

## **GAS PARA CRESCER – CONTRIBUTION BY GEOSTOCK**

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### **INTRODUCTION**

As Owner's Engineering company fully dedicated to Underground Gas Storage as well as Underground Storage operator for the last 50 years in Europe, USA, Asia, Mexico and Argentina, GEOSTOCK is pleased to see and contribute to the "Gas Para Crescer" initiative. This initiative explicitly mentions several time the importance of underground storage in a developed gas market. Although, underground gas storage does not yet exists in Brazil, it is fundamental regulation to be adapted to the future development of this tool. To that end, it is important to not create any barrier to such development.

Underground gas storage is fully part of the gas value chain. In EU directives, it is always dealt with together with the transport system.

In our view, "Gas Para Crescer" initiative should enable the creation of a fluid market and 2<sup>nd</sup> / derivative market. Enabling SWAP and reducing unnecessary and sometime "absurd for the gas business" (ICMS calculation methodology) fiscal system should be a first priority.

To be functioning, a gas transport (and storage) system must have 3 elements:

1. Access to network
2. Unbundling
3. Clear, predictable and market based network rules.

Points 1 and 2 are mentioned in the "Gas Para Crescer".

Geostock would like to focus its contribution on the third points as well as on the storage underground right as currently implemented in the 2009 Gas law.

For the 3 point, "Gas Para Crescer" initiative envisages the creation of a system operator (Sistema de Transporte de Gás Natural or STGN).

The objective of such operator would be to manager resources and eventually control network expansion.

### **ON THE RESOURCES MANAGEMENT**

Also this system exists in Germany for example, this is not a commonly used practice. In Germany such operator was created on the industry initiative and is privately own.

Furthermore, if one looks at the whole European Continent which is fully integrated in terms of gas transport and storage, such "system operator" does not exists. There are about 40 different entities operating the system. The only thing that some (very few) states require by laws is the filling of natural storage at the end of summer season to cope with strategic needs in winter.

In our view, a unified operator, particularly if publicly owned, might increase system operational cost and decrease gas competitiveness. Such an operator is not necessary if information is provided in the market.

In EU, it exists rules for Congestion Management Procedure (CMP) and Capacity Allocation Management (CAM) known to all actors.

If one wants Brazil to have a competitive gas market in the short / mid term, the revision of current contracts should be performed. Indeed, existing contracts, due to their inflexibility, increase transport cost. Operator have to reserve pipeline capacity to attend a specific contract even if capacity is use with intermittency. This lack of contractual flexibility, or network flexibility, block competition by hindering pipeline capacity to be used at its maximum.

In any case, we do not feel that Underground Gas Storage should be managed by an eventual STGN. Indeed, this might hinder the real cost of operating the system. This is the issue of the existing network where the cost of flexibility is not known due to current Petrobras network management in the in the Centro de Operações Logísticas do Gás Natural (COLG).

The use of storage to balance the transport network needs is valid only if the transport network is a client of the storage like any other actor of the gas chain. That is why, in Europe, the figures of the TSO (Transmission System Operator) and SSO (Storage System Operator) have been created. They are independent from each other and should guarantee equality in access terms to their clients. If the TSO manages the storage operator, it will have a commercial advantage over other customers and storage benefits might not be used to its full extent for other clients (end-users, gas producers, distributors).

## **ON THE NETWORK EXPANSION**

On the network expansion perspective, we would like to emphasize that although, the law should allow the state to define priority of network development for its owns needs for strategic purpose, it should not block private sector to be developed.

PEMAT relative failure so far for pipeline development is a show case of that issue. Most of the regulation in Europe reserve the right to the state to decide is a pipeline or an underground storage should be build. However, private sector can also propose to develop pipelines and underground storage at his own cost and risk. In that case, the state guarantee that such infrastructure will benefit all actors by promoting “open seasons” to offer third party access. Regulator in that case will ensure that offered tariff is fair to all actors and does not inhibit competition.

Planning the future demand is a very difficult task particularly when the service does not exists yet or is poorly understood by the market (case of underground storage). We do not feel the state, apart for its own needs, should be in charge of that aspect.

## **ON THE UNDERGROUND STORAGE REGULATION**

As already mentioned to ANP, and on the mining right standpoint of the underground gas storage, we feel that current regulation is not adapted to the development of the technique. Indeed, for cases other than conversion of a concession of an O&G field into UGS, it is very hard to develop UGS (salt caverns or aquifer) in Brazil. Indeed, the 2009 gas law states that the storage should be a concession preceded by auction “licitação” (law 8666).

However, underground gas storage is not the exploration of resources. There is nothing to extract and it should not be licensed the same way oil and gas fields are. Indeed, storage is a service. To auction a service, one who have to prove that the service is feasible and, theoretically finds the clients. We do not feel that Brazilian authorities (ANP) have the will or financial resources to develop and support an exploratory program to prove the feasibility of a project before going to auction (several tenth of

millions of reais are necessary). Moreover, it is impossible to provide a price to an auction if the reservoir encompassed is not well known.

If market reform such “Gas Para Crescer” is performed in a more market oriented way, this point of the gas law should be seriously reviewed. Once again, we would like to refer to European regulation and particularly French or Spanish one.

Those regulations ensure the right to any entity the right to invest and search for reservoir adapted to underground storage. If exploration is successful, this entity has the exclusivity to obtain an authorization to develop such storage and will have to pay operational taxes on local, state and federal level. In that case, risks link to exploration is taken by private entity unless the state wants to develop such storage for its own purpose. The reward of the risk taken is the authorization.

In French and Spanish regulation, the only stage where a competition between actors is envisaged is on the definition of the area to be explored. In that case, if two actors want to explore the same area, they can agree to explore together or the company presenting the best exploratory program will be authorize to explore.

Geostock would like to emphasize that main actors present at the 2015 underground storage regulation seminary organized by ANP underlined the need to change the regime for underground storage licensing to authorization. Petrobras also supported this claim. Regulation defined in the gas law has no equivalent in the world. However, it exists 700 underground storage worldwide.

#### **SUMMARY AND RECOMMENDATIONS BY GEOSTOCK**

1. Study carefully the consequences of a Sistema de Transporte de Gás Natural or STGN and particularly if market base procedure will not be sufficient to deal with current issues.  
We do not think a state STGN is the best for Brazilian gas market.
2. Develop clear communication and information rules.
3. Exclude storage for a STGN if any. STGN will be a client like any other.
4. In the Gas Law of 2009, change the obligation of a concession for underground storage to an authorization unless it is for state strategic needs.
5. New storage facility should be proposed by private initiative unless it is for state strategic purpose.

*Geostock remains at the entire disposal of the “Gas para Crescer” Initiative to further discuss those points.*