

**CEER Vision Paper for a conceptual model for the
European gas market
Call for Evidence**

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**POWEO's Contribution
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Acronyms used in this paper:

- TM: target model
- FG: framework guidelines
- WG: working group
- NC: network code
- CAM/CMP: capacity allocation mechanism, congestion management procedure
- VTP: virtual trading point

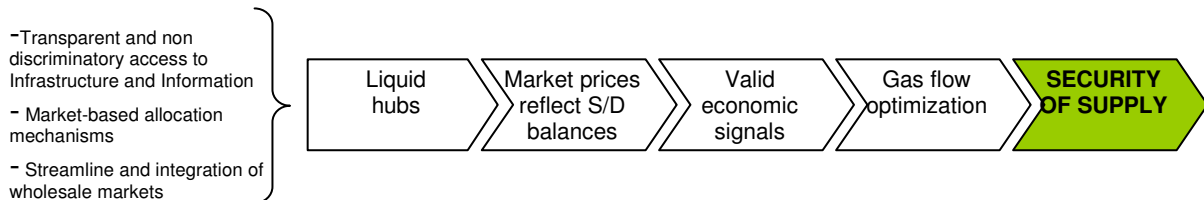
Introduction

POWEO welcomes this consultation as we believe that the definition of a vision for the target European gas market is becoming critical to ensure that FG and NC currently being developed are aligned on a single vision.

We understand that the objective of this TM is to put words and provide additional details around the vision outlined on the occasion of the CAM/CMP principles, published on December 2009 (E09-GNM-10-03): **“In the end, the design of the EU gas market should be as follows: a set of entry/exit market zones with their own virtual hub connected through a limited number of bundled capacity products identical all over the EU and allocated via auctions.”**

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?

The main goals fall under the Market Integration objective from the 3rd package. POWEO believes that the TM should aim at establishing market-based mechanisms for access to infrastructure (transport, storage capacity), streamline and integrate the wholesale markets and ensure transparent and non discriminatory access to infrastructure and information. These in turn will ensure that the building blocks on which hub (ie. Virtual Trading Point VTP) liquidity can develop are in place. POWEO believes this is key as VTP liquidity leads to market prices reflecting supply/demand balances, which in turn sends valid market signals so that shippers can fully optimize their gas flows and security of supply is in the end strengthened:



Besides defining a common vision for the European gas market, the TM shall also define the pre-requisites which are necessary to reach that vision and the key elements that need to be addressed through dedicated workstreams. This last part has already been tackled partly through streams already set-up (such as the ones on CAM/CMP, Balancing, Storage, Tariffs etc.), but pre-requisites have not been clearly identified. Such pre-requisites should include, but are not limited to:

- Definition of a standard gas day
- Definition of a standard gas quality, including the issue of odorization
- Definition of standard units (for capacity, nominations, trading and all other operational aspects)
- Definition of standard capacity products
- Definition of target balancing timeframe

The Target Model shall not go into technical details but rather set high-level orientations that can be used as building blocks for the European Gas Market.

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;

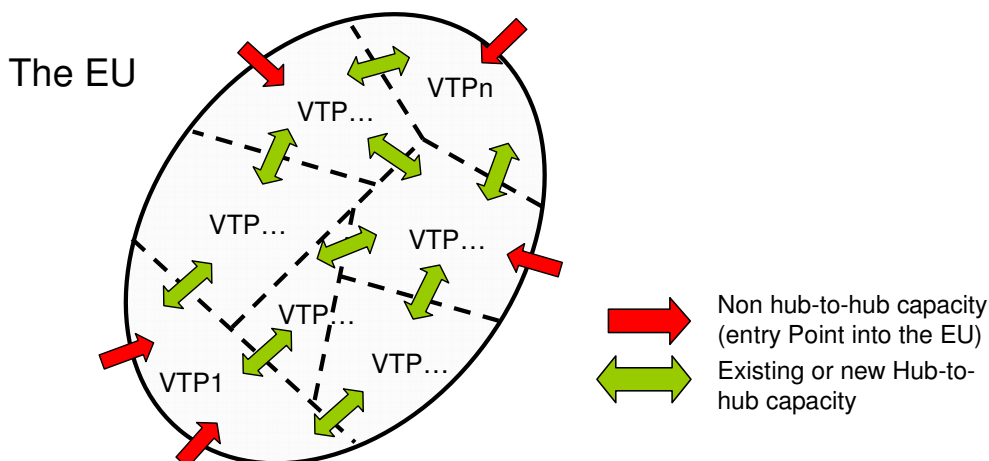
b. the role of hubs / gas exchanges.

POWEO believes that the key change affecting the European gas market is a shift in paradigm: gas flows are changing and becoming more unpredictable, and therefore infrastructure need to increase flexibility. Historically, gas flows were primarily unidirectional, gas consumption could easily and accurately be estimated and storage were used to inject in the summer and withdraw in the winter. This is no longer the case. Market prices reflecting daily supply and demand balances have emerged, therefore providing valid economic signals to optimize assets and infrastructure; LNG and shale gas are game changers impacting world prices and balances; and gas-to-power, very flexible, is the largest area of demand growth and is becoming a key element in the consumption mix. All this leads to increased uncertainties. Therefore the TM should define the vision and the tools available to the market to manage these growing uncertainties.

In practical terms, the TM brings value in defining a single, shared vision for the European gas market. This will ensure that market players can then work at defining and implementing the practical steps towards that target, instead of arguing on the target model itself.

- a) Regarding the specific question of long-term capacity contracts, POWEO makes a strong difference in function of the capacity type. For existing hub-to-hub capacities, long-term capacity contracts are not required. Indeed, as the capacity is there and in sufficient quantity to ensure adequate supply, then allocating it under market-based mechanism (preferably auctions) provides a guarantee of volume. The issue of TSOs authorized revenues should then still be guaranteed through regulation. Another key point regarding existing hub-to-hub capacities is that POWEO believes it is of utmost importance to have only one price per product, with a product being defined as a route and a duration. Regarding new hub-to-hub capacity developments, regulatory authorities should authorize them only once a clear market need based on supply/demand balances has been identified, in other words where there is potential physical congestion (as opposed to contractual congestion). In exceptional circumstances, if the regulator is looking for commitments in order to justify the market needs, this new capacity can then be allocated partly under long-term contracts, based on a known, fixed price only (as opposed to a tariff-linked price as it is currently the case for most Open Seasons, creating regulatory risk). The remaining capacity should then be allocated together with the existing capacity, under market-based mechanisms, and TSOs authorized revenues should be guaranteed through regulation. Regarding capacities which are not hub-to-hub (entry points into the EU, such as Dunkirk, LNG terminals ...) long term capacity contracts could remain for a part of the capacity as they are linked to production assets.

The distinction between hub-to-hub and non hub-to-hub capacities can be illustrated as per below, the overall diagram representing the EU:



- b) Regarding the role of hubs (VTPs) in the TM, POWEO believes that they are fundamental, as outlined in the vision described in the Introduction. VTPs are a required pre-requisite to allow the development of a transparent traded market and at the end to insure security of supply within the market.
It is also worth noting that to fully benefit from VTPs, these have to be virtual (as opposed to physical): indeed, a physical hub implies that there is limited access to it, that prices do not reflect regional supply/demand balances but only local ones, and that potentially a limited number of market players can have too much leverage on this hub.
- c) Gas exchanges are tools primarily aiming at providing transparency on price formation on these VTPs and credit security thanks to clearing mechanisms. They can additionally foster liquidity but only to the extent that the underlying conditions for the development of a market are met, such as adequate logistics, operational and regulatory frameworks.
- d) Regarding long-term gas contracts, POWEO would like to remind that their primary objective is to ensure security of supply and security of demand. As far as price structure is concerned, the emergence of valid gas market prices paves the way for these long-term gas contracts to be structured around gas market prices. POWEO strongly believes that these contracts will remain to insure the physical security of supply and security of demand but that their structure will be completely reengineered. In a system where long term gas contracts are indexed on the VTP price where gas is delivered, there is no specific need to have hub-to-hub long term capacities (capacity will always be available at the market price).
- e) Regarding storage capacity, POWEO believes that this infrastructure should be treated in the same way as other infrastructure, such as transport capacity. It should therefore be allocated under transparent, non-discriminatory market-based allocation mechanisms.

Finally, the scope of application of any decision needs to be clearly defined at the TM level. For instance regarding CAM/CMP FG, the scope has been described as all “cross-border interconnection points between two or more Member States as well as interconnections between adjacent entry-exit-systems”. POWEO understands through this statement that an interconnection point such as GRTgaz Nord / GRTgaz Sud shall be included (as it is an interconnection between adjacent entry-exit systems, which are GRTgaz Nord and GRTgaz Sud), whereas GDF SUEZ believes it shall be excluded (as it is an interconnection point within the GRTgaz system). Such lack of clarity creates unnecessary debate and leaves room for domestic interpretation.

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.

The TM should serve as an umbrella to define a common vision above the FG and the NC, and that vision should be declined into norms. In that respect, POWEO agrees with the vision outlined in the Introduction, for which we see 5 key points:

- Reduced number of balancing zones, under an entry/exit model only
- One virtual trading point (hub) per balancing zone (ie convergence of balancing zone and hub), with improved liquidity on the spot and forward contracts
- Between VTPs, bundled capacity products only, with efficient, market-based, CAM/CMP mechanisms to ensure optimized use of infrastructure and improve security of supply
- Efficient, market-based balancing rules
- Efficient, market-based, allocation mechanisms for storage capacity products

Besides these, please see also pre-requisites as detailed in question 1.

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:

Harmonisation is key, and this can be done through the developments of “norms”, covering the points described in questions 1, 2 and 3.

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

Yes, this is of utmost importance (see also question 1.). We believe that with the increasing share of gas-to-power on the European gas demand side, there is an opportunity to make these two markets converge, and therefore define a unique gas day as a standard calendar day, that is from 00:00:00 to 23:59:59.

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 TM should stop at the VTP level, as going beyond that will bring little value. Horizontal depth will bring much more value than vertical depth. DSOs have an important role to play in the European gas market, but not necessarily at the TM level.

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?

To implement the TM vision (see question 3), key areas are the ones already identified through public consultations and FG processes: Capacity Allocation and Congestion Management Procedure, Balancing, Access to storage, Network Tariffs and Transparency.

POWEO believes that the main constraint lies in defining a unique set of requirements, applicable to all markets, which currently operate radically differently from one region to another, or even from country to another. What might be relatively easily applicable in say North West Europe, might be completely idealistic, for say Eastern Europe.

In other words, POWEO believes the TM shall be unique for the EU, ie the same goal shall apply across the EU, but the implementation timeframe and the required intermediate steps might be different from one region to another..

Another key constraint is the implementation cost of this TM. It is one thing to define a desirable outcome, it is another thing to pay potentially sky-high amounts for the sake of integration. At some point down the road, cost/benefit analysis will have to be carried out, and arbitrage decisions will have to take place at the regional and/or domestic level.

One element to keep in mind to mitigate costs is that TSOs should join forces to streamline things such as IT costs and operational teams: currently each TSO has its own, dedicated, IT system and its own dedicated operations team. As balancing zones/VTPs merge, so should IT systems and operations team, hence reducing costs.

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

High level elements of the European gas market are not compatible with national decision-making, therefore TM shall set the vision, the intermediate steps and the acceptable options to reach that vision. FGs and NCs shall then set the technical details of that vision and the way to implement it. At this stage, POWEO does not see any aspect that should be excluded from the TM.

7. What are the options for integrating the currently fragmented European markets? Are there any existing models you would like to recommend? In case your answer is yes, we would be interested to learn about the features of this model and if there are also any draw-backs in this model in your view.

The electricity market is more mature than the gas market, and has been structured around market-based mechanisms. Therefore POWEO believes that valuable learnings can be taken from the power market. We understand that there are differences between electricity and gas, but this does not mean that it should not be thoroughly studied, bearing in mind that with the convergence of gas and power markets as outlined earlier, it becomes important to coordinate consistency between each market 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?

This is a key question, as there are currently too many market areas, often limited by geographical borders or network ownership. Instead, balancing zone shall be set by the ability of a TSO or a group of TSOs to manage the balancing within such zone, not by political borders or network ownership. On the other hand, balancing zone merger shall not be dogmatic, as consolidation of market areas should take place to the limit of economical and operational efficiency.

It is hence desirable to reduce the number of balancing zones to a limited number of zones, built around key VTPs in certain regions and operated by a single entity (a Balancing Zone Manager). Criteria to assist for the identification and definition of such balancing zones might be the following (this is not an exhaustive list, but provides certain criteria for decision making):

- Small consumption areas, relatively to its neighbouring markets, shall be merged with either of the neighbouring market
- If no strong technical constraints limit the ability of gas to freely flow across to the adjacent system in both directions, then zones should merge
- Where technical constraints are identified, contractual decongestion mechanisms, such as flow commitments, shall always be considered as an alternative to infrastructure investments.
- Technical issues such as gas quality might delay the merger of balancing zones but shall not be a reason not to merge as the TM shall set a standard gas quality vision

As specific examples, POWEO has identified the following:

- The existing Luxemburg VTP has no reason to survive on its own (consumption around 14TWh compared to 450TWh for GRTgaz Nord H+B), it should be integrated to either of its connected neighbour, ie GRTgaz Nord, Fluxys or NCG.
- Fluxys/the Zeebrugge hub is a key historical, physical point to supply North West Europe. Yet it is mostly a transit point as the area of consumption it represents is relatively small (around 160TWh), and as a result has little reason to survive in an integrated European Gas market. We believe it should be merged with either GRTgaz Nord, GTS or NCG.
- TIGF is another small-consumption area (around 35TWh), squeezed in between two larger zones, ENAGAS and especially GRTgaz Sud (130TWh), and with practically no congestion with GRTgaz Sud. It should therefore be integrated to either GRTgaz Sud or ENAGAS.
- GRTgaz Nord H and B: long-term flow commitments offered from GDF SUEZ to GRTgaz has been renewed (through the process of the GDF SUEZ commitments to the EU Commission), therefore now allowing the merger of these two zones.

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

This topic of market-coupling needs further analysis before being transposed to the gas market. At this stage we believe this concept is barely understood by many gas players, especially the ones with no power activities. It shall therefore be thoroughly analyzed before any relevant decision can be made.

It is worth mentioning that an initiative of a pilot project for market coupling is currently being jointly developed by GRTgaz and Pownext, for the GRTgaz North-South link. POWEO strongly welcomes this initiative as we believe that it will set an example and provide a valuable test case for the implementation of a possible gas market coupling mechanism.