



THE THREE INTERNATIONAL PETROLEUM AGREEMENTS COEXISTENCE IN PRE-SALT AREA AND THE IMPACTS OVER THE UNITIZATION PROCESS

Luciana Braga

M.Sc. Energy Planning

Analyst at Brazilian National Petroleum Agency



BRAZILIAN CONTEXT

BRAZILIAN CONTEXT

- Pre-salt discover in 2007: 50 billion barrels of estimated reserves; oil of good quality – approximately 29° API.
- Changes in Brazilian Petroleum Legal Framework: Law n.º 12.276/2010 (Petrobras Capitalization e Onerous Assignment Agreement); Law n.º 12.304/2010 (create Pré-Sal Petróleo S.A.) e Law n.º 12.351/2010 (Production Sharing Agreement and Social Fund)
- Three International Petroleum Contracts (IPAs) in Pre-salt Area:

Concession	Onerous Assignment	Production Sharing Agreement
28%	2,46%	69,50%
55 Blocks/Fields	7 Fields	–

UNITIZATION

UNITIZATION

Definitions

- Ribeiro (2005) defines unitization as the coordinated operation of the entire or extensive part of an oil or gas reservoir by the owners or holders of rights of the blocks situated over the reservoir, whose basic function is to provide an efficient drainage of the reservoir, using the best engineering techniques, which are economically viable
- Weaver e Asmus (2006) classifies unitization in three phases: Pre-agreement; Agreement and Redetermination
- To Owen Anderson (1984) unitization process is usually complex and slow, that begins with the operational committee creation, constituted by the companies which has E&P rights under the shared reservoir



UNITIZATION IN PRE-SALT AREA

UNITIZATION

Pre-salt Area

- Tomasquim e Pinto Júnior (2011): considering that Pre-salt reservoirs can have several sections hydraulically connected, unitization agreements (AIPs) will be inevitably signed.
- Derman e Melsheimer (2010): Pre-sal area, due to geological structure, has multiple reservoirs and, due the size and number of blocks, there is high probability of many shared reservoirs, under different IPAs.



BRAZILIAN REGULATION

Law n.º 9.478/97

Art. 27 - Revoked

Law n.º 12.351/2010

Art. 33 - Compulsory, even when the same company or consortium has the E&P rights of the blocks where the shared deposit is located

Art. 34 - ANP's obligation to regulate unitization procedures and guidelines, and monitor agreement negotiation

Arts. 36 e 37 - The Government (PPSA or ANP) will enter into an unitization agreement in cases where the deposits from the Pre-salt polygon and the strategic areas extend to areas which are not granted or shared. The E&P regime is regardless of regime effective in the adjacent areas

Art. 38 - Petrobras could be contracted directly in order to carry out the evaluation activities

Art. 40 - Absence of agreement between the parties: ANP shall determine based on technical report or termination of the IPA

Concession Agreement

- Regarding unitization clauses, Bucheb (2007) indicates three generation of concession agreements: one from First Round until Forth Round; other of Fifth Round; and other from Sixth Round onwards. However the basic structure was kept in all the concession agreements.
- Foresee some of Law n.º 12.351/2010 dispositions, such as: use of the term 'deposit' instead of field; predicting that ANP will enter into an unitization contract in case of not granted areas; requiring minimum information that should be included in the agreement; monitoring the negotiations by ANP, and predicting the operations suspension during the transactions. From the Fifth Round, also predicted the IPA termination, if one party refuses to sign the agreement.

POTENTIAL PROBLEMS

Practical Potential Problems in Pre-salt Area

Ribeiro (2010) says the coexistence of different regimes (concession and producing sharing) in neighboring areas can cause huge technical difficulties in case of unitization

UNITIZATION

Practical Potential Problems in Pre-salt Area

DIVISIBLE OBLIGATION x INDIVISIBLE OBLIGATION*

The fiscal systems should be applied independently (and proportional) for each portion of unitized field, respecting the contracts involved original features, admitting specific ruling by regulator only to the contractual obligations that need to be fulfilled entirely, observing the public interest, the social function of the contract, the best practices of the oil industry, the principles of contracts preservation and proportionality. (DAVID e LOPES, 2011 - Parecer n.º 094/2011/PF-ANP/PGF/AGU)

** Art. 258 of Brazilian Civil Code provides that indivisible obligation occurs when the installment has as object a thing or fact that cannot be divided by nature, by economic order reason, or given the legal business reason*

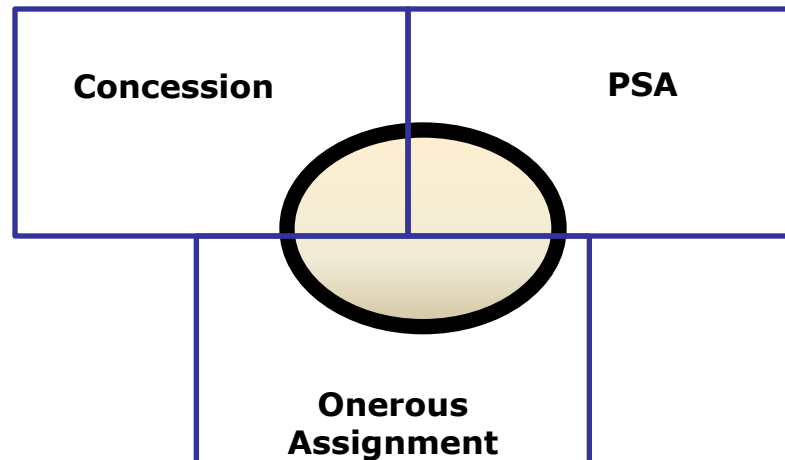


UNITIZATION

Practical Potential Problems in Pre-salt Area

First hypothesis:

- the deposit extends to three blocks, one under concession agreement, other under onerous assignment and the third block under production sharing agreement



UNITIZATION

Practical Potential Problems in Pre-salt Area

○ **Potential Problem:**

- Definition of percentages and rules for local content commitment, given the difference in contractual dispositions and the difference in percentage of each International Petroleum Agreement (IPA)

○ **Indivisible Obligation**

○ **Possible Solutions:**

- adopt the lowest commitment defined in IPAs involved;
- adopt the biggest commitment;
- adopt an intermediate value in accordance with a rule of ponderation;
- define a specific rule for unitization cases

UNITIZATION

Practical Potential Problems in Pre-salt Area

- **Potential Problem:**

- Defining the government take

- **Divisible Obligation**

- **Possible Solutions:**

- Calculation by IPA, proportional to participating interests

UNITIZATION

Practical Potential Problems in Pre-salt Area

- **Potential Problem:**

- Gold Plating: tendency of the contractor under the production sharing regime to be less efficient in its spending

- **Possible Solutions:**

- Pré-Sal Petróleo S.A. (PPSA) monitor and audit costs and investments related to Producing Sharing Contract.

UNITIZATION

Practical Potential Problems in Pre-salt Area

- **Potential Problem:**

- Define the operator: Petrobras as the unique operator of Pre-salt Area

- **Indivisible Obligation** (carryng out the operations)

- **Possible Solutions:**

- Art. 35 of Law n.º 12.351/2010 permits an indication of a different operator for AIP

UNITIZATION

Practical Potential Problems in Pre-salt Area

○ **Potential Problem:**

- Definition of unitized area: several alternatives in AIPN model of unitization agreement (reservoir/deposit; stratigraphic horizon; depth or full depth)

○ **Possible Solutions:**

- Art. 33 of Law n.º 12.351/2010 establish that unitization procedure must be done by deposit

UNITIZATION

Practical Potential Problems in Pre-salt Area

- **Potential Problem:**

- Definition of unitization agreement duration

- **Possible Solutions:**

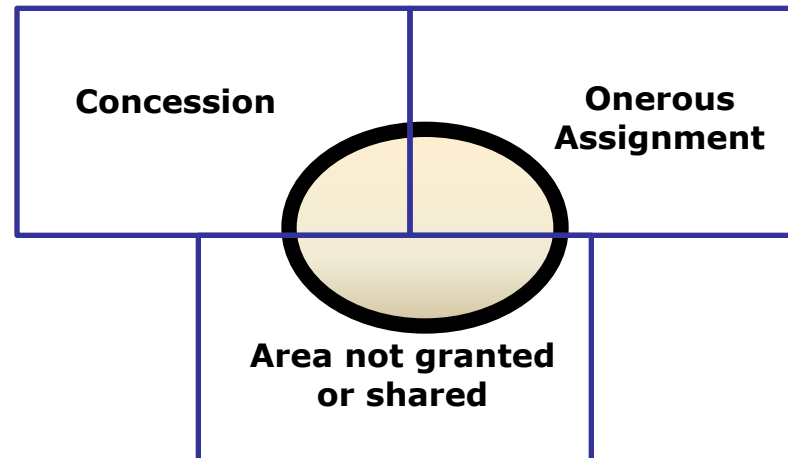
- ANP could standardize the IPAs' duration authorizing, at its sole discretion, the extent of the validity of IPA with lower lifetime to reach the one with highest validity

UNITIZATION

Practical Potential Problems in Pre-salt Area

Second hypothesis:

- the deposit extends to an area whose E&P rights were not granted or shared



Practical Potential Problems in Pre-salt Area

○ **Potential Problem:**

- Lack of IPA for the area not granted or shared

○ **Possible Solutions:**

- Replicate the IPAs' parameters - operator, local content, duration (WEAVER e ASMUS, 2006)
- Government Take according the legislation in force- royalties rates probably different
- Adopting an independent fiscal regime, according art. 36, § 2° of Law n° 12.351/2010)

UNITIZATION

Practical Potential Problems in Pre-salt Area

○ **Potential Problem:**

- The future concessionaire or contracted under producing sharing regime is obligate to obey the unitization agreement dispositions signed by PPSA

○ **Possible Solutions:**

- Permit the future concessionaire or contracted under producing sharing regime make the necessary adjustments in the unitization agreement, since they do not harm the public interest, and be approved by ANP

UNITIZATION

Practical Potential Problems in Pre-salt Area

○ **Potential Problem:**

- Government participation in E&P investments

○ **Possible Solutions:**

- Exploration costs: the Government can not assume any risk and, therefore, operating costs
- Production costs: the Government will assume the costs in proportion to its participation, to prevent unjust enrichment. This payment must be made in kind, being compensated by the share of production due to the Government

- **Potential Problem:**

- Evaluation of the adjacent area not granted or not shared

- **Possible Solutions:**

- Art. 38 of Law n.º 12.351/2010: allows to contract Petrobras directly to carry out the evaluation activities – exception to art. 23 of Law n.º 9.478/97

Practical Potential Problems in Pre-salt Area

- **Potential Problem:**

- Share of production due to Government

- **Possible Solutions:**

- Art. 45 of Law n.º 12.351/2010: establishes that the share of the Government shall be delivered in kind, which will be commercialized by Petrobras, after being hired directly by the PPSA

FINAL REMARKS

- For a more detailed analysis is necessary the analysis of the contractual terms of the Brazilian PSA and the unitization procedure to be published by ANP as well as their specific regulations
- Hypothetic analysis: none AIP involving more than a kind of IPA or involving an area whose E&P rights were not granted or shared was signed in Brazil
- The solutions presented may not be the most suitable when faced with a factual situation.