



Shell Energy Europe

# CONCEPTUAL MODEL FOR THE EUROPEAN GAS MARKET

Response of Shell to ERGEG's Public Consultation



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14th January 2011

Dear Mrs Geitona,

### Conceptual model for the European Gas Market

Shell welcomes the opportunity to comment on CEER's vision paper for a conceptual model for the European gas market. Developing the target model should help progress towards the overall aim of facilitating the creation of a single, competitive, efficient and sustainable internal market for gas in Europe.

Shell strongly supports the ongoing implementation of the EU Third Energy Package and the last three years have seen considerable effort from policymakers, market participants and consumers in developing the 3<sup>rd</sup> Package to help underpin further development of the internal market for gas (and electricity).

Given that Member States are now in the early stages of implementation together with development of the European Network Codes, it seems appropriate and timely that legislators, regulators, market participants and other stakeholders reflect on progress to date and carefully consider what market design is now required to further develop the European gas market.

We agree with the goals for the model as set out by CEER and look forward to providing detailed analysis and comment over the coming months as the model is developed. As a starting point it is necessary to reach agreement on what the market is intended to deliver. In this regard, we endorse ERGEG's view that:

*'The aim of the internal market is to deliver real choice for all customers of the European Union so as to achieve efficiency gains, competitive prices, and higher standards of service, and to contribute to security of supply and sustainability.'*

The efficiency gains associated with the target model must start with the basis on which the monopoly Transmission System Operator (TSO) is regulated. Experience in the more liberalised markets has shown that if consumers are to enjoy the benefits of competitive retail, shipping and trading markets, there must be a proper, consistent and robust method of monopoly network regulation.

As such, the reference to Directive 2009/73/EC (Gas Directive) that:

*'...the internal market in natural gas suffers from a lack of liquidity and transparency hindering the efficient allocation of resources, risk hedging and new entry'*

does not adequately reflect the fact that highly competitive national markets do exist within the broader European market. The target model should, where possible and appropriate, learn from such markets and ERGEG should take care to avoid the risk of failures associated with over simplification and generalisation.

Competitive prices are a clear benefit from an efficient market. There are several aspects to prices and these need to be recognised in the arrangements underpinning the target model. The target model should deliver competitive prices and incorporate the following characteristics:

- they are not unduly volatile - it is vital that prices are based on supply & demand fundamentals that are reflective of the structure of the gas industry and the way in which gas is traded. Spurious and commercially self-serving analogies with other markets, eg. power, must be avoided;
- they provide accurate and reliable long term investment signals.

Gas has a crucial role to play in contributing to security of supply. Security of supply itself depends on securing or attracting investment in assets and/or other financial commitments, e.g. long-term transportation rights. Given the global competition for investment funds, it is crucial that the European gas target model and the price signals it generates provide not only accurate and reliable investment signals but also ones that are sustainable in order to mitigate undue investment risk.

### ***The Approach to Market Development:***

Regulators are best placed to provide the framework and tools by which a competitive market can develop. However, we do not believe it is in the interests of consumers, market participants or regulators themselves, if regulators become prescriptive in directing how the market makes use of such tools.

### ***The Target Market:***

Bearing the above in mind, key features of the target model should ensure that:

- An emphasis on the development of competitive wholesale markets through the transparent and consistent economic regulation of monopoly networks at interconnection points. The development of Network Codes should prioritise the following:
  1. a market based balancing regime, preferably daily;
  2. charging methodologies; and
  3. predictable tariffs.
- Competitive activities such as storage and LNG importation are out of scope;
- Promoting competitive wholesale markets that are sustainable and provide reliable long-term investment signals in all infrastructures. There should be an enforceable obligation on network operators to ensure they have in place transportation arrangements that demonstrably promote security of supply and investment;
- A recognition of the on-going role to be played by long-term transportation contracts in mitigating investment risk and enhancing security of supply;
- The sanctity of existing contracts should be maintained. Access to transportation capacity should properly be resolved by obliging network operators to provide (tradable) capacity and products in response to market signals from system users; and
- Putting in place the framework for hub-to-hub trading and market coupling but allowing the **market** to decide the speed with which it wishes to proceed.

### **The Role of Gas in a Diversified Energy Mix:**

When addressing market design it is worthwhile understanding the key role gas has in the energy mix. There is an abundance of Natural Gas; resources are plentiful, growing and geographically diverse. Conventional and unconventional recoverable gas resources can supply more than 250 years of current global production, so we expect gas to play a key role in the EU's long term energy mix.

Gas is the cleanest burning fossil fuel and gas plants emit 50% less CO<sub>2</sub> than a modern coal plant and 60-70% less CO<sub>2</sub> than an old coal plant. Gas has much lower capital costs per MW installed versus coal, nuclear and wind. In short gas should be part of the long term solution as a 'destination fuel' so we see the work being undertaken to develop a conceptual model for the European gas market as very important.

Europe is within economic reach of 70% of global gas reserves through an extensive and growing infrastructure. The gas target model has an important part to play in providing good market design and continued development of a stable regulatory framework to support long term investments in gas infrastructures and interconnectors.

Shell appreciates the opportunity to provide our comments. We would be pleased to provide any additional information that may be helpful regarding our views. We look forward to continuing our firm commitment to and support for ERGEG's work.

Kindest regards.

Yours sincerely,



Matthew Allan  
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Shell Energy Europe Limited, acting through its agent  
Shell International Trading and Shipping Company Limited

## SHELL ANSWERS TO THE QUESTIONS FOR STAKEHOLDERS

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### 1. What are in your view the main goals to be aimed at by the gas target model beneath the high-level policy goals set out by the 3rd Package?

#### Harmonisation of TSO Regulation

Experience from elsewhere has shown that the most basic requirement of a competitive gas (or electricity) market as envisaged by the 3<sup>rd</sup> Package is the rigorous, transparent and consistent regulation of monopoly network. This is already in place in some markets, e.g. GB, less so in others. In particular, in relation to National Grid, we have in mind Ofgem's Periodical Price Control Review work and the obligations contained in its Gas Transporter licence.

It is perhaps no coincidence that the GB gas market, at all levels, is most competitive of any gas or power market in Europe and that the NBP is the most liquid of any gas or power trading hub in Europe.

This is not to suggest that every aspect of a single market will be transferable or applicable everywhere else. However, there are some obvious, high-level hurdles to the development of a competitive market, e.g. investment obligations, timeframes, liability for non-provision of capacity, etc, that could be resolved by looking to best practise elsewhere.

Harmonisation of these aspects of network regulation would take away a degree of uncertainty that currently exists for shippers who wish to ship/trade gas across interconnection points, sometimes as the result of investment in physical assets.

#### Consistency

The goal of a target model should be to achieve consistency between the interactions of various aspects of regulatory policy aimed at creating a single market, e.g. the 3<sup>rd</sup> Package, development of the Network Codes. Equally, this consistency has to incorporate the requirements and/intent of other legislation, e.g. Security of Supply Regulation.

Another aspect of consistency that will help underpin the target model is a common approach at interconnection points to operational/commercial issues such as transportation capacity calculation levels, tariff calculation and the gas balancing/cash-out regime.

#### Security of Supply

The target market model should seek to demonstrate that the market approach remains the best means of delivering security of supply. Moreover, the competitive position and reliability of gas versus competing fuels should not be compromised by the target market arrangements.

As such, the market model should:

- a) recognize and provide the certainty required in relation to investment in assets that will enhance security of supply;
- b) not penalize investment in indigenous gas sources by increasing risk; and
- c) not encourage undue price volatility, either in terms of transportation or commodity prices.

## 2. What are in your view the major developments and anticipated changes in the European gas market (on national and international level) and where would a target model bring added value? Including:

### **a. the role of long term capacity contracts in the future European gas markets;**

Long-term transportation contracts will remain a fundamental aspect of the European gas market. Such contracts have been and will continue to be required to manage risk associated with the considerable investments in upstream and other assets, e.g. storage or import terminals. These investments are essential to a sustainable market that can deliver security of supply.

Some market participants have called for existing transportation contracts and capacity to be 'brought to the table' as part of a big-bang capacity allocation. To do so would be a mistake.

In the absence of any competition concerns, market participants would be concerned if legally binding existing transportation contracts were rescinded to 'free up' capacity for others. This move may increase the perceived risk associated with future long-term financial commitments, an important consideration in the context of import dependency. Rather, the target model should respect the terms and conditions of existing long-term transportation contracts, e.g. in terms of duration, capacity levels and renomination rights.

We therefore do not support the proposal in the Revised Pilot Framework Guidelines on Capacity Allocation Guidelines that:

*Transmission system operators shall amend all relevant clauses in capacity contracts and/or relevant clauses in general terms and conditions relating to the allocation of capacity at relevant interconnection points, as defined in 1.1, in accordance with the terms of the network code. The relevant clauses shall be amended within six months after entry into force of the network code. This requirement shall apply regardless of whether the relevant contracts or general terms and conditions provide for such an amendment. Point 2.4.2 remains unaffected.*

*Upon expiry of transportation contracts the relevant capacity provisions shall not be subject to tacit extension.<sup>1</sup>*

For the same reason, we do not support the 'firm day-ahead Use-It-Or-Lose-It' mechanism in the current Congestion Management Procedure proposals<sup>2</sup>. Such a mechanism would have the effect of limiting renomination rights in existing transportation contracts.

Rather, the way in which monopoly TSOs should be required/incentivised obligated to respond to market investment signals is the way forward.

### **b. the role of hubs / gas exchanges;**

Hubs and gas exchanges will undoubtedly play an increasingly important and vital role in the target model, and their development should be supported. In an increasingly global gas market, liquid markets are required to generate market signals for shippers to better manage their global portfolio risk.

Trading, however, does not only take place at hubs or exchanges. The most liberalised of markets are characterized by traders exercising the choice as to where they trade; hub and non-hub trading can happily co-exist.

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<sup>1</sup> Para 1.2, 'Revised Pilot Framework Guidelines on Capacity Allocation Mechanisms', E-10-GWG-71-03, ERGEG, 7 December 2010.

<sup>2</sup> p3, 'Congestion management procedures Commission proposal for guidelines to be adopted via a comitology procedure'

While the target model should develop the conditions for the development of hub trading, regulators should not therefore mandate the sole use of hubs or exchanges for trading. It is for that reason that we do not support the proposal in the Capacity Allocation Mechanism proposals for the mandatory use of bundled services<sup>3</sup> as the net effect is to remove the option of border trading.

Rather, the market should be allowed to gravitate towards their use at its own pace; the NBP illustrates this point. While non-hub trading still takes place in GB, over a period of time the majority of it has switched to the NBP.

**3. What are in your view the key elements of a conceptual model for the European gas market to contribute to non-discrimination, effective competition, and the efficient functioning of the internal gas market? Please include views on the key aspects of market design such as, capacity allocation and congestion management procedures, network tariff arrangements, wholesale market pricing, balancing arrangements and, gas quality specifications? Please consider the interaction of these arrangements.**

Aside from the comments in response to Q2 wrt CAM, CMP and existing contractual arrangements, it is important that the provision of capacity and the means of resolving any congestion are considered together. In relation to CAM, TSOs should be required to:

- a) Consult with shippers and provide the required mix of long, medium and short duration products required. It is vital that what is provided is what is required by the market, not what the TSOs are willing to provide;
- b) In being required to operate an economic and efficient network, TSOs must have in place, and approved by the regulatory authorities, the following:
  1. An obligation to offer a pre-declared maximum physical volume of capacity;
  2. A clear economic test that will trigger physical investment;
  3. An auction procedure for the allocation of capacity products, namely those of a shorter duration, including the setting the basis on which any reserve prices are set; and
  4. An obligation to offer interruptible capacity at the same time as any firm capacity, leaving shippers to assess the risk of future interruption.
- c) TSOs must be obliged to buyback – at market rates – any capacity rights that they subsequently can't make available on the day. Regulators need to make sure that Force Majeur declarations are not used as a means of getting round this obligation.

Many of the characteristics of a preferred CAM are also relevant to CMP, eg. an obligation to make maximum physical capacity available, a buyback obligation, etc. There are, however, two additional requirements that should form part of CMP:

- a) Up-to-date and transparent information on network planning assumptions and investment, including any changes in network flows that could impact on the declared level of capacity at any point; and
- b) There should be no question of limiting the renomination rights for any capacity already purchased by shippers. To do so would:
  1. Reduce the commercial incentive on TSOs to invest in response to market demand; and

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<sup>3</sup> See para 2.4.2, 'Revised Pilot Framework Guidelines on Capacity Allocation Mechanisms', E-10-GWG-71-03, ERGEG, 7 December 2010



2. Just as importantly, it would undermine the value that shippers ascribed to the capacity at the time of purchase, possibly undermining the credibility of future capacity offerings.

In relation to the issue of tariffs, we consider that many market participants would want both a transparent charging methodology and stability of transportation charges. Given the inextricable link between the setting of the regulated asset base, the rate of return and subsequent transportation prices (to recover allowed revenue), certain aspects of neighbouring TSOs' price controls may need to be harmonised.

By way of example, two TSOs may have revenues set for different periods and/or at different times or may be allowed to under/over recover revenues in a different fashion. Given that both these situations will have an impact on subsequent tariff levels, it is not immediately clear that stability of tariffs will be achieved. This uncertainty could be unhelpful for those who wish to have certainty regarding the costs of moving gas from one TSO to another, as could a difference in the structure of charges, e.g. capacity/commodity split.

Subject to honouring their existing transportation contract obligation, it is key that any model requires TSOs to be incentivised and obligated to maximise capacity offered to the market, following consultation with shippers. This latter point is important in that shippers must be able to indicate the type and nature of products they would like to access.

For example, it would seem plausible that a typical shipper would like:

- a) the option of a simultaneous choice between firm and interruptible capacity; in some markets interruptible capacity is only made available once firm rights have been sold-out; and
- b) to access such capacity as near to the gas day as possible.

With regards to gas balancing, from experience we have a preference for a daily, market based regime. An important characteristic of our preferred choice is that the TSO only has a residual balancing role – the primary role remains with shippers who face market-based prices for their imbalances. Economic signals ensure within-day market response, so flexibility is used efficiently & liquidity improves.

#### **4. What level of detail, e.g. level of harmonisation, do you expect from the CEER vision paper on a conceptual model for the European gas market? For example:**

##### ***a. Do we need a definition of an EU-wide gas day? If yes, what should this definition be?***

There appears to be a general EASEE consensus in favour of such a proposal. SEEL's preference would be for an EU-wide gas day based on the EASEE-gas definition of 06:00hrs-06:00hrs CET.

##### ***b. How deep should the "reach" of the EU gas market model be, i.e. should it encompass DSOs? Is there a trade-off between vertical depth (i.e. including all levels of national gas markets) and horizontal depth (i.e. integrating balancing zones cross border)?***

The target model should focus on developing a consistent model at the wholesale market level at interconnection points. The reasons for this view are twofold. Firstly, successful and competitive wholesale markets are a prerequisite for a competitive gas market (that brings benefits to consumers). Secondly, a concentration on 'vertical depth' would be impractical. The differences between markets would make such an option unrealistic and slow down progress in areas where agreement could be reached.

**5. Which areas or aspects of the gas market should be affected by the target model and what are the constraints for such a model ?**

The focus should be on the downstream wholesale markets, namely in relation to the terms, conditions and structure of services offered by TSOs at interconnection points. In that context, the 3<sup>rd</sup> Package has already identified the relevant areas that need to be covered by the Network Codes, e.g., capacity allocation, gas balancing, tariffs etc.

The initial development of the target model should concentrate on ensuring that ENTSOG develops the codes as required by legislation.

**6. Which areas or aspects of the gas market should be excluded from the target model description and left to national/regional decision making ?**

In line with the answer to Q5, areas that should be excluded from the target model are:

- Those that fall into the camp of competitive activities, eg. shipping, supply, trading and retail activities. Regulators and the target model should provide the framework for the development of these activities, not be prescriptive about their nature ; and
- Regulation of upstream activities, either directly or indirectly.

**7. What are the options for integrating the currently fragmented European markets ?**

Given our preference for a horizontal rather than a vertical approach (see our answer to Q4b), the target model and the relevant regulatory framework, e.g. Network Codes, should concentrate on integration at the wholesale level. The most appropriate manner in which to proceed is take a realistic view of where integration can most likely take place within a reasonable timeframe.

This process could be speeded-up or made more efficient by the creation of a pan-European System Operator (SO) that would operate at points of interconnection. The particular model we have in mind could be based on the GB electricity market, where National Grid acts as the GB-wide SO, even though it is only the Transmission Owner (TO) of one of the three networks.

Moreover, given that the network codes are meant to apply at interconnection points, the monitoring of their application could be easier under this model.

***a. Should we merge balancing zones to create cross border or regional balancing zones or market areas? How many balancing zones does Europe need and how big should they be ?***

There should not be an ex-ante view of the number of merged balancing zones or the speed with which they are created. While it may be tempting to suggest a role for regulators and/governments in taking the initiative in this area, a far better and more optimal solution would be to allow market forces to decide 'when and how many'.

Notwithstanding this point, given that TSOs should have an enforceable obligation to operate an economic and efficient network, a question that regulators could usefully ask of them on a regular basis is if this would be better done by merging with a neighbouring zone?

***b. Is the coupling of market areas as it is being developed in European electricity markets appropriate for gas ?***

This may be an issue worthy of future consideration. However, given what we say above in response to the issue of merged balancing zones, it would be inappropriate to pursue this policy in the absence of market demand purely on the basis of a comparison with the electricity market.

## APPENDIX – ABOUT SHELL

Shell has been a leading producer of gas in Europe for decades with production in the UK, the Netherlands, Norway, Denmark, Germany and Italy, which combined with third party supplies and a global LNG position gives us an unrivalled position amongst private energy companies. In 2009, Shell produced 915,000 barrels of oil equivalent per day for the European market. Headquartered in London, Shell Energy Europe Limited coordinates Shell's European gas, power and CO2 marketing and trading business across 14 offices around Europe.

### About Shell

Shell is a global group of energy and petrochemicals companies. With around 101,000 employees in more than 90 countries and territories, Shell helps to meet the world's growing demand for energy in economically, environmentally and socially responsible ways. The parent company of the Shell group is Royal Dutch Shell plc, which is incorporated in England and Wales.

### Upstream

Our Upstream businesses explore for and extract crude oil and natural gas, often in joint ventures with international and national oil companies. We liquefy natural gas by cooling and transporting it to customers across the world. We also convert natural gas to liquids (GTL) to provide cleaner burning fuels. We extract bitumen especially thick, heavy oil – from mined oil sands convert it to synthetic crude oil.

Our Upstream businesses are grouped into two organisational units: Upstream Americas, covering the Americas, and Upstream International, covering the rest of the world with major interests in Europe, Asia/Middle East/Russia, Australia/Oceania and Africa.

### Downstream

Our Downstream organisation is made up of a number of businesses. Collectively these turn crude oil into a range of refined products, which are moved and marketed around the world for domestic, industrial and transport use. These include fuels, lubricants and bitumen.

Our manufacturing business includes Refining, Supply and Distribution. Marketing includes our Retail, Business to Business (B2B), Lubricants and Alternative Energies and CO2 management. Our Chemicals business has dedicated Manufacturing and Marketing units of its own. We also trade gas, power, crude oil, oil products and petrochemicals primarily to optimise feedstock for our Manufacturing business and to supply our Marketing business.