

ERGEG Consultation on a Gas Target Model

Submission by Paul Hunt¹

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Summary

Gas Market Challenges

ERGEG has set out its goals for the gas market, but these, more usefully, may be defined as remaining challenges:

- Entry/exit systems have not been implemented effectively;
- National markets have not been integrated into an efficient and effective competitive gas market at the Community level;
- Capacity allocation mechanisms are not operating efficiently, in particular when contractual or physical congestion occurs;
- Pipeline capacity, in particular cross-border capacity linking trading hubs, is not being used efficiently;
- There are barriers to the convergence of prices at trading hubs;
- Sufficient investment in network interconnection and import facilities to enhance security of supply and efficient market integration is not forthcoming willingly.

Defining property rights and promoting competitive markets

It is contended that poorly-defined, but well-defended, property rights have hindered meeting these challenges. It is also contended that the development of competitive markets (in both gas and pipeline capacity) is the most effective means of undermining the oligopolistic behaviour of external suppliers that damages the interest of consumers in the EU – and of demonstrating the benefits of competition to the governments hosting and directing these suppliers. Competitive markets will drive long term contracts with inappropriate price indexation out of the market and force re-negotiation and, with appropriate security of supply standards, will address security of supply concerns. ACER will exist from March 2011 and, if necessary, its powers should be enhanced.

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All this requires policy-makers, regulators and market participants to hold the nerve to stay the course and seek to complete the internal market in gas. But it also requires all parties to recognise that a competitive market in pipeline capacity is vital – and, more importantly, to recognise that the extent to which this exists is entirely inadequate.

The focus should be on developing this competitive market in pipeline capacity.

A competitive market in pipeline capacity

ENTSO-G has identified 58 internal EU cross border Interconnection Points (IPs). These are in the middle of pipelines that connect national and sub-national TSO networks and, in general, represent an entry point to one entry/exit zone and an exit point on another. The first step is to define these pipelines, their ownership, start points and end-points, operating parameters, capacity available (whether uni- or bi-directional) and the current arrangements for allocating and managing this capacity. ENTSO-G has also identified 19 inter-TSO connection points within national borders, 13 regassified LNG entry points and 23 external supply points. The pipelines associated with these points should be addressed in a similar manner.

Once these pipelines have been defined (plus any pipelines from internal supply locations), the geographical scope of the entry/exit zones to which they are connected should be reduced. Regulation of these entry/exit zones would continue to be the responsibility of the NRAs, but the regulation of the newly-defined pipelines into and between these entry/exit zones would be subject to regulation by ACER. And the first task would involve defining and allocating capacity in these pipelines in the form of long-term, tradable property rights. ACER would also be responsible to ensure that anti-competitive practices, such as capacity-hoarding, were detected, penalised and eliminated.

It is contended that this effort is necessary to begin to address the challenges that remain.

Introduction

The decision of ERGEG to open this consultation on the target gas model for 2015 is very welcome and it is a privilege to have the opportunity to make a submission.

A brief observation on the process of public consultation is necessary.

Public Consultations

In general, this involves the responsible body, in this case ERGEG, setting out proposals and issues on which it wishes to secure the views of stakeholders and interested parties. Submissions are received, assessed and a document is prepared and published which summarises the responses received. And, in most cases, the responsible body acknowledges the submissions that are broadly supportive of its preferred approach, ignores or dismisses those that raise objections or propose alternative options and carries on to implement its preferred approach.

This diminishes the value of the exercise and runs the risk of ‘groupthink’ or of succumbing to special pleading or woolly-thinking. In contrast, a process that allows for a case to be advanced with supporting evidence and for rebuttals and counter rebuttals to be made (again with supporting evidence) is far more effective at generating robust and well-tested proposals. It would be of considerable value if ERGEG were prepared to convene a hearing where its preferred approach could be assessed and tested against contesting evidence and alternative approaches.

Overview of Submission

The next section examines ERGEG's goals for the gas market and the challenges that remain. This is followed by a brief assessment of how we have arrived at this position, after almost 20 years, and these challenges still remain. The next section contends that staying the course with the development of competitive markets is the most effective means of addressing the obstacles that are, most often advanced, to explain the slow progress and the approach that has been adopted. The final section briefly outlines an approach to kick-start a competitive market in pipeline capacity.

ERGEG's Goals for the Target Gas Model

At the outset it is necessary to recognise the progress that has been made to complete the internal markets in electricity and gas and to compliment the EU institutions on the efforts made – in particular, DG ENER and DG COMP of the European Commission and ERGEG. It seems that a long time has elapsed since the debates between policy-makers and market participants in the early to mid 1990s and the enactment of the 1st Electricity Directive in 1996 and the 1st Gas Directive in 1998, but substantial progress has been recorded in the interim culminating in the Third Legislative Package (TLP) in 2009 and the empowering of ERGEG to progress the development of Framework Guidelines (FGs) in advance of the formal establishment of ACER from March 2011.

However, despite the considerable progress that has been made, ERGEG, when considering the gas target model for 2015, believes that the overall goals should include:

- Effective implementation of entry/exit systems;
- Facilitating cross border market integration into an efficient and effective competitive gas market at the Community level;
- Efficient capacity allocation procedures including market based mechanisms when demand exceeds the offer;
- Efficient usage of pipeline capacity, especially for cross-border flows of gas between trading points in Europe, with the aim to integrate national gas markets, including limiting (physical and contractual) congestions;
- Improving the integration of trading points leading to a convergence of market prices between neighbouring markets, reflecting market risks and supply/demand imbalances; and
- Improving security of supply by fostering the appropriate network, storage and LNG regasification capacity enhancement as well as upstream investments aimed at supplying the European gas market.

Revealing the Challenges

However, by setting out these goals, ERGEG reveals the challenges that remain. From the enumeration of these goals it may be inferred that:

- Entry/exit systems have not been implemented effectively;
- National markets have not been integrated into an efficient and effective competitive gas market at the Community level;
- Capacity allocation mechanisms are not operating efficiently, in particular when contractual or physical congestion occurs;
- Pipeline capacity, in particular cross-border capacity linking trading hubs, is not being used efficiently;
- There are barriers to the convergence of prices at trading hubs;

- Sufficient investment in network interconnection and import facilities to enhance security of supply and efficient market integration is not forthcoming willingly.

A Clear Choice: “Carry on regardless” or recognise defects and devise remedies

This raises the question: why is this the case? The answer offered by ERGEG (and, presumably, by the Commission and the various fora and associations of market participants and stakeholders) is that, despite the significant progress that has been made, much more work needs to be done along the lines already established and without any significant changes to the overall process. It is, of course, equally plausible to assert that the reason so much difficulty is being encountered in achieving these goals is that aspects of the approach are flawed and require revision or remedy.

There are two aspects to this. The first involves identifying the specific aspects of the approach that may be flawed and advancing remedies; the second relates to the apparent unwillingness to even consider that aspects of the approach might be flawed.

It makes sense to consider the second aspect first and to begin by considering the process that has brought us to this point.

How did we get here?

Motivation for Reform

Much of the original motivation to take steps to complete the internal markets in electricity and gas was driven by a recognition that, following the Single European Act, the energy sector presented ‘unfinished business’ and by a perception that the existing organisation of the EU’s electricity and gas sectors resulted in EU industries paying higher prices than their competitors outside of the EU. Almost from the beginning of this process it has been clear that a key objective of the Commission (and of ERGEG since its establishment) is to facilitate the emergence of liquid, efficient and competitive wholesale markets in electricity and gas. This is evidenced by the remaining challenges identified by ERGEG and enumerated above. The commitment to roll-out full retail competition emerged somewhat later, but is consistent with a desire to increase liquidity and with a belief that extending choice of supplier to all consumers will confer significant benefits.

Unpicking the ‘Grand Bargain’

In the early to mid 1990s when the Commission was contemplating the initial steps to liberalise gas and electricity markets, it confronted a huge variety of institutional arrangements, of ownership structures, of organisational forms (with a general tendency towards vertical integration either within a single corporate structure or via exclusive contracts) and, for gas, of stages of industry development. But a very simple ‘quid pro quo’ underpinned this huge variety of structures, arrangements and stages of development. The various electricity and gas supply businesses were granted various exclusive rights to produce, purchase, import and supply electricity and gas, to build, own and operate the infrastructure required, as appropriate, to produce, transmit, distribute and supply electricity and gas and to secure revenues from intermediate purchasers and final consumers sufficient to recover the costs they incurred in exchange for providing secure, reliable supplies and for consenting, where required, to implement specific national, regional or local policy objectives.

Despite the variety and complexity of the arrangements in different member-states, this grand, but simple, bargain underpinned the entire edifice of the electricity and gas supply businesses.

The challenge confronting the Commission was to begin to unpick this grand bargain to foster competition and choice of supply for consumers. It is easy to underestimate the scale of this challenge. Apart from some clear recommendations from economic theory about the costs of the existing form of industry organisation and the benefits of competition and choice, a conviction that 'more Europe' and a lessening of the individual pursuit of national interests would be in the interests of all of the Community's citizens and some limited demonstration effects from the gas industry 'de-regulation' process being pursued in the US from 1978, the Commission did not have a well-stocked armoury.

A Poorly Stocked Armoury

In contrast to the US, where the FERC was able to exert some leverage over the bundled pipeline companies by offering them a process that would allow them to unwind high-priced, 'gas bubble' era supply contracts in exchange for introducing voluntary TPA, the Commission had little leverage. Indeed, it lacked a solid legal basis to pursue the reforms it was contemplating. In contrast to unitary or federal nation states, the EU is simply an association of sovereign states which have agreed in binding treaties to pool some of their sovereignty in certain areas and to empower the EU's institutions to govern the exercise of this pooled sovereignty. A potentially sufficient legal basis for EU competence in the energy area was adopted only in 2009 by adding a separate chapter to the Treaty for the Functioning of the EU (TFEU). Prior to this the various steps taken to complete the internal markets in electricity and gas were driven primarily by the Commission and generally required messy compromises to secure a measure of often reluctant and unenthusiastic support from the Council and the Parliament in the co-decision process.

The Allure of the 'Status Quo'

In addition, from the perspective of most national governments and, in particular, from that of the existing national energy companies, the current arrangements were working well. In natural gas, reliance on external suppliers was increasing, and was expected to continue increasing as internal reserves were depleted and demand continued to grow. The belief was widespread that heavyweight national players were required to exercise 'counter-vailing' market power in negotiations with these generally state-owned (or state-directed) externally suppliers.

More importantly, the grant of exclusive rights conferred explicit and implicit property rights on the national (and sub-national) energy supply businesses. And in exchange for conferring these 'property rights', national governments enjoyed legal rights, via ownership, direction of regulation, to employ the national energy companies to achieve specific policy or strategic objectives. The explicit and implicit property rights enjoyed by the national energy companies facilitated the exercise of market power; the legal rights enjoyed by national governments facilitated political interference.

The impact of poorly-defined, but well-defended, property rights.

Exclusive rights to import, purchase and supply proved the most ephemeral and the Commission found it relatively easy to enforce the removal of these as some national governments already had or were in the process of removing these exclusive rights. However, dealing with the nature of the property rights associated with the ownership and operation of assets and with certain long-term gas supply contracts continues to bedevil the process of gas market liberalisation.

The integrated natural gas businesses did not have unassailable property rights to the assets they owned and operated. The possession and enjoyment of any property rights to these

assets was contingent on them fulfilling their side of the 'Grand Bargain' described above. Irrespective of whether these companies were in public or in private ownership (or even a mixture), the nature of any property right that existed was determined by legislation – and, of course, could be modified by legislation. But this required national governments in the European Council to agree to primary EU legislation that would alter and re-define these rights. The reluctance of national governments to do this – and the concerted opposition of the integrated businesses – has hindered the emergence of full ownership unbundling of gas network and supply businesses.

And again, irrespective of the extent of unbundling, for businesses in full or partial public ownership, governments did not set a value on the assets in the subsequently-regulated transmission asset base either prior to any privatisation or at the outset of the restructuring that market liberalisation required. It is ironic, given their almost unfettered powers in this regard, that governments did not do this.² In general, this task has been left to the NRAs who have applied a patchwork of techniques and methods throughout the EU.

Even when some degree of network unbundling was achieved, the larger, incumbent energy supply businesses, by virtue of being counter-parties to long-term, large-volume gas supply contracts with, mainly, external suppliers, have been able to maintain some benefits of the property rights they enjoyed as bundled businesses by reserving capacity on transmission pipelines that matches the maximum delivery capacity volumes in these supply contracts. This creates considerable contractual congestion and has led to consideration of excessively complex capacity allocation mechanisms and congestion management procedures..

As a result, in the absence of clear property rights subject to judicial oversight and of well-defined, long term contracts between the pipeline businesses and the businesses to whom they provide service, it has proved impossible to sub-divide these rights, as has been done in the US, into long-term, tradable contracts for the capacity provided by these assets. And this has hindered the emergence of a liquid, competitive market in pipeline capacity which is a *sine qua non* for the development of liquid, competitive commodity markets. As a further consequence, investment in necessary infrastructure has been hampered and, in general, investors in pipeline interconnectors or in LNG importation facilities, as specific, long-lived assets, require some measure and duration of exemption from TPA to protect the property rights they will establish and to ensure recovery of their investment. This is probably the signal example of the failure to secure gas market liberalisation.

What can, and should, be done?

The existence of oligopolistic external suppliers, the prevalence of long-term, large-volume gas supply contracts (and the pipeline capacity earmarked to deliver these volumes), the need for interventions to ensure security of supply and the absence of appropriately empowered EU-level regulation are frequently advanced to justify the long drawn-out, incremental approach being pursued by the Commission and the associated bodies.

The development of competitive markets (in both gas and pipeline capacity) is the most effective means of undermining the oligopolistic behaviour of external suppliers that damages

² In the UK, it is, perhaps, understandable as it would have revealed the huge privatisation discount that fed a glorious, if short-lived, stag market. It also appears that, with a primary focus on privatisation, policy-makers had a limited understanding of the restructuring and contractual arrangements required. And even where they might have had some inkling, they were prevented from imposing any structural reforms that might have prejudiced a successful privatisation.

the interest of consumers in the EU – and of demonstrating the benefits of competition to the governments hosting and directing these suppliers. Competitive markets will drive long term contracts with inappropriate price indexation out of the market and force re-negotiation and, with appropriate security of supply standards, will address security of supply concerns. ACER will exist from March 2011 and, if necessary, its powers should be enhanced.

All this requires policy-makers, regulators and market participants to hold the nerve to stay the course and seek to complete the internal market in gas. But it also requires all parties to recognise that a competitive market in pipeline capacity is vital – and, more importantly, to recognise that the extent to which this exists is entirely inadequate.

Kick-starting a Competitive Market in Pipeline Capacity

ENTSOG has identified 58 internal EU cross border Interconnection Points (IPs). These are in the middle of pipelines that connect national and sub-national TSO networks and, in general, represent an entry point to one entry/exit zone and an exit point on another. The first step is to define these pipelines, their ownership, start points and end-points, operating parameters, capacity available (whether uni- or bi-directional) and the current arrangements for allocating and managing this capacity. ENTSOG has also identified 19 inter-TSO connection points within national borders, 13 regassified LNG entry points and 23 external supply points. The pipelines associated with these points should be addressed in a similar manner.

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Electricity networks are characterised by network externalities. The inputs to, or off-takes from, an electricity network by a network user (or variations in these inputs or off-takes) will impact on network flows (and on the network services provided to other users) in ways that are difficult, if not impossible, to define and quantify ex ante. As a result, it is not possible to define and quantify the capacity and services provided on specific segments of an electricity network and electricity networks are managed by a single operator. In contrast, for gas networks, it is possible, subject to operational data and constraints in relation to operating pressures, gas velocity, pipe roughness, gas temperature, etc., to define and quantify the capacity available in a pipeline segment. This means that it is possible to have different owners and operators of specific segments or parts of an interconnected gas pipeline network. It also means that prospective providers of pipeline capacity can compete to build, own and operate new pipeline segments that will form part of an interconnected gas pipeline network.

It is contended that this effort is necessary to begin to address the challenges that remain.