Journal of Law, Policy and Globalization
ISSN 2224-3240 (Paper) ISSN 2224-3259 (Online)
Vol.72, 2018

The Role of the Management of Oil and Gas in Indonesian Borders

Zulkarnain[1] Abrar Saleng[2] S.M. Noor[2] A.M.Yunus Wahid[2]
1.Phd Student at Postgraduate Program Hasanuddin University
2.Professor on Legal Science, Faculty of Law, Hasanuddin University

Abstract
The aim of this paper is to analysis the role of the State to secure the interests of the State in the management of oil and gas in the border of Indonesia. The applied methodology was literature study to collect some reading and reviewing written documents. The data then were analyzed through qualitative descriptive analysis. The result of the discussion indicates that in accordance with the mandate of the 1945 Constitution that the role and responsibility of the State in the management of oil and gas in the border of Indonesia should be oriented to the prosperity of the people of Indonesia. However, it is not yet optimal because the Law No. 22 of 2001 concerning Oil and Gas is very liberal which is more profitable to foreign investors than the national interest of Indonesia. Therefore, it is important for the Indonesian government to revise the Law No. 22 of 2001 concerning Oil and Gas for the sake of Indonesian benefits as a state and for sake of the greatest possible prosperity of Indonesian people as stipulated by the 1945 Constitution of Indonesia.
Keywords: Role of State; Management of oil and gas; Indonesian border.

1. Introduction

Mining management is a vital field and strategy in sustaining the country's foreign exchange. It is stipulated in the provisions of Article 33 paragraphs (2) and (3) of the 1945 Constitution which states that "production branches which are important for the State and affect the livelihood of the people, controlled by the State and used for the greatest prosperity of the people (paragraph 2); and that the earth, water, and natural resources contained therein are controlled by the state and utilized to the greatest prosperity of the people (paragraph 3)". It can be said that both paragraphs include to the operation of mining products to be managed to increase the welfare of the people

To realize the mandate of the 1945 Constitution, Indonesia is given roles and responsibilities for protecting its gas and oil in appropriate ways. However, the presence of the Law No. 22 Year 2001 concerning Oil and Gas is not in accordance with the mandate of the 1945 Constitution. It, then, tends to be even worst in terms of the management of Natural Resources of Indonesia. The effect of it makes the industry oil and gas fail to become a buffer of national energy security. The worsening of oil and gas natural resources management is marked by misguided regulations; the creation of a complicated new bureaucratic chain; inefficiency of cost recovery; the existence of mafia game; the declining of nationalism in the oil contract; and the policy of oil and gas earth without a roadmap. Those reasons have an impact on the production (lifting) of oil and gas. The production has not increased especially since 2004.[1]

A misguided fiscal regulation is marked by the abolition of "*lex specialis* principle" in Production Sharing Contract (hereinafter referred to PSC) in the Law No. 22 Year 2001 concerning Oil and Gas. In fact, Indonesia becomes the only country to levy tax at the pre-production stage through Article 31 of the Law No. 22 Year 2001 on Oil and Gas. Indonesia is the only country that levies taxes at the pre-production stage through Article 31 of Law Number 22 Year 2001 on Oil and Gas. Indonesia has implemented various taxes and levied them during the exploration period including import duties of 15% and Value Added Tax 10% of the value of capital goods imported from abroad. This condition has been the cause of the declining attractiveness of investment in the oil and gas sector in Indonesia. The consequence of it, new exploration activities on the potential of oil and gas resources in Indonesia has no developed as expected.[2]

The Law Number 22 Year 2001 on Oil and Gas introduces a new institution called the Executing Agency for Oil and Gas (hereinafter referred to BP Migas). However, its function and duties are relatively limited because of the legal status aspect of State Owned Legal Entity (hereinafter referred to SOLE). As a legal status in the form of SOLE, it is not a business entity because it cannot be eligible to conduct business transactions with other parties, especially with the company. As SOLE, business transactions are conducted with third party as intermediaries. BP Migas as SOLE has function to control management of oil and gas operations but not a State Owned Enterprise (hereinafter referred to SOE) directly involved in production activities. This condition has triggered a judicial review through the Judicial Review to the Constitutional Court which ended in the dissolution of BP Migas and for the time being its role and function is run by the Oil and Gas Special Unit

[1] Juajir Sumardi, Sovereignty of Oil and Gas in Indonesia, Makassar, Arus Timur, 2017, p..5.
[2] Ibid.

(hereinafter referred to SKK Migas) which recently the position and authority carried out also has been questioned and raises new legal issues.[1]

2. Research's Method

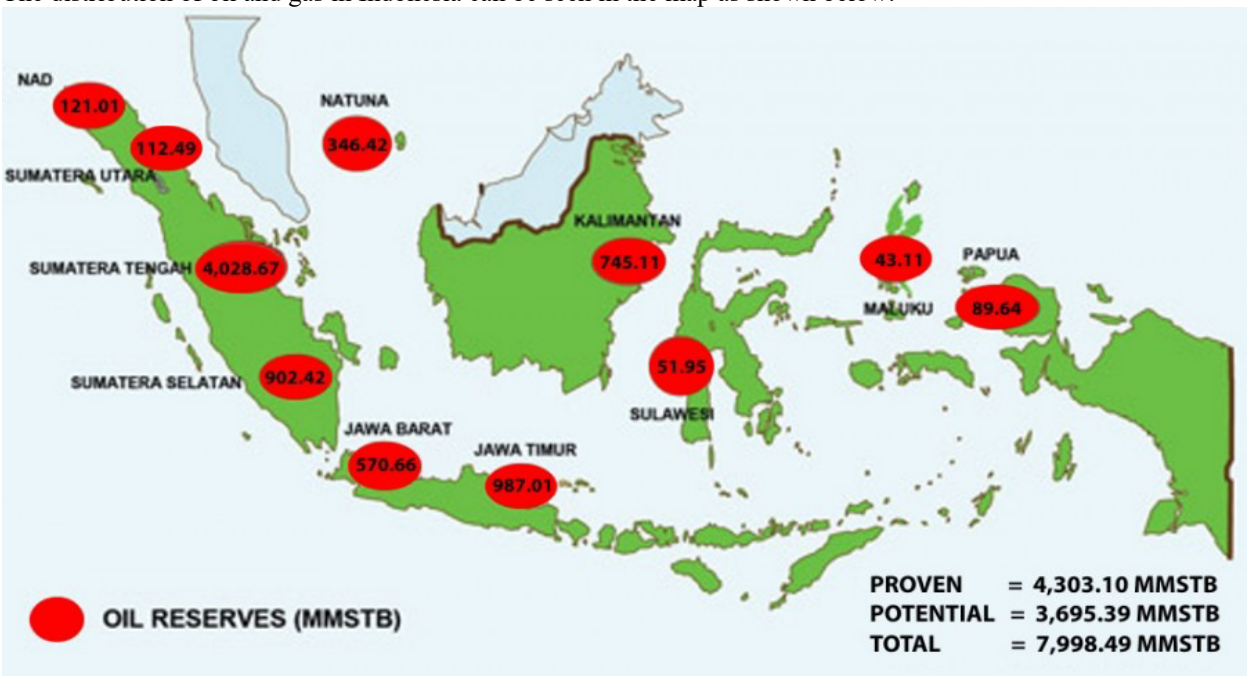
The type of this legal research was a normative legal research. The normative legal research includes (1) research in regards to the principle of the law; (2) research in regards to the system of the law; (3) research in regards to the vertical and horizontal synchronization process; (4) legal comparison; and (5) legal history.

The legal materials of this research were obtained from primary legal materials, secondary legal materials, and tertiary legal materials (supporting materials). The collection of the legal materials, both primary and secondary, will then be arranged into a comprehensive arrangement. They will be further made descriptively and analyzed qualitatively with reference to the existing principles.

.

3. Map of Amount and Distribution of Oil and Gas in Indonesia

The distribution of oil and gas in Indonesia can be seen in the map as shown below:



Source: Adi Maulana, The Indonesian Mineral Resources: Current Outlook, Management and Challenge, Makassar, POLTEK NEGERI UJUNG PANDANG, 2016.

The Map indicates that reserves of energy resources in Indonesia spread throughout the country. However, in general, fossil energy resources in the form of oil and gas are mostly available outside Java islands while the usage of the energy is concentrated in Java (more than 60% of the population lives in Java).

The "proven reserves" of current oil and gas are not large. The petroleum reserves after being produced for approximately 125 years since the Dutch colonial era until now, have only 4,200 million barrels of oil (million stock tank barrels, MMSTB) and are ranked 20th in the world or only about 1.2% of the world's oil reserves. Therefore, it is not true if there is a perception that Indonesia's oil reserves are very large and even abundant. Natural gas reserves, to distinguish from other types of gas, have been massively produced since the early 1970s, Indonesia's natural gas reserves are considerable at 108 trillion cubic feet (trillion standard cubic feet, TSCF), ranked 12th in the world and the largest in the Asia Pacific region.[2]

The amount of this reserve needs to be stated. In addition to knowing the "wealth" of Indonesian oil and gas resources, it is also to know how long Indonesia can utilize these oil and gas resources to support our national development. Of the remaining proven reserves of oil, when produced at the current production level of about 1 million barrels a day, production target in accordance with National Budget 2010 was 965 barrels a day. If assuming no additional reserves are found because there are no exploration activities, the oil reserve will run out in about 10 years. While the remaining proven reserves of natural gas, if produced at current production levels are about 8 billion cubic feet a day. If assuming no additional reserves are found because there is no exploration activity, the natural gas reserves will run out in a relatively long time, which is about 37 years. The total gas produced is mainly exported, mainly in liquid form (Liquified Natural Gas, LNG) and natural gas, contributing

[1] Ibid.p.6.
[2] Review of World BP, Statistical Energy, June 2009

approximately 2.3% of the world's gas needs.[1]

Besides the numbers of proven reserves of oil and gas as mentioned above from the results of the initial exploration activities so far in all regions of Indonesia, it is recorded that there is still potential reserves. The potential oil reserves of approximately 3.500 million barrels (MMSTB) and natural gas reserves of 48.7 TSCF.[2] This potential reserve can be upgraded to proven reserves with further exploration activities, which amount depends on the level of activity and the exploration success ratio. The success of this proof will be able to extend the "life time" of oil and gas energy availability to be used to support development. In addition to the proven and potential reserves as described above, from the 66 geological basins study results, it is possible that Indonesia still has oil resources of approximately 11,300 MMSTB.[3] While the amount of natural gas resources there is no data to be used as a reference.

In this case, the authors argue that perhaps the magnitude of the resource is not only oil but including natural gas, so that the amount is "barrel oil equivalent", the writing becomes 11,300 MMSTBOE. The existence of such a large resource potential not only provides confidence and pride but also a challenge to be able to prove it so that resources can be manifested and used to support national development as an effort to support the realization of the welfare of all Indonesian people. The potential for this huge oil and gas resource in addition to the potential reserves is also one of the "attractions" for many, including and especially the international oil companies (IOC) to prove and more importantly whether it can be produced in a commercial.

The data described the Energy Distribution Scheme as stipulated above indicates that the Indonesian nation is not only aware of the potential reserves of each type of energy resource, but also its location. Indeed, these still require further exploration activities using large technology and funding capabilities prove before it can be exploited that has economic value. In the oil world in particular and mining in general, it is pivotal to have potential reserve data, especially if already in good mapping status. It is leverage in the face of third parties whose will cooperate in upstream activities (exploration and exploitation).

There are 3 (three) important aspects that determine the agreement of upstream oil and gas activities. In addition to attractive investment climate (political stability and security), it is the geological aspect, whether the geological conditions in the work area is quite "promising" can be found oil and gas reserves. While the economic aspect is how the fiscal arrangement is described as "terms and conditions" in the agreement (Contract) whether it is enough to provide profits if found commercial oil and gas reserves.[4]

In cooperation with foreign investors, there are 3 (three) principles to be regulated – called the management authority, the status of foreign investor, and the form of cooperation. This cooperation is temporary as long as the State Enterprise as the holder of the mining business authority has not / has not been able to perform the activities of Upstream Oil and Gas (exploration and exploitation) assigned by the State to it.[5] Indonesia's ability to map the potential reserves and the dissemination of various energy resources, which have great potential, including oil and gas, as well as the basis of national energy planning, can be sorted out which ones can be handled by themselves and which ones can require major cooperation with foreign investors. For the latter of the ownership of the data, it can be used as "leverage" in various negotiations.

4. The Role and Responsibility of State in the Management of Oil and Gas in Indonesian Borders

4.1 The Role of the Management of Oil and Gas

The simple formulation of Article 33 Paragraph (3) of the 1945 Constitution of the Republic of Indonesia expressly mandates the interests of the people nationally and not locally as follows: "Earth, water and natural resources contained therein, including minerals controlled by the state". Understanding *the phase of controlled by the state* is the creation and intellectual ingenuity of the founding father. If *the phase of controlled by the Government* is applied in this terms, it is meant that it can be controlled either by central government or by local government. Therefore, the mandate for the greatest prosperity of the people can be just a prosperity of the people locally (in the area) where the minerals are located.

The constitutional mandates only gives power to the state, even this is not a "derivative", which means that it cannot be re-authorized to anyone, let alone done only by based on a form of law. The juridical effect will be null and void, as it is contrary to the higher provisions of the constitution. The notion of the greatest prosperity of the people as a mandate of this constitution means that:

1) the utilization of minerals is only one purpose, that is for the greatest prosperity of the people all over Indonesia and not for the prosperity of the local people. If that is meant prosperity of the local people certainly formulated in the form of "prosperity of society;
2) only a state can hold a nation's prosperity nationally, as this is indeed the responsibility of the state;

[1] OPEC Annual Statiscal Bulletin, 2008.
[2] See Report of Ministry of Energy and Mineral Resources, 2008.
[3] Ibid.
[4] Suyitno Patmosukisme, **Oil and Gas: Politic, Law, and Industry**, Jakarta, PT. Fikahati Aneska, 2011, p. 95
[5] Ibid., p.96.

3) on the use of natural resources for the greatest prosperity of the people, both in the body and explanation of the Law of the Republic of Indonesia Year 1945 not specified and explained explicitly. It means to exploit this natural wealth, then open the opportunity to be done in the form of cooperation with the state, not with local government. In this case the state acts as the "Right-holder" of the people in accordance with the mandate of the Constitution;
4) the necessity of pay attention, whether the right of control of this country, have understanding including also can be implemented by state (SOE).

In order to use the minerals for the greatest prosperity of this people, basically the right of the state according to the mandate of the constitution is merely given in the form of rights of control. While the ownership of excavated materials remains to the entire people or the nation of Indonesia.

The existence of the greatest terms of the prosperity of the people is as a consequence of the words "controlled by the state" and "used". The word "used" is the purpose of the word "controlled" so that both have a causal relationship. Thus, it can be understood that the word "used" as a result of "state control". Both aspects of the rule cannot be separated from each other. Both of them are a systematic entity. Right of mastery of state is an instrument, while the greatest use of people's prosperity is a goal (objectives). The general term of people's prosperity is the continuation or normatification of several terms in the fourth paragraph of the Preamble of the 1945 Constitution.

The main role of the state referred to in the welfare state concept is very closely related to the state's right of state assets and resources to be carried out in accordance with its functions. According to W. Friedman, the roles are as follows:[1]

1. State ownership rights positioned the state as a regulator and guarantor of people's welfare. The function of the state cannot be separated from one another. It means that it is to let a field of business over natural resources to the cooperative; the private sector must be accompanied by special forms of control and supervision. Therefore, the obligation to realize the greatest prosperity of the people can still be controlled by the state.
2. State ownership rights provide legitimacy for the state to undertake natural resources related to public utilities and public services. On the basis of philosophical considerations (basic spirit of the economy is a joint effort and kinship), strategies (public interest), politics (preventing monopoly and oligopoly that harm the state economy), economy (efficiency and effectiveness), and for the welfare of the public and the amount of prosperity of the people.

In the implementation of state control, there are aspects of policy as follows: a. Regulation (*Regeleensdaad*), b. Handling (*Bestuurdaad*), c. Management (*Behersdaad*), and. Supervision (*Toezicthoudensdaad*), e. Confirmation/determination (*Beschikking*).[2] The five forms of state control in the decision are the function of policy and regulation, management and supervision must be interpreted in stratum based on its effectiveness to achieve the greatest prosperity of the people. Then, the form of state control of the first rank and the important thing is the state direct management of natural resources so that the state gets bigger profits. It can be concluded that the mandate of the constitution is that the state shall do direct management of natural resources that affect the livelihood of many people. Mineral and coal resources as non-renewable natural resources including natural oil and gas resources must be managed directly by SOE.

For this context, the author agrees to Subianto Tjakrawerdaja point of view. Subianto Tjakrawerdaja[3] states that the management of oil and natural gas based on Article 33 of the 1945 Constitution must contain seven constitutional characteristics, namely: first, the economy aims to achieve the common prosperity of all people; this is explicitly explained in the elucidation of Article 33 of the 1945 Constitution. Second, the participation of the people in the ownership, production process, and enjoy the results. This is in accordance with the formulation contained in Article 33 paragraph (1) and paragraph (4) of the 1945 Constitution. Third, in accordance with the principles of Article 33 Paragraph (4) of the 1945 Constitution that is fair efficiency, the economy needs to be run by using a fair market mechanism based on fair competition and the role and authority of the state for investment in case of market failure. Fourth, the role of the State should be guaranteed, as mandated by Article 33 Paragraph (1) and Paragraph (3) of the 1945 Constitution, especially in the case of national economic planning, in establishing and enforcing the implementation of the Law, and in the implementation of community service and empowerment programs, subsidized and other benefits. Fifth, SOEs as one of the pillars of economic activity master the important branches of production and which affect the livelihood of many people. This is clearly stated in Article 33 paragraph (2) of the 1945 Constitution. Sixth, the cooperative as a pillar of people's economy should be realized in the spirit of togetherness with state-owned and private, and as a people's

[1] Tri Hayati, et. all, Concept of State Ownership Rrights in Natural Resources Sector Based on Article 33 of the 1945 Indonesian Constitution, Jakarta, SekJen MKRI and CLGS FHUI, 2005, p.17.
[2] The Decision of the Constitutional Court of Indonesia, June 2011.
[3] Subiakto Tjakrawerdaja is an observer Cooperative and ex-Ministry of Cooperative in Soeharto Era. See Subiakto Tjakrawerdaya, "Waiting the Umbrella Law of National Economy" , *Reform Review*, Volume II Nomor 1 April-Juni 2008, p. 40.

economic enterprise. Seventh, the national economy should be a manifestation of an equal partnership between cooperatives, state-owned enterprises and the private sector. This principle is contained in Article 33 Paragraph (1) of the 1945 Constitution. It is these constitutional characteristics that should be translated into the whole set of oil and natural gas legislation regulations.

The greatest prosperity of the people is the goal of every management and use of national natural resources. This objective is seen as a non-negligible interest. In addition to constitutional mandate, it is also coveted by every citizen and is the responsibility of the state as a consequence of the right of control of the state itself. Therefore, every exploitation and use of natural resources is tailored to the objectives (doelmatig).

4.2.State Control of Oil and Gas Management

The existing forms of oil and gas management cooperation can be classified into four forms:

a. Concession Agreements (Cas);
b. Joint Venture Contracts (JVCs);
c. Services Contracts (SCs); and
d. Production Sharing Agreements (PSAs).

Tabel 1
Comparative of Ownership, Control, and Risks of *Concession Agreement* (CAs) and *Production Sharing Agreement* (PSAs)

	Cas			PSAs		
	Ownership	Control	Risk	Ownership	Control	Risk
International Oil Company (IOCs)	Yes	Full	Full	Shared	Full	Full Risk
Host State	No	No	No	Shared	No	No Risk

Tabel 2
Comparative of Ownership, Control, and Risks of *Cooperation of Service Contract (SCs)*

	PSC			RSC		
	Ownership	Control	Risk	Ownership	Control	Risk
International Oil Company (IOCs)	No	No	No	No	No	Exploration
Host State	Full	Full	All Risk	Full	Full	All Risk

To illustrate the differences between each of the international forms of cooperation in oil and gas management as described above, it can be stated in Table 1. As for oil and gas management agreement by using service contract, a comparison table between pure service contracts and service contracts with risks as shown in table 2 can be presented.

4.3 Practice of Oil and Gas Management in Some Countries

The oil and gas industry of a country differs from one another in terms of how the roles and responsibilities of three functions are: policy, regulation and commercial functions (business). Some countries strictly divide the function, such as Norway, and Brazil. In Norway, the policy function is handled by the Ministry of Petroleum and Energy, the regulatory function under the Petroleum Directorate and the commercial functions carried out by the national oil company (NOC) together with the IOC. Similarly in Brazil, the three functions are strictly separated.[1]

In some countries, there is no strict separation of the three functions, but one and other functions, such as Saudi Arabia and Malaysia, the NOC (Saudi Aramco and Petronas) play a very dominant role. It has not only played commercial function, but also it plays regulation function. Instead Venezuela, the Petroleum Ministry played a more dominant role. Before the Chavez era became President in 1998, the role of the NOC was already too strong and joined politics against Chavez's rise. Since 1999, the dominance of PDVSA has been reduced, the regulatory function is then returned to the Petroleum Ministry. Meanwhile, in Iran the dominance between the NOC (National Iranian Oil Company / NIOC) and the Ministry is relatively balanced.[2] In developing countries, the commercial role is generally carried out by NOCs, both individual and with the IOC. While in the OECD countries, such as USA, UK, Australia and Canada, the state does not go directly into the oil and gas business through NOCs (no NOCs in those countries), so that pure commercial functions are undertaken by private parties.[3]

In Bolivia, through the new oil and gas law (2005), the royalties rose to 18% and Direct Tax On Hydrocarbon (DTH) by 32%, thus totaling 50% of total production. Especially for large field, added with the

[1] Benny Lubiantara, **Economy of Oil and Gas: Review of Commercial of Oil and Gas Contract**, Jakarta, PT. Gramedia Widiasarana Indonesia, 2012 , pp.. 127-146.
[2] Ibid.
[3] Ibid.

participation of the government by 32% so the total to 82%. Comparing with PSC conditions in Indonesia where 85%: 15% (oil) and 70%: 30% (gas) is divided, certainly not apple to apple because 85% and 70% of the Indonesian government share is net profit. When calculated from gross revenues, of course the presentation is not that great, still far below Bolivia which is 82%. The division of Bolivian model is indeed unusually high for the state, but still implemented because it is known exactly the cost structure. So, it only costs to production and does not need to invest capital. It supposes a production cost of 10% of gross income, then the company still makes a profit of 8% of gross income. The 82% model in Bolivia applies to large fields currently in production, thus there is no exploration risk. If this concept is offered for the new block that has been explored, certainly no investor is interested. Full risk exploration activities, when commercial reserves are found once access to gross income is limited to a maximum of 18%. Investors will certainly re-think, when their investment costs will return.

The Indonesian PSC model is divided into 85%: 15% (oil) and 70%: 30% (gas). It is for full cycle activity from exploration to production. Compared to other countries, revenue share including the tax has been very good. What happened in Bolivia and some other Latin American countries basically is inseparable from the existence of unfair contracts made in the past.[1]

In Brazil related to the arrangement of investor cooperation in the framework of exploration and exploitation activities, through oil and gas law in 1997, it only mentioned the concession system. Therefore, the PSC system has never been there. So the authorities in Brazil began to examine the contracting system used by other countries which led to the debate about the two choices that still use the concession system with modification or move to the PSC system.

The debate raises the pros and cons among academics who still want the concession system. They argue that the system is successful for decades, if the government feels the need to obtain a larger portion. It can be done by doing a little modification without having to move to the PSC system. While supporters of the PSC system assume that concession systems are only suitable for work areas that have large geological risks, while sub-salt basins, as they have many findings, the risks are relatively small. Even though both systems can provide an equal share of revenue for the government, but the arrangement of the division will be easier in the PSC model due to there is a profit-share element (oil share profile). In July 2009, authorities announced that the government would move to the PSC system by forming a new national company specifically established for subsalt basin development. No explanation of the reasons for the formation of a new national company is required, but this is expected due to the status of Petrobras. Although known as a national company, Petrobras is not 100% state-owned. The government portion is only 48%, the rest is owned by foreign and national private investors. The establishment of a 100% state-owned new company is intended to maximize the total government share of upstream activities in the subsalt basin.[2]

It is clear that what happened in Brazil is contrary to the situation in Indonesia. Firstly, oil and gas exploration in Brazil is a big success, but the opposite situation occurs in the country. Secondly, Brazil considers the PSC, while in Indonesia the government is busy looking for a system other than PSC for cost recovery reasons. Brazil's move so far is right, because the first stage for them is how to invite investors to oil and gas exploration with the terms and conditions of interest. In contrast, in Indonesia too busy looking for contracts that benefit the state, while at the same time exploration performance is less encouraging.

Oil and gas management in Norway only recognizes the concession system from scratch to obtain a portion of the government from the oil and gas industry. Norway relies solely on their sophisticated administrative system of taxation, so the use of PSCs is deemed unnecessary. Although the use of concessions and government sections is derived only from taxes, the total share of government revenue is large. Income tax of 28%, plus other taxes – called - Special Petroleum Tax (50%) of net income, thus the marginal tax rate is 78%. At the international level, the share of government revenue is a high category, especially compared to blocks or oil and gas fields in other countries using the concession system. For investors, although the share of government revenue is quite high, the Norway concession system is considered attractive because elements of government revenue are derived from the bank, unlike royalties imposed on gross income. Taxes are imposed on net income; such systems are known as back-end loaded, which tend to be preferred by investors. The simplicity of the physical framework for the oil and gas industry in Norway can work well, notwithstanding the reality that an advanced governance system.

4. Conclusion

The right to control by the state must be in accordance with the purpose of the Welfare State as stipulated in Article 33 Paragraph (3) of the 1945 Constitution of the Republic of Indonesia. The relationship with the right of state control with the greatest prosperity of the people will realize the obligations of the state, among others, that all forms of utilization of natural resources should significantly enhance prosperity and prosperity. State

[1] Ibid.
[2] Juajir Sumardi, Op.Cit. pp..27-28.

ownership rights positioned the state as a regulator and guarantor of people's welfare. The function of the state cannot be separated from one another. It is to let a field of business over natural resources to the cooperative; the private sector must be accompanied by special forms of control and supervision. Therefore, the obligation to realize the greatest prosperity of the people can still be controlled by the state . The control of the state interpreted as the people collectively constructed by the 1945 Constitution mandates the state to make policies (*beleid*) and the act of administering (*bestuurdaad*), regeneration (*regelensdaad*), management (*beheersdaad*), and supervision for the greatest purpose of people's prosperity. The five forms of state control in the decision that is the function of policy and management, regulation and management and supervision should be interpreted in stratum based on effectivity to achieve the size of people's prosperity.

Therefore, the role and responsibility of the State in the management of oil and gas in the border of Indonesia should be oriented to the prosperity of the people of Indonesia. However, it is not yet optimal because the Law No. 22 of 2001 concerning Oil and Gas is very liberal which is more profitable to foreign investors than the national interest of Indonesia.

Bibliography

Benny Lubiantara, **Economy of Oil and Gas: Review of Commercial of Oil and Gas Contract**, Jakarta, PT. Gramedia Widiasarana Indonesia, 2012.

Juajir Sumardi, **Sovereignty of Oil and Gas in Indonesia**, Makassar, Arus Timur, 2017.

Subiakto Tjakrawerdaya, "Waiting the Umbrella Law of National Economy" , ***Reform Review***, Volume II Nomor 1 April-Juni 2008.

Suyitno Patmosukisme, **Oil and Gas: Politic, Law, and Industry**, Jakarta, PT. Fikahati Aneska, 2011.

Tri Hayati, et. all, **Concept of State Ownership Rrights in Natural Resources Sector Based on Article 33 of the 1945 Indonesian Constitution**, Jakarta, SekJen MKRI and CLGS FHUI, 2005.