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A Gas Target Model for the European Union: Contrasting MECOS and EURAM Proposal

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Highlights

- At the 18th Madrid Forum (2010) the discussion of an EU gas target model was officially launched. It aims at defining a non-binding vision giving coherence to the coming set of European gas framework guidelines and grid codes.
- There is a European-wide consensus to ensure third party access to interconnections and to promote EU gas trade across the entire EU as to reach – let's say 2014 - a target model of "achievement of the internal market".
- J.M Glachant (director of FSR) and S. Ascari (FSR gas adviser) agree that interconnection capacity is key to increasing trade among EU countries. However, they do not have the same view on who should decide on and who should pay for the needed investment, and how trading places should be selected.



Florence School of Regulation

The Florence School of Regulation (FSR) was founded in 2004 as a partnership between the Council of the European Energy Regulators (CEER) and the European University Institute (EUI), and it works closely with the European Commission. The Florence School of Regulation, dealing with the main network industries, has developed a strong core of general regulatory topics and concepts as well as inter-sectoral discussion of regulatory practices and policies.

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Background

The 3rd package did not describe a “target model” – which says a lot on the absence of common vision of the matter among European countries. It did, however, ask for the creation of EU-wide network code(s) to facilitate cross border gas transactions. All the transmission system operators (TSOs) will then have to obey the single network code(s) when operating the transmission networks. To keep these network codes in line with European regulation aims, a set of binding or non-binding framework guidelines are developed by ACER and the European Commission.

In this context, with the aim to give global coherence to these guidelines and code(s), the European regulators launched a consultation process in July 2011 to define a gas market target model. It is a non-binding vision providing a unified frame on the future layout of gas market architecture.

On the one hand, a target model should say how the available transmission capacity can be allocated (from the long to the short term), and how it could be expanded through new investments. On the other hand, the target model also has to define key characteristics of the gas trade, and indicate an institutional frame that fits with such characteristics. During the

first semester of 2011, the FSR director and gas advisor posed for discussion two top-down target models: MECOS and EURAM. They are a European (MECOS) and an American (EURAM) models for Europe gas market architecture.

Summary of the proposed MECOS and EURAM target models

MECOS is a “Market Enabling, COnnecting and Securing” model describing the final state that the EU gas market should achieve over time (2015?, 2020?). The main aim is to guarantee to every European final customer easy access to a wholesale gas market respecting a minimum set of rules, notably those “enabling” and “connecting” markets (the EU consumer is guaranteed both a certain access and a certain set of market rules). EURAM (EUROpean American Model) distinguishes from MECOS in underlining the importance of including the market supply forces at the core of the model definition, especially in the definition of the transport investment and market arrangements. Building on these contrasting approaches, these two target models propose different solutions to transport network development and allocation, as well as to the promotion of gas hubs.

Box 1 - MECOS model main pillars

- The network access should enable functioning, liquid and competitive wholesale gas markets. The guarantee will come from a regulated capacity access defined through EU code(s). The corresponding investment will involve a regulatory oversight at Member State and EU levels plus an indicative planning at the EU level.
- The model promotes short and mid-term price alignment by facilitating cross-market borders trading. It will also ease trade by implementing market coupling and by expanding the coupling of market areas. It assumes an increase of interconnection of the grids and a unification of the operation of market and network (entry/exit pricing; congestion management; balancing).
- MECOS establishes a secure supply pattern by favouring open seasons backed with transport long term contracts. These long term contracts, however, should not foreclose shorter term trade nor impede regulators from intervening in the initial capacity definition or the following contracting arrangement. Then “approved” network expansion not being implemented by the locally existing TSOs can be auctioned off to all other interested investors (the grid investment monopoly is made contestable at the margin).

Box 2 - EURAM model main propositions

- EURAM does not challenge all MECOS proposals. It mainly aims at correcting MECOS where it deviates too much from the proper dynamics of market supply forces.
- The gas transport network is not necessarily a natural monopoly, and thus its regulation frame need to take into account its competitive potential and favour it. The competitive potential in transportation is a key source of efficiency improvement which should be accounted for and promoted. Actually, if market forces push gas transport investment as in the U.S, congestion constrains requiring auctions and other managements should be very rare.
- Network tariff regulation should be streamlined across Europe and designed in a way to properly address issues arising from cross border trade, including the transfer of capacity rights to (and payment by) downstream market players including possibly TSOs.
- It is not just network investment which should take market forces into account, but the proper development of hubs. Regulators cannot build or design market places by themselves. They can only enable a dynamic market play or not. The risk of too many hubs would be liquidity fragmentation, and hence the delay of real market integration.

The two target models, while sharing some common views, propose different solutions especially with regard to transport investment. MECOS seeks a regulated development of the network targeted at facilitating EU gas trade and a plan of market areas expansion. This would be done by an ex-ante definition of the efficient network and the well-functioning market places. EURAM relies on freeing market forces to permit them to define the development of an efficient network according to their market strategies. Public interest can be added to market forces here or there, but it cannot replace them as the engine of grid expansion and market place (hubs) building. Trade will occur where there is trade and traders. Trading arrangements should follow traders' needs.

The role of gas transport networks

TSOs cannot create markets just by themselves, but they are a central part of the industry chain where gas markets operate.

1. Existent Capacity

Both MECOS and EURAM models agree on using an entry/exit frame to allocate transport capacity. In Europe, the entry/exit

scheme is widely seen as a pre-condition to create functioning markets.

However the degree of centralization in the capacity allocation differs in the two models. MECOS proposes centralized auctions of standardized transport products via virtual hubs, and does not conceive any other place to trade. The various virtual hubs could be unified by fully merging their corresponding markets. One can also create a single hub on the top of the existing end users' balancing zones through the creation of "trading regions" (with separated balancing areas). MECOS also strongly supports implicit auctions as the mechanism to allocate capacity in the shorter term (at least Day Ahead) and recommend experiencing it through pilots.

EURAM, on its side, still values explicit mechanisms to allocate capacity. The capacity market could be reinforced by the use of an open subscription process, which is close to a kind of coordinated EU-wide open season. This would be based on a common trading platform covering all the EU capacity market. In the case of congested lines, EURAM suggests using shorter-term auctions. EURAM does not see the necessity of trading in any virtual points, as trading is likely to concentrate in few markets.

However market coupling may remain a valid option for short term trade involving congested cross-hub capacity.

2. New Capacity

One of the main consequences of including the active role of markets in network development can be noted in the divergent proposals of EURAM and MECOS models.

The MECOS model addresses the investment in inter-connection and intra-connection mainly under a regulated environment. The inter-connection should include long-term contracts as well. Thus, MECOS proposes an open season process to deal with the inherent uncertainties on investing in new interconnections. This open season process would have to be performed periodically for all existing interconnection capacity and on demand.

According to the MECOS model, the decision to build a new interconnection infrastructure should be based on:

- The contract signed through the open season process where the shippers are able to sign 'long term contracts'

- The capacity expected be contracted in the future through short and mid-term mechanisms.

And the revenue to pay for this capacity should also come from these two kinds of capacity:

- The long term contracts should pay part of the capacity cost.
- The other part of the cost should be paid by the TSO's network tariffs.

Therefore, the TSOs may accept to bear a share of the utilization risk associated with constructing capacity for a short- and mid-term market in exchange for a higher rate of return on that part of investment.

Moreover, according to MECOS, the intra-connection pipelines investment risk should be borne by the regulated tariffs. Thus, inside national/regional market the TSO and the authority responsible for including the asset in the regulated revenue are actually the main players deciding investment localisation and amounts.

Box 3 - Inter-connection and intra-connection pipelines

- The interconnection pipelines are the ones which help to connect separated markets better and thereby improve the price alignment among different markets. The access of these pipelines is the key to allowing the interconnection between the different European markets.
- The intra-connection pipelines are the infrastructure which fulfils its task within a market (i.e. within an entry/exit area) and often under control of national or sub-national TSOs. Increasing the intra-connection capacity can either serve increased demand in a market or can help to 'debottleneck' an entry/exit area, which means decreasing the 'balance' costs associated to entry/exit model.

The EURAM model diverges in underlining the importance of market forces in investment decisions. The open subscription process would be the tool to allocate existent capacity on a long term basis, and also to give information to market players regarding the demand to build new capacity. This model does not exclude the possibility to have public intervention, as all stakeholders (public and private) should be able to bid in the open subscription process. The investment in intercon-

nections should be mainly decided and paid for by long term contracts. EURAM agrees with MECOS in advocating that some capacity should be kept to be allocated in the middle and short term.

In summary, the EURAM model supports that third party access should be guaranteed mainly by allowing all players to contract under harmonized conditions, instead of increasing the use of implicit auctions.

Hub Development

The two proposed target models aim to promote the connection between markets increasing the liquidity of the European cross-border trade. The tools proposed, however, differ.

MECOS aims to allow all EU end-users to allocate gas at any point of the network. Thus:

- All end-users should be inserted in a market (either national or regional).
- The cross-border trade should be promoted by virtual trading points to allow changes of ownership and accounting of gas flows by merging markets or by region trades.

EURAM implies a different view regarding the development of European hubs:

- Hub development is seen as a result of market forces incentives. Furthermore, they will present different sizes and relative importance, depending on the interest of players to trade in them.
- It highlights the recommendation that the regulatory role developing hubs should focus just on the harmonization of rules, instead of developing inefficient hubs.

In that environment, and observing the evolution of the US gas market, the EURAM proposal foresees that the number of hubs will probably be significantly smaller than the number of national markets.

Comparing the proposals

The main differences between the two models are related to the reliance on the potential advantages of introducing competition in gas transport networks.

The MECOS proposal follows the approach of adapting the spirit of the power networks regulation to the regulation of gas networks. Loosely, present European power network regulation seeks promoting efficient markets by the use of implicit auctions to ensure the adequate use of infrastructures, and by the centralized planning of the network.

On the other hand, EURAM observes that several physical features of gas industry are not so close to the power sector, which makes the gas network subject to potential liberalization to enhance its efficiency. This can be thought of as one of the main motivations for the EURAM proposal, which seeks to introduce more competition in the gas transportation activity, especially focusing on network investment decision, paralleling in some ways the US scheme. However, EURAM keeps the main ideas of EU network code(s) as proposed by the Third Package. It keeps the regulation of capacity use still close to MECOS proposition based on entry/exit model and national tariffs, rather than the bilateral contract model mainly applied in the interstate USA frame.

The two proposed models have many similarities, as they do not disagree in the main aspects defined by the European 3rd package. However, they fundamentally disagree on the role that markets (or long term contracts) should play regarding the use of gas transport networks, the development of market hubs and, regarding decisions on network investments (even when public intervention is accepted in the two models).