)677 final, 17 November 2010, p. 12.

<sup>5</sup> Point (i) of the question is in contradiction with the last-but-one paragraph of p. 12 of the consultation document “Draft Vision...”, *op. cit.* The statement (i) in question 2 should be: “(i) creating market areas at national level for Member States *that are able to meet* the criteria of a functioning wholesale market”.



- Whereas option (i) is compliant with the Third Energy Package, the choice of any other option should be preceded by a robust consultation with all the stakeholders as well as by a sound cost-benefit analysis.
- The creation of a full entry/exit zone across previously separated market areas may require the creation of huge capacity between them. As such capacity will not be recovered through capacity bookings, tariffs at other entry/exit points will increase, impacting also shippers not benefitting from such capacity. It is also important to note that such an increase should not impinge on flexibility tools; for instance increased exit charges should not be applied to storage sites as that would lead to their underutilisation.
- The missing revenues of the previous cross-border points within the trading region would need to be recovered through other entry or exit tariffs within the trading region with the risk of cross-subsidisation.<sup>6</sup> As noted above, the negative impact on storage utilisation should be avoided.

As the costs and the benefits of the merger of market zones lie with different parties, any such merger of market zones should be subject to an extensive cost-benefit analysis and impact assessment, with due consultation of all stakeholders. This analysis should assess the impact on TPA rules (capacity, balancing), capacity level, investments, tariffs, new tariff distribution across entry/exit points, but also on the functioning of the wholesale market (indicators before and after merger) and the expected gains for the end-users in each previous market zone. It should result in a significant improvement of social welfare of the concerned Member States before adoption.

Options (ii) and (iii) will require a framework for extensive cooperation between TSOs, NRAs and Member States in order to align the legal and regulatory frameworks.

**Question 3: What are stakeholders' views on the proposed steps until 2014 for enabling functioning wholesale markets?**

2014 has been proposed by policymakers as the target for the completion of the Internal Gas Market.<sup>7</sup> The current process of Framework Guidelines and Network Codes is likely to produce harmonised rules for the main elements of the future Internal Gas Market – mainly capacity allocation mechanisms, congestion management principles, balancing and interoperability.<sup>8</sup> The implementation of these measures across Europe is likely to enhance strongly the functioning of the current wholesale markets. Improvement of access to cross-border capacity will likely improve price convergence between the interconnected markets, resulting in further market integration. Moreover, it should be noted that whereas gas markets in the Western part of Europe enjoy already a fairly high level of development, more time may be needed for other parts of Europe to develop higher levels of market liquidity. This is also linked with the greater dependence on one source of gas import due to geographical position.

Regarding the merger of market zones, implementation depends first on the positive cost/benefit analysis and impact assessment, with due consultation of all stakeholders (as explained in answer to

---

<sup>6</sup> The accuracy of entry and exit tariffs to reflect actual transportation costs decreases as market areas become bigger. Therefore it is likely that the merger of market areas introduces cross-subsidisation, possibly resulting in sub-optimal reactions from shippers who would preferentially book capacity on the entry points where the tariffs are lower than the actual costs.

<sup>7</sup> Conclusions of the European Council, 4 February 2011, ref. EUCO 2/11, p. 3.

<sup>8</sup> Article 6(1) of Regulation 715/2009/EC.



question 2). The “economic viability” is one criteria of the analysis, among many others. If investments in capacity are required to enable a full entry/exit regime in the bigger zone, it is highly unlikely that they would be realised before 2014. Alternative measures could be designed to ensure a sufficient level of capacity, if possible (i.e. flow commitments, capacity buy-back), provided full cost recovery for TSOs is ensured.

**Question 4: What are stakeholders’ views on the full implementation of the CAM network code and the CMP guideline at all interconnection points by 2014 at the latest?**

The full implementation of the CAM Network Code and the CMP guideline depends on several conditions:

- Timely delivery of the CAM Network Code by ENTSOG;
- Clarity on the CMP guideline by the Commission, and on the outcome of the comitology process;
- Compatibility of the measures of CAM Network Code and the CMP guidelines;
- Sufficient time for TSOs to implement the CAM and CMP measures, who need the guarantee to recover incurred implementation costs.

GIE supports pilot projects that would provide early implementation of the proposed CAM and CMP measures. Such projects help assess the possible impact of those measures in the functioning of the wholesale market.

Other pilots that aim at testing implicit allocation of capacity or other mechanisms of linking wholesale markets are also supported by GIE.

**Question 5: What are stakeholders’ views on the proposed pilot projects to design and trial an implicit capacity allocation mechanism between at least two entry-exit zones in different Member States by 2014?**

GIE supports pilot projects aiming at designing and trialling an implicit capacity allocation mechanism, provided the costs for such pilot projects can be recovered by the parties involved or, preferably, if incentives are given to the parties involved. See also answer to question 4.

**Question 6: What are stakeholders’ views on the need for explicit long-term capacity allocation?**

The European gas capacity market is based on capacity subscriptions by shippers that give them the option to flow gas when they need it, while providing revenues to TSOs to recover investment costs – ensuring a proper cost allocation between shippers, TSOs and end-users. At cross-border interconnection points, capacity bookings ensure that costs are paid by the beneficiaries of the capacity – possibly in other countries – through the shippers. Therefore capacity bookings are an effective mechanism to allocate costs to the right beneficiaries throughout Europe.

Long-term explicit bookings are needed for two reasons:

- To provide a mid- to long-term vision on the possible future flows and assess security of supply on a capacity point of view;
- To provide market signals to TSOs regarding future needs in capacity, and therefore the basis for the assessment of future investments.



The Third Energy Package gives a clear preference for market-based mechanisms. Therefore the long-term explicit bookings (longer than 1 year) play an important role in the design of allocation mechanism.

**Question 7: How should economically-viable projects for cross-border capacity investments be determined?**

Economically-viable projects for cross-border capacity should be determined on the basis of the long-term capacity bookings provided by shippers through a market test (see also answer to question 6). The risk sharing of cross-border investments between TSOs, shippers and end-users is specified by the legal and regulatory context of each country. Projects which are economically viable can be financed on the financial market at acceptable conditions – meaning that an appropriate risk/reward balance is achieved.

Investments in security of supply or reverse flows according to Regulation 994/2010/EU should also be made economically viable through long-term capacity bookings. Alternative forms of financing will be discussed in the framework of the Energy Infrastructure Package.

Alternatively, an exemption from TPA rules and/or tariffs could be required according to article 36 of Directive 2009/73/EC. In such case, the economic parameters of the business plan and/or the required level of capacity bookings can be adapted to make a project economically viable.

**Question 8: What are stakeholders' views on the proposed development of an economic test to trigger new capacity, based on market demand established through coordinated long-term auctions? If in favour, by whom and how often should such a test be conducted?**

GIE welcomes the proposal to develop an economic test to trigger new capacity through a coordinated long-term capacity allocation process,<sup>9</sup> where “long-term” means one year or more. However the legal and regulatory context of each country – in particular establishing the risk sharing between TSOs, shippers and end-users – has a huge impact on the risk/reward balance for TSOs and the design of a unique economic test across Europe is likely to be challenging (see also answer to question 7).

A yearly process seems ambitious, given the huge amount of work involved in the coordination of cross-border investments between freely-allocable entry/exit zones. Indeed the increase of capacity at one entry or exit point within a network may impact the capacity at other points. Investments within the network have to be designed to match the expected increase of capacity at all entry and exit points at the same time, while ensuring a matching with investments at the other side of the border. Therefore a two-year process – in line with the TYNDP process of ENTSOG – could be appropriate, as a starting point. Such market tests should be run whenever there is an indication of congestion.

**Question 9: What are stakeholders' views on the pricing of cross-border transmission capacity?**

---

<sup>9</sup> Note that new capacity is currently not sold through auctions in Europe, but at regulated price. In the UK, the release of new capacity through auctions is not a true auction. In fact shippers are asked for the *value* they give to new capacity, which is then compared to the *cost* at which the TSO can provide it. The clearing price matches the *value* for shippers with the *cost* for the TSO, who has to maximise the capacity released.



On the one side, tariffs should be calculated according to the principles of art. 13 of Regulation 715/2009/EC.<sup>10</sup> On the other side, long-term capacity bookings are a basic element of cost recovery of infrastructure investments in Europe, as indicated in the answer to question 6.

In gas markets, it is not necessary to have identical prices across market zones like in electricity, where each market covers more or less its demand by its own production. Gas has to be transported on long distances and the basis flows from production to consumption areas need a price difference to ensure investments in the necessary infrastructure.

Cross-border gas infrastructure represents a significant part of the total gas infrastructure in Europe, contrary to electricity. If there is no reserve price for day-ahead capacity in explicit or implicit auctions, day-ahead capacity would have no value as long as there is no physical congestion.<sup>11</sup> This is detrimental to long-term bookings for which the reserve price would be set at the regulated price: network users are not incentivised to book long-term capacity as it would be more expensive than short-term capacity. Moreover this would be detrimental to investments because TSOs would need to invest to remove congestion, while the revenues would decrease because congestion is removed.

If there is no reserve price, the cost of moving gas between markets is assumed to be zero and this means that the actual cost of the interconnection has to be recovered by other mechanisms than capacity bookings, which introduces a discrepancy with respect to cost recovery mechanisms for the domestic market arrangements. This would result in tariff cross-subsidisation because the beneficiaries from the capacity would not pay for it. This is contrary to the requirements of the Third Energy Package.

In conclusion, if introduced in gas markets, market coupling should allow for implicit auctions with a reserve price equal to the transmission tariffs between the connected markets, identical to the reserve price for long-term auctions.

**Question 10: Do you think that the elements of the gas target model provide a good framework for the integration of renewable energy?**

GIE regrets that the topic of renewable energy integration has been put forward very lately in the context of the Gas Target Model discussions. As a matter of fact, GIE would like to note that whereas the Gas Target Models has focused on the delivery of the Internal Gas Market, the possible future market evolution due to renewable energy integration or domestic production evolution, which is likely to change gas flows in Europe, have not been considered so far. It is therefore important that the final Gas Target Model does not include overly restrictive proposals which could potentially impact on the evolution of the market and trading arrangements that the new changing market circumstances would necessitate.

---

<sup>10</sup> Art. 13(1) of Regulation 715/2009/EC requires tariffs or tariff methodologies for transmission to “*reflect the actual costs incurred*”. Alternatively, market-based arrangements, like auctions, are possible. Further, tariffs shall “*avoiding cross-subsidies between network users and providing incentives for investment and maintaining or creating interoperability for transmission networks*”.

<sup>11</sup> This fact is recognised on p. 11 of the CEER presentation “*Connecting markets*”, Gas Target Model Workshop, London.



At this point we would also like to recall that gas infrastructures (transport, storage and LNG) are well suited to deal with the integration of renewable energy in the energy mix.<sup>12</sup> They provide flexibility at an affordable cost and are well-suited to supply gas-fired power plants that provide back-up for intermittent renewables. Moreover they support innovative uses of gas, like CNG vehicles, LNG for ships and trucks, micro-CHPs, and are capable of integrating new technologies – such as CCS, Compressed Air Energy Storage (CAES), power-to-gas and energy storage – which could enable further integration of renewable power production.

The key aspects of the Gas Target Model regarding integration of renewables are access to gas (commodity trading) and balancing. As an increased share of intermittent renewables increases the volatility flows, the Gas Target Model has to be efficient in this case – especially at the cross-border interconnection points.

GIE would like to underline that the costs associated with renewables integration should be fully recovered by infrastructure operators. Such costs should be clearly identified and allocated in a way which avoids cross-subsidisation between different classes of infrastructure users, in accordance with art. 13(1) of Regulation 715/2009/EC.

**Question 11: Are there elements missing in the target model that are necessary for the integration of renewable energy at a European level, possibly with a view beyond 2014?**

See answer to question 10.

---

<sup>12</sup> For example, in Spain, the electricity production is mainly based on renewables (wind, solar) backed-up by CCGTs. Gas networks and LNG provide for the necessary flexibility between the demand and the intermittent supply from renewables.