THE CHALLENGES OF THE COMPETITIVE DEVELOPMENT OF THE BRAZILIAN OIL AND GAS SECTOR IN THE CONTEXT OF PRE-SALT - PART III

OS DESAFIOS DO DESENVOLVIMENTO COMPETITIVO DO SETOR DE PETRÓLEO E GÁS NO BRASIL NO CONTEXTO DO PRÉ-SAL - PARTE III

Abstract:

This work is the third and last in a series of three articles, which purpose was to analyze the challenges of the competitive development of the Brazilian 0&G sector. The main elements involved, as well as the dynamics that comprise the context of the competitive development of the national supplier companies located in the 0&G cluster in the Campos Basin, were identified, in this Part III, from the use of the Strategic analysis of actors. Considering the results found, it was concluded that it is possible to achieve a higher qualification in the forms of participation of the actors in the process of intervention and change in cases as the one illustrated in this work.

Keywords:

Oil and Gas. Competitive development. Strategic analysis of actors.

Resumo:

Este trabalho é o terceiro e último de uma série de três artigos, cujo propósito foi analisar os desafios do desenvolvimento competitivo do setor de petróleo e gás no Brasil. Os principais elementos envolvidos, assim como a dinâmica que compreende o contexto do desenvolvimento competitivo das empresas nacionais fornecedoras localizadas na aglomeração produtiva de petróleo e gás na Bacia de Campos, foram identificados, nesta parte III, a partir do uso da Análise Estratégica dos atores. Considerando os resultados encontrados, concluiu-se que é possível alcançar uma maior qualificação nas formas de participação dos atores no processo de intervenção e mudança em casos como o ilustrado neste trabalho.

Palavras-chave:

Petróleo e gás. Desenvolvimento competitivo. Análise estratégica dos atores.

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In the first article of this series, published in June 2014, in the 44th edition of this

Bulletin, it was shown that despite the great opportunities presented by the Brazilian O&G sector, mainly as a result of the discovery of large reserves in the pre-salt layer, there are important competitive gaps of the Brazilian suppliers of this sector, which may restrict the generation of wealth in Brazil. Part II of this series, published in June 2015, in the 48th edition, presented the main factors of influence that have been acting in that context from the use of tools of strategic prospective analysis.

Taking into account the importance of the O&G sector to the Brazilian economy and the complexity that comprises the context presented, in addition to governmental actions, there is a need to involve a diversity of actors from many different areas and sectors. The participation of a range of actors interested in the competitive development of the national

industry of the O&G sector is essential. The purpose of that commitment should be to act in an integrated manner in a process of collective action to prevail over the dynamics that negatively influence on the context considered here. According to Godet (1993), prospective studies consider the dynamics as powerful cyclical forces that influence the evolution of certain socioeconomic contexts. Therefore, the major theme of this work is the analysis of the dynamics that influence the participation of the key actors involved in the context of the competitive development of the national supply companies located in the O&G cluster of the Campos Basin. As already seen in Part II, the methodology adopted was the strategic prospective analysis because of its suitability to the background of

uncertainty in relation to the future of the Brazilian O&G sector. The objectives proposed here were achieved by giving continuity to the scenario method from the implementation of the Strategic analysis of actors, which enabled the Identification of the key actors involved and the dynamics that are part of the analyzed sector.

Identification of key actors

In order to identify the key actors, the main influential factors identified were listed and made a relational analysis between these factors and the main actors involved considering different areas and sectors. It may be cited as an example of this procedure, the identification of the actors involved with the influential factor related to potential loss of competitiveness of the operators of O&G sector in Brazil. In this case, there is a possibility that it occurs considering that the operators are forced, by the Local Content (LC) requirements, to purchase goods and

services from domestic companies that do not have satisfactory competitive levels to meet the demands of these operators. Thus, after analyzing the implication context of that influential factor, it was considered as actors, fundamentally related to it, the Operators of the O&G sector (Petrobras, Statoil, Shell, Total, etc.), the National Petroleum Agency - ANP and national supplier companies of O&G located in the Campos Basin. The same procedure was followed in order to identify the actors related to other factors it was followed the same procedure.

It is important to highlight that the proposal of the Scenarios method is to reduce the complexity and allow the best structuring of information in order to clarify the context addressed (GODET, 1993). Therefore, the purpose of relational analysis among the main factors of influence and actors is not to identify all the actors involved, but those primarily related with the dynamics of the system. After the conclusion of the procedure described above, sixteen actors, which will be presented in the Table 1, were identified.

Actors	Abbreviation
National Petroleum Agency (Agência Nacional do Petróleo, Gás Natural e Biocombustíveis)	ANP
Brazilian suppliers of the O&G sector located in the Campos Basin	-
Transnational suppliers of the O&G sector located in the Campos Basin	-
Funding Agency for Studies and Projects (Financiadora de Estudos e Projetos)	FINEP
Federation of industries of Rio de Janeiro (Federação das Indústrias do Estado do Rio de Janeiro)	FIRJAN
Fluminense Federal Institute (Instituto Federal Fluminense)	IFF
Laboratory of Engineering and Oil Exploration/North Fluminense State University Darcy Ribeiro (Laboratório de Engenharia e Exploração de Petróleo / Universidade Estadual do Norte Fluminense Darcy Ribeiro)	LENEP / UENF
Ministry of the Development, Industry and Foreign Trade (Ministério do Desenvolvimento, Indústria e Comércio Exterior)	MDIC
National operator of the O&G sector	-
Transnational operator of the O&G sector	-
National Organization of Oil Industry (Organização Nacional da Indústria do Petróleo)	ONIP
Program for Mobilization of the National Oil and Natural Gas (Programa de Mobilização da Indústria Nacional de Petróleo e Gás Natural)	PROMINP
Rede Petro - BC	Rede Petro - BC
Brazilian Service of Support for Micro and Small Enterprises (Serviço Brasileiro de apoio às Micro e Pequenas Empresas)	SEBRAE
Technological and Economic Development Department/ City Hall of the city of Macaé (Secretaria de Desenvolvimento Econômico e Tecnológico / Prefeitura Municipal de Macaé)	SEDEC / PMM
Economic Development, Energy, Industry and Services Department/ State Government of Rio de Janeiro (Secretaria de Desenvolvimento Econômico Energia Indústria e Serviços / Governo do Estado do Rio de Janeiro)	SEDEIS / GERJ

Identification and analysis of the dynamics

After determining the main actors, the next step was to identify and analyze the dynamics involving the main actors related and that influence the studied context.

According to Perestrelo and Caldas (2000), the Strategic analysis of actors is a support tool to identify the strategic challenges and objectives of the various key players identified in collective action processes that aim a common goal. Based on the knowledge of the challenges and objectives, alliances and conflicts among actors can be detected, thus providing

strategic recommendations to succeed the process of change in favor of the competitive development of Brazilian companies.

The Strategic analysis of actors was applied through the conduction of semi-structured interviews, supported by a script, with representatives of the main actors identified. From the interviews, the next step was the preparation of synopses of each interview in order to allow a better structure and organization of information.

After the preparation of the synopses,

it was elaborated the Actors strategy framework, using the information related to the positioning of the actors in relation to the overall context of the competitive development of national supplier companies located in the Campos Basin and, especially, in relation to the impact of the dynamics in the behavior of these actors.

After analyzing the results, five dynamics were identified, that, according to the methodology, can be considered as the most influential in the context approached as it can be seen in the Table 2:

- 1. Economic Vocation of the O&G cluster focused on the operational phase
- 2. Influence of the discovery of the pre-salt reserves in the O&G cluster
- 3. Creation of a technology park focused on the O&G sector
- 4. Structuring a governance model for the O&G cluster
- 5. Level of the oil price

Table 2: Main dynamics that influence the context approached. Source: Elaborated by the authors.

1. Economic Vocation of the O&G cluster focused on the operational phase

One aspect widely mentioned by the actors interviewed that helps understand the analyzed context is the economic potential of this cluster is directed to the operational phase. This finding directs the analysis to a number of limitations that must be considered, because actually the activities realized in the O&G cluster of Campos Basin are related to the maintenance and logistics services for the transport of people, food and equipment, and other inputs used in the oil platforms.

Therefore, although there are actions in the cluster, taken by actors as FIRJAN and PROMINP, which are directed to the technological development, it cannot be noticed any interest by the entrepreneurs of the national supplier companies. The representative of the Rede Petro - BC notices that the greatest interest shown by entrepreneurs is to establish business contacts to obtain more maintenance contracts with operators and other service providers. This way, it can be concluded that the technological development is not the focus of the entrepreneurs.

2. Influence of the discoveries of the pre-salt reserves in the O&G cluster

According to the representatives of ONIP and SEDEIS, the influence of the pre-salt discoveries may occur in two ways in Brazil. The first one is related to investments in manufacturing equipment and technology in order to meet the LC requirements. The representative of SEDEIS calls for investments of US 400 billion in this sector by 2020. However, the ones that may get the benefit directly are essentially shipyards, to produce platforms, support vessels and other equipment, and the research centers, for the development of technologies. This is not the case of the O&G cluster of Campos Basin as this conglomeration does not have an economic vocation for manufacturing or technological development.

The operational bases that will support the offshore activities of the pre-salt exploration may suffer the second influence. Currently, the O&G cluster hosts the main operational basis for O&G exploration in the post-salt layers, but it suffers real bottleneck logistics problems in its only port – Imbetiba Port. Therefore, besides the logistics problems faced, the cluster is in competition with other more well-structured ports that

provide offshore support for the pre-salt, as the ports of Vitória-ES, Rio de Janeiro-RJ and Santos-SP, which are much closer to the pre-salt areas. Therefore, it can be concluded that the O&G cluster of Campos Basin may not suffer directly the influences of the pre-salt discoveries.

3. Creation of a technology park focused on the O&G sector

Among the actions implemented by the City Hall of Macaé (PMM) in favor of the competitive development of national companies, it can be mentioned the creation of a technology park. This project is resulting in much expectation in local actors it is the missing piece of the technological development of the O&G cluster in Campos Basin.

A point raised by representatives of actors as LENEP, IFF and the Brazilian suppliers is the lack of credibility of the PMM in leveraging this project. It was highlighted that the PMM have tried to implement other similar projects that had failed. Thus, although the actors have been very hopeful with the implementation of this technology park, there are doubts about the performance and continuity of the project.

4. Structuring a governance model for the O&G cluster

According to the representatives of Rede Petro - BC, SEBRAE and Brazilian suppliers, although Petrobras, as the main national operator, exert a strong influence on the O&G cluster of Campos Basin, there should be the formalization of a governance model for this cluster. The importance of this structure is to generate the mobilization and organization of actors in order to achieve a better representation and power to the common decision-making on the future of the cluster.

A representative of the Brazilian suppliers argues that it is very complex to be dependent of Petrobras, because the decisions on this company, which is an anchor for the cluster, not always meet the interests of other actors involved. For example, the representative points that Petrobras should clearly present its future demands in order to allow the local companies to better plan their projects. Thus, the structure of a governance model would be essential to establish a better direction of the cluster, besides facilitating the relationship with other actors in particular with Petrobras.

5. Level of the oil price

A dynamic that has proven to be very powerful was generated by the fall of the oil price in the international market as it was US\$ 107.73 a barrel, in June 2014, and, currently, around US \$ 46.17.

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Considering that the O&G industry is highly globalized, a macroeconomic factor as the price of the barrel impacts directly on all actors involved, whether operators, the supply chain or support organizations. Since the operation of O&G demands high financial costs, the economic feasibility analysis is a vital issue for the success in this sector. In Brazil, there is a more

complex situation because of the high costs of the offshore exploration in deep and ultra-deep waters as in the case of the pre-salt. Thus, worldwide, there was a decrease in the attractiveness of the O&G sector, which waits for an improvement in the oil price levels so projects and investments are restarted.

In summary, from the use of the tools of the Strategic prospective analysis, it was possible to identify the main factors of influence, the key actors involved and the main dynamics that influence the context approached. The proposal of the identification and analysis of the cited factors of influence by the Strategic prospective analysis is to lead the actors to a strategic discussion about their participation in change processes.

Therefore, it is possible a greater qualification of the actors in participating in the process of intervention and change in situations like the one exposed in this work. And as Godet (2000) highlights, the main purpose of the Strategic prospective tools is to support the decision makers in order to promote the collective success as can be seen in the dilemma experienced by the Brazilian suppliers located in the O&G cluster of Campos Basin.

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