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Common Oil and Gas Field Strategic & Integrated Development Management; Case Study: South Pars Gas Filed

Bahram Navazeni

*Prof. of Political Science, Imam Khomeini International University (IKIU), Qazvin, Iran,
info@navazeni.ir, navazenib@ikiu.ac.ir*

Ehsan Nojoomi

*Well Test Operation Superintendent at Mehran engineering and Well Services Co.
e.nojoomi@mehranservices.com*

Akhtar S. Moghadasi

Acid Laboratory Technician at Mehran engineering and Well Services Co.

Abstract

For Common Oil and Gas Field Strategic & Integrated Development Management, a legal pattern is essential to be considered since two or more independent countries/ states are known as interested parties. This pattern shall include vital technical issues as well as legal ones. In which these legal issues are directly infected by political wills of each interested country/ state to respect vital technical aspects.

The clearest concept to develop a hydrocarbon field is to perform surveillance management. Regarding common reservoirs, issued concept is highly affected by political will of interested countries. Thus all legal consideration must be hired to perform Strategic & Integrated Development Management based on required technical concepts.

This article would investigate Strategic & Integrated Development Management (legal pattern) of one of the most important region in oil and gas industries known as Persian Gulf and compare it with accepted international pattern. Common South Pars Gas Field is issued as case study in Persian Gulf to let the followers fully understand how legal pattern works for Common Oil and Gas Field Strategic & Integrated Development Management in this region.

Finally some tips would be presented to facilitate Strategic & Integrated Development Management based on technical requirements.

Key Words: common Hydrocarbon Reservoir/ Field, South Pars Common Gas Field, Surveillance Management, Common Oil and Gas Field Strategic & Integrated Development Management.



1. Introduction

Importance of Common hydrocarbon Fields in Persian Gulf is no negotiable for costal countries and also the consumers. This importance gets bolder because of South Pars Common Gas Field, biggest gas field in the word which is shared between Iran and Qatar. These common hydrocarbon fields affected by political will of owner`s more than required technical aspects to perform surveillance management.

Legal concept of common hydrocarbon reservoirs/ fields and also legal pattern of Strategic & Integrated Development Management according to international law and actual situation in Persian Gulf region is to be studied in this paper.

2. International Law Concept of Common Hydrocarbon Reservoirs/ Fields

According to international law and because of several technical aspects, mutual agreement and mutual understanding of interested countries/ states are critical to define Common Hydrocarbon Reservoirs/ Fields. Accordingly most hydrocarbon reservoirs/ fields all around the word share an equivalent definition by offshore border limitation of costal countries. Since South Pars Gas Field is a giant offshore gas reservoir in Persian Gulf and also Norway/ UK are first countries that agreed officially on unitized Strategic & Integrated Development Management of Frigg Common Gas Field (which was shared between them), comparing Persian Gulf pattern to North Sea pattern is unavoidable.

According to 1982 convention on the Law of the Sea, all Agreement concerning the boundary line dividing the continental shelf between Iran and Saudi Arabia on 24 October 1968, Iran and Qatar on 20 September 1969, Iran and Bahrain 17 June 1971, Iran and Oman 25 July 1974 and Iran and Dubai on 31 August 1974, equitable Delimitation of the Continental Shelf is respected.

Agreement between Iran and Qatar pointed out definition of a common hydrocarbon reservoir/ field on its second article and in east both Governments shall endeavor to reach agreement as to the manner in which the operations on both sides of the Boundary line could be coordinated or unitized.

In North Sea, UK and Norway followed the same principal. As it is pointed out in Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the delimitation of the continental shelf between the two countries, 10 March 1965.



3. Integrated Development of a Common Hydrocarbon Field

Known pattern as integrated development management of common hydrocarbon fields are formed for the first time based on legal agreements between UK and Norway to perform Common Frigg¹ Gas Field Strategic & Integrated Development Management. This pattern got improved over the time by involved parties. These improvements led to latest agreement published as “Framework Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway concerning Cross-Boundary Petroleum Co-operation” Oslo, 4 April 2005 [The Agreement entered into force on 10 July 2007].

This agreement includes 6 chapters, 5 annexes and one appendix to annex. Agreement states that “This Agreement shall apply to cross-boundary co-operation between the United Kingdom Government and the Norwegian Government with regard to Petroleum activities.”² Also both countries agreed on if two Governments, after consultation with their respective Licensees, agree that a Petroleum reservoir is a Trans-Boundary Reservoir which should be exploited, it shall be exploited as a single unit in accordance with the terms of this Agreement, unless otherwise agreed by the two Governments.

4. Persian Gulf Pattern of Common Hydrocarbon Field

All costal states of Persian Gulf perform alike approach to Iran regarding common hydrocarbon reservoirs/ fields. Thus study Iran and Qatar pattern would truly shows what kind of pattern all costal states are presenting all over Persian gulf. Mentioned agreement declared that No well shall be drilled on either side of the Boundary line so that any producing section thereof is less than 125 meters from the said Boundary line, except by mutual agreement between the two Governments, and also both Governments shall endeavor to reach agreement as to the manner in which the operations on both sides of the Boundary line could be coordinated or unitized.³ But so far no agreement or coordination or unitization even got discussed between owners of common hydrocarbon reservoir.

It should be noted that refer to the main idea of article 2 of issued agreement, utilizing new technologies specially deviated and vertical wells towards north and south of border is pointed out and agreed to not drill any well which its drainage radius, interface in a buffer zone about 125 meter of border in each side.

¹ Frigg gas field is a natural gas field on Norwegian block 25/1^[1] in the North Sea, on the boundary between the United Kingdom and Norway. The field is named after the goddess Frigg. King Olav V of Norway officially opened production on 8 May 1978. Production was closed on 26 October 2004. The field is situated 230 kilometers (140 mi) northwest of Stavanger. Operator for the field was the French oil company Elf Aquitaine, which merged and changed name to Total S.A.

² Framework Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway concerning Cross-Boundary Petroleum Co-operation, article 1.

³ Ibid



5. Conclusion

As shown, despite a very clear and reliable legal pattern which is enforced with required technical aspects for integrated development management of common hydrocarbon reservoirs, unfortunately Persian Gulf coastal countries doesn't respect the legal and technical needs of integrated recovery of common hydrocarbon reservoirs that are shared among them such as South Pars Gas Field/ North Field. Distrust ruling the atmosphere of coastal states political wills so heavily and is result to lose a great advantage for all interested countries. This article tried to show that basically there is no lack of legal efforts in region to reach mutual technical understanding for integrated development of common reservoirs. Problem is in no serious follow up the pervious achievements in bordering agreements to reach higher level in technical and legal affairs caused by distrust and no tendency in political wills of interested parties.

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