The Ethiopian Legal Framework for Petroleum Operations (Exploration and Production).

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Abreviations:

PSC	Production Sharing Contract
PSA	Production Sharing Agreement
FDRE	Federal Democratic Republic of Ethiopia
EMPPSA	Ethiopian Model Petroleum Production Sharing Agreement

The Ethiopian Legal Framework for Upstream Petroleum Operations (Exploration and Production)

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1 INTRODUCTION

1.1 General Background

For nations endowed with petroleum resource, it constitutes a substantial component of their GDP and even a major part their export.[1] Ethiopia, a country with a surface area of about 1.14 million km^2 [2] and a population of about 100 million,[3] whose economy is mainly agriculture based, is striving to make economic sense of its mining sector. So far, the contribution of the mining sector to GDP is generally negligible,[4] and there has not been commercial production of hydrocarbons. However, there have been reported significant gas discoveries and promising signs of oil. [5] A significant portion of the country is presumed to have petroleum potential and labelled into different basins (see fig. 1).[6]

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[1] See World Economic Forum, "which economies are most reliant on oil?", https://www.weforum.org/agenda/2016/05/which-economies-are-most-reliant-on-oil/ .

[2] Ministry of Mines(currently renamed as Ministry of Mines, Petroleum and Natural Gas) (Federal Democratic Republic of Ethiopia), "National report on mining to the United Nation Commission on sustainable development (UNCSD)," New York (November 2009), http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/ethiopia/mining.pdf; The organization dedicated to petroleum sector had gone through series of organizational structural changes (http://www.mom.gov.et/about.aspx#1);

[3] UN data, "World of information" (2016), http://data.un.org/CountryProfile.aspx?crName=ethiopia

[4] As of 2010 , for example, the sectors constitutes just 1% of GDP, and plan was to increase this to 10% by 2024. Fasil Amdetsion, "Ethiopia's mining sector: a developmental approach" http://www.americanbar.org/content/dam/aba/events/international_law/2015/06/Africa%20Forum/ForeignInvestment2.authcheckdam.pdf.

[5] Calub and Hilala gas-condensate fields in the Ogaden basin have been the most promising ones with estimated total reserve of 4 Tcf (reserve at Calub field is 2.7 Tcf and at Hilala field 1.3 Tcf). Yet even these have had a troubled history and are still not in production. See Deloitte, "The Deloitte guide to oil and gas in east Africa" (2014):5, https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-Deloitte-guide-to-oilandgas-in-eastafrica-April%202014.pdf; see also Addis Fortune, "Ethiopia Escapes PetroTrans's $1.4 Billion Claims" (Published on Jan 24,2016 [Vol 16 ,No 821]), http://addisfortune.net/articles/ethiopia-escapes-petrotranss-1-4-billion-claims/.

[6] Ministry , "Petroleum exploration in Ethiopia information and opportunities" (Brochure, May 2011), http://www.mom.gov.et/upload/Brocure%20on%20Petroleum%20Potential%20of%20Ethiopia.pdf

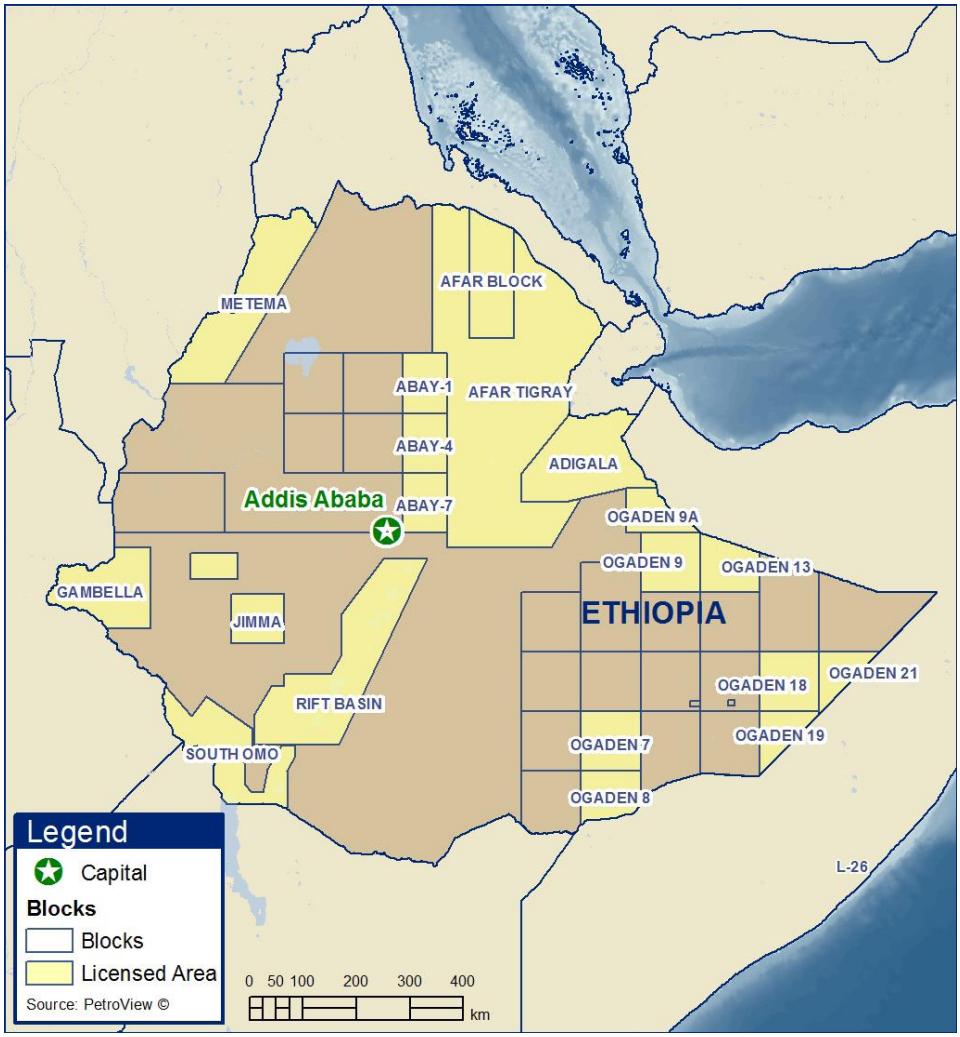

Fig. 1. Hydrocarbon basins of Ethiopia: source: **The Deloitte Guide to Oil and Gas in East Africa**.[7]

[7] Deloitte, "the deloitte guide," 5.

Few local and a number of international companies are reported to have been engaged in petroleum exploration in various parts of the country. [8] There is optimism on the part of oil companies and the government for increasing participation and transition from exploration to development and production.

In the meantime, the petroleum regulatory regimes play essential role in discouraging or encouraging investment in the sector. Alternative legal arrangements for petroleum operation have been developed through time.[9] Concession arrangements,[10] production sharing arrangements (PSA)[11] and service contracts arrangements[12] are the widely known ones although the joint venture, as a traditional form of cooperation in investment by a government and investors, may also be the fourth option.[13] In some legal literatures, the three alternative petroleum regulatory regimes are reduced into dual characterization: the contractual regime and non-contractual regime[14](concession/licensing) .

[8]Ministry, "Current petroleum exploration and development activities" (2016), http://www.momines.gov.et/petroleum-licensing-administration-directorate.

[9]The legal arrangements began to develop by adopting the concession agreements used in the United States (US) mining industry. Ismaila P Jalo, "The rights to explore for and exploit petroleum: what manner of award of rights is best suited for the Iraqi petroleum industry?" *CEPMLP Annual Review* 16 (2013), 2.

[10] Ernest E. Smith, "From concessions to service contracts," *Tulsa law journal*, (1991-1992):495-8.

[11]See Robert Fabrikant, "Production sharing contracts in the Indonesian petroleum industry," *Harvard international law journal* 16 (1975):303-310. Note that production sharing arrangement is otherwise known as is Production Sharing Agreement or Production Sharing contract(hereinafter abbreviated as PSA)..

[12] Smith, "From concessions to service contracts,"520; Taverne (1999), *Petroleum, industry and governments*, 154; Cameron, P. D., *International Energy Investment Law* (Oxford: Oxford University Press, 2010), 238-9.

[13] Bernard Taverne (2013), *Petroleum, industry and governments: a study of the involvement of industry and government in exploring for and producing petroleum* (Alphen aan den Rijn, the Netherlands: Kluwer Law International, 2013), 30; Taverne (1999), *Petroleum, industry and governments*, 166.

[14] Bernard Taverne (1999), *Petroleum, industry and governments: an introduction to petroleum regulation, economics and government policies* (the Hague-London-Boston: Kluwer Law International, 1999), 136. See also Tina Hunter, "Access to petroleum under the licensing and concession system," in *Regulation of the upstream petroleum sector: a comparative study of licensing and concession systems*, ed. Tina Hunter(Cheltenham, UK.Northampton, MA, USA: Edward Elgar, 2015), 37;

Ethiopia adopted Proclamation No. 295/1986[15](the Proclamation to Regulate Petroleum Operations) as the principal petroleum[16] regulatory regime. This legislation, in its preamble, acknowledged the indispensability of private investors' participation for effective undertaking of petroleum operations. It then provided the possible legal arrangements for petroleum operations.

1.2 Purpose of the Research and Research Questions

This research aims at exploring the Ethiopian legal regime for 'upstream' 'petroleum operation'[17] in light of the globally prevailing legal arrangements. Of the various alternatives, some countries have adopted the concession regime while others opted for the production sharing and/or risk service arrangement, and still some others use a combination of them. There exists also the trend to attribute the licensing regime as the one primarily used in the developed nations, with supposedly strong legal and institutional set up, while developing countries tend to adhere conventionally to the contractual regime.[18] Needless to say, the alternatives are supposed to have their own pros and cons both from the perspective of investors and the host states. The relative scope of rights they confer/ and duties they impose to the host state and the investors presumably differ. On the other hand, a cursory review of

[15] Proclamation No 295/1986, "Petroleum operations proclamation No 295/1986 (of Ethiopia)" *Negarit Gazeta* 45,6 (March 26, 1986).

[16] For the purpose of this research and Ethiopian law, the term petroleum includes not only crude oil as might be conventionally understood but also natural gas and other associated products that are subject to the same legal regime. Proclamation No 295/1986, Art. 2(7) 'Petroleum' means Crude Oil and Natural Gas and includes hydrocarbons produced from oil shale's or tar sands."

[17] Petroleum operation encompasses a broad range of activities in the petroleum industry. For instance , Art. 2(9) of Ethiopian law defined 'petroleum operations' as "the operations involving and related to the exploration, development, extraction, Production, field separation, treatment (but excluding refining), storage, transportation up to the point of exportation or entry into a system for domestic consumption and marketing of Petroleum, excluding refining of Crude Oil, but including the processing of Natural Gas." These petroleum operation activities are conventionally categorized as upstream and downstream operations. Petroleum 'exploration' and 'production' constitute the principal upstream activities. Modern petroleum regimes divide the entire duration of petroleum operation into periods of exploration and production. See Indonesian Petroleum and Natural Gas Law, Law No. 22/2001, Art.1 (7)-(13); Brazil Concession Law No. 9478/1997, Art.24 & Art.6 (XVII); Norwegian Petroleum Act 29, Section 1.6 (e)&(g).

[18] Taverne (2013), *Petroleum, industry and governments*, 157; Tina Hunter, "Access to petroleum under the licensing and concession system," 37.

prevailing petroleum legal regimes would reveal their manifest convergence on clauses they incorporate for regulation purposes,[19] though not necessarily converge in content. The choice of either of the regimes or a combination of them needs appreciation of the relative merits of one legal regime vis-à-vis the other with respect to the essential subject matters to be addressed.

According to Ethiopian law, 'petroleum operations' shall be undertaken in accordance with "petroleum Agreement."[20] Petroleum Agreement is generically described as a "contract or other arrangement between the Government and a contractor to conduct petroleum operations."[21] Model Petroleum Agreements, "*including Production Sharing or Modern Concession Agreements,"* [22] which will serve as basis for the negotiation, are to be prepared by the Ministry.[23] The Ministry chooses the appropriate type of petroleum agreement, and it provides for the details of the terms of the model agreements. Moreover, these model agreements merely constitute basis for negotiation, implying that the actual content of agreement with each company would be the negotiated outcome. This discretion is so generic and generous. This raises the question of whether the framework legislation or even the legal jurisprudence and literature provides adequate guidance for the Ministry in choosing the type and designing the content of petroleum agreements, either to assist a Ministry acting in good faith or for controlling potentially abusive practices of the Ministry.

The nature of these 'contract or other arrangements' recognized in the principal legislation requires clarification. Appreciation of their relative importance and implication invites closer examination. That is the purpose of this research, with respect to Ethiopian petroleum law.

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[19] Hunter, "Access to petroleum under the licensing and concession system," 15&16.
[20] Proclamation No 295/1986, Art.4(2)
[21] Proclamation No 295/1986, Art. 2(8)
[22] Proclamation No 295/1986, Art.7.
[23] Ministry of Mines, Petroleum and Natural Gas represents the government with respect to exploitation and management of petroleum resources. Proclamation No 295/1986, Art. 2 (4).

Accordingly, we need to answer the following questions:

1. What are the globally recognized alternatives for awarding petroleum exploration and/or production?
2. How do they differ in content? Is the difference suybstantial or symbolic?
3. What type of petroleum exploration and/or production award mechanisms are recognized by the Ethiopian legislation? In other words, which of the theoretically acknowledged legal arrangements are recognized?
4. Are there inherent features of the alternatives that compel a country to choose one and not the other? Concession Agreements, Production Sharing and/or service agreements?
5. And, in Ethiopian case, what is margin of discretion left to the Ministry in choosing and designing the content of petroleum agreements?

1.3 Research Methodology

The research relied on review of legal literature for identifying the available approaches for petroleum regulatory regime, for explaining their content and distinctions. However, it is only generic characterization because each legal system may adapt the legal regimes content wise. Analysis of the principal petroleum legislation and related laws of Ethiopia disclosed the alternative regulatory regimes recognized in Ethiopia, and the margin of discretion bestowed to the Ministry as regards the choice of the legal alternative and the design of content of same. The Ethiopian petroleum legislation, the model PSA, [24] and other laws having ramifications on petroleum operation are analyzed. Finally, the licensing (modern concession) and PSA legal regimes as applied in different countries and explained in legal literature are

[24] The Ministry, EMPPSA, http://www.momines.gov.et/home/-/asset_publisher/Fbdi3GaR8IrA/document/.

juxtaposed vis-à-vis the alternatives depicted in Ethiopian legal regime, with a view to appreciate the appropriate alternative for Ethiopia. The risk contract alternative will be discussed here for the PSA is representative of the contractual regime.

In dealing with the concession regime, reference shall be made to the licensing legal regime as adopted in Norway and UK for these countries are among typical users of the modern concession regime.[25] Indonesia as the origin of PSA, and Kenya as one of the developing countries experimenting on PSA are mainly referenced for PSA regime. The Brazilian petroleum legal regime also constituted among those mostly referred for it combines both the licensing and PSA regimes. The experience of other countries is also mentioned where relevant.

The other methodological question is on what account the concession regime and the contractual regime would be compared, and their merits to be assessed? The comparative assessment shall be undertaken in reference to the subject matters that are commonly addressed in most modern arrangements regardless of whether the arrangement is concession based or contractual one. Different scholarly works summarized the list of these common subject matters of regulation for any of the alternative petroleum regimes. [26] This research selects main areas of regulation for comparison and analyses the content of the rules in these respects. Expectedly this would results in appreciation of their relative importance.

[25] For instance, Taverne discussed the licensing system of these two countries as examples of the licensing regime. Taverne (2013), *Petroleum, industry and governments*, 182-238.

[26] See Alex Wawryk, "Petroleum regulation in an international context: the universality of petroleum regulation and the concept of *lex petrolea*," in Tina Hunter ed., *Regulation of the upstream petroleum sector: a comparative study of licensing and concession systems*, (Cheltenham, UK.Northampton, MA, USA: Edward Elgar, 2015), 14-15.

1.4 Scope and Significance of the Research

The research is limited to general survey of the approaches for petroleum operations (in the design of the relation between host country and oil companies), and how that is articulated in Ethiopia. Elucidating the available options and their characteristics, this research provided some guidance in understanding and distinguishing the various arrangements for petroleum operations in general and in Ethiopia in particular.

1.5 Organization of the Research

This research is organized into four main sections. The first section, the introduction, provides preliminary background information about the available petroleum regulatory regimes worldwide, and the facts and legal setting as regards petroleum in Ethiopia. It also presented the research questions, the methodology, scope, significance and organization of the research. Section two reviewed the alternative petroleum regulatory regimes at some length. They are conceptualized and distinguished as far as possible. The third section, the legal regimes for petroleum operations in Ethiopia, is devoted to detailed analysis of which of the regimes Ethiopian law recognized, described the alternative currently applied in Ethiopia, and compares and evaluates the relative merits of various alternatives for Ethiopia. Section four, the conclusion, recapitulates the main issues addressed in the research and reports the findings as regards the choice of petroleum regulatory regimes, specifically as incorporated in Ethiopian law.

2 THE ALTERNATIVE APPROACHES FOR AWARDING PETROLEUM OPERATIONS

As noted above, based on type of authorization, legal regulatory regimes for petroleum operations could be classified into concession (licensing), PSAs, and service contracts regime. Taverne used the term "contract of work regime" for the latter two, and thereby reduced the legal regimes generally into either the licensing regime or a contract of work regime.[27] Proper understanding of what they are and evaluation of their relative importance helps in deciding which of the alternatives are to be used. As such, conceptualization and distinctions of the alternatives are due.

2.1 Conceptualizing "Concession" (Classical" and "Modern")

The concessionaire system for access to oil exploration and production, being the earliest of all alternatives, has gone through transformation in the ages. The literature[28] and even legislation[29] ascribe the prefixes "classical" and "modern" so as to imply the changes in content the concessionary system has gone in time. Thus, we have the "classical" concession and "modern concession".

Mainly employed during the 1930s and dominantly in the middle East Gulf states,[30] the classical concession was generally known for its skewedness to international oil companies. The scope of rights granted to oil companies was vast. Extensive area coverage, long periods of control, unfettered operational freedom, and minimal governmental take characterizes classical concession.[31] In terms of area coverage, for example, many of the initial Middle

[27]Taverne (1999), *Petroleum, industry and governments*, 136.
[28] Smith, "From concessions to service contracts,"495, 501. Taverne also uses the terms past and current license based petroleum legislation, which signifies the reforms in the concessions system of the past. See Taverne (2013), *Petroleum, industry and governments*, 157-291.
[29] See, for instance, Proclamation No 295/1986, Art. 7(3), that uses the term "modern concession agreements".
[30] Taverne (2013), *Petroleum, industry and governments*, 157.
[31] Smith, "From concessions to service contracts,"495-8.

Eastern concessions such as those granted by the rulers of Abu Dhabi[32] and Kuwait[33] encompassed their entire territory. Persia and Gulf of Mexico had granted similar concessions. [34]

The duration of classical concessions were often times fixed for periods extending beyond half a century. For instance, the Abu Dhabi and Kuwaiti concessions were both for seventy-five years, and the 1933 concession granted by the King of Saudi Arabia to Standard Oil of California was for sixty-six years.[35]. Classical concession is also characterized by extensive operational freedom of the oil companies. The host countries had no right to participate in managerial decisions including decisions on drilling and development. Production was left to the option of the grantee: the companies were free to drill or not to drill on any of the lands granted; when to produce any oil discovered and how much; and they were under no obligation to release unexplored and undeveloped territory.[36]

The inequitable allocation of benefits is the other striking, and of course severely criticized, feature of the classical concession. The share of the government (often labeled as 'government take') was reported to be extremely small.[37] Under some concessions, the government's take was a very small fraction of specified production. In Mexican, government's take was fixed at ten percent, and D'Arcy concession in Persia provided for a sixteen percent royalty.[38] Other arrangements provided for a fiat rate royalty per ton rather than as a percentage of the value of the sale price of production. The royalty to the Ruler of Abu Dhabi, and also to the Sultan of Muscat and Oman, was three rupees per ton of oil produced from their respective concessions.[39]

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[32] Smith, "From concessions to service contracts,"495-6
[33] Smith, "From concessions to service contracts,"496.
[34] Smith, "From concessions to service contracts," 495-6.
[35] Smith, "From concessions to service contracts,"496.
[36] Smith, "From concessions to service contracts,"496.
[37] Smith, "From concessions to service contracts,"496.
[38] Smith, "From concessions to service contracts,"497.
[39]Smith, "From concessions to service contracts,"497.

Through time, the sentiment that the classical concession had unduly vested ownership of natural resources in the hands of foreign corporations; that it compromised control over domestic oil reserves and other minerals, particularly in the third world, resulted in a demand for transforming the arrangement into 'modern' concession, and other alternatives.

'Modern' concession, also labeled as "license", differs in important details from its 1930s prototype. In this arrangement, the risks of undue influence and corruption are mitigated for this new concession system adopted competitive bidding (auctioning) as typical method of award as opposed to direct negotiations with head of government.[40] Model agreements that sets forth the basic provisions of the arrangement and the negotiable issues in the agreement have also helped diminish risks of abuse.[41] The modern concession system has narrowed down the extensive rights that used to be granted to the investors in the sector. In this system, the specified geographic area-commonly termed "blocks" are allocated to investors, and size wise they are significantly reduced to a size large enough to make it reasonably likely that exploration and production will be profitable.[42] The exclusive control at the exploratory stage in the classical concession have been modified into nonexclusive license; the licensees in this preliminary exploration stage receive no automatic right to produce; they do not even have assurance for priority in obtaining a production license over the area explored.[43]

In terms of duration, modern concession has significantly shortened the six decades or more long concessions periods in the classical concession. For instance, the law in Norway provided for a three years exploration license and generally up to ten-years for production license with a possibility of extension.[44] As opposed to the unfettered discretion to drill or not to drill, and when and how much to produce, the modern concessions incorporates specific

[40] Hunter, "Access to petroleum under the licensing and concession system," 52-57.
[41] Smith, "From concessions to service contracts,"504
[42] Smith, "From concessions to service contracts," 505.
[43] (Norwegian)Act 29 November 1996 No. 72 relating to petroleum activities, last amended by Act 24 June 2011 No 38,(herein after Norwegian Petroleum Act 29), Section 2-1, parag 2.
[44] Norwegian Petroleum Act 29, Section 2-1, parag 3; Section 3-91, parags. 1& 2.

clauses imposing a scheme of development. These obligations include monetary commitment for each year of the term; obligation to submit and obtain approval for a work program, and the duty to relinquish a portion of the area on a specific schedule.[45]

Modern concessions have also improved government's take. Different payments like area fees and other charges, in addition to the classical royalty and income taxes, may also be provided. Moreover, as opposed to the classical fixed royalties, the present day royalties are usually variable that there would be increment depending on levels of production.[46] Modern concessions also set requirements that the licensee provide training and employment for local workers, transfer the technology to the host country, government participation in the development, etc.[47]

2.2 Production Sharing Agreement (PSA)

Production Sharing Agreement/ PSA/ is a contractual arrangement for regulating the relationship between foreign oil companies and host countries. As noted above, PSA is the result of efforts to accommodate the host states' discontents with the classical concession arrangements.[48] It is relatively new. The archetype PSA was developed in Indonesia in the early 1970s,[49] and countries such as Egypt, Libya, the Philippines, Peru, Malaysia and others had followed the footstep in the same period. [50]

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[45] Smith, "From concessions to service contracts,"506,507; See also Norwegian Petroleum Act 29, Sections 4-2&4-4.

[46] Nour E. Terki, "The Algerian Act of 1986 and the Encouragement of Foreign Investment in the Area of Hydrocarbons", *OIL & GAS L. TAX'N REV*. 3, 80 (1987-88).

[47] Smith, "From concessions to service contracts," 513.

[48] See Robert Fabrikant, "Production sharing contracts in the Indonesian petroleum industry", *Harv. Int'l. L. J.*, 16 (1975), 303.

[49] Taverne (2013), *Petroleum, industry and governments*, 240.

[50] Taverne (2013), *Petroleum, industry and governments*, 251-291.

The general terms of the contract are determined by legislation while much of the details are usually negotiated.[51] Under this legal framework, the investor (usually international oil company) assumes the contractual obligation to perform the petroleum operation on its sole risk. The petroleum produced belongs to the host nation but shared between the host state and the investor. A portion of the oil accruing to the investor is used for cost recovery (cost oil) and the remaining portion (profit oil) would be shared as per the agreed formula.[52]

The PSA is credited on a number of counts.[53] It affirms host state's ownership of the oil resources, and as such dismisses the perception that the investor owns state resources. The PSA is also credited for allowing the state to adjust its share of profit oil in periods of rising oil prices while still generally providing the investor with sound economic performance. In addition, the design of PSAs enable host states exercise better control over petroleum operations. In most PSAs, control and management of operations are under the prerogative of the host state while the investor retains daily operations. For instance, in the initial Indonesian PSA, Pertamina-the state oil company-was assigned to oversee and assist in the management of the operations contemplated by the contractor.[54]

On the other hand, absent proper supervision, there exists potential abuse to deprive the state the expected outcomes. For example, the government's take may be eroded by escalating recoverable costs. In practice, the investor is unrestricted in drawing up its exploration and development program, in which it may inflate capital expenditure estimates to grab a higher share as cost oil. Moreover, given the investor's upper hand in technology and managerial capability in petroleum operations, the host state's control over operations could be of less value.

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[51] Hunter, "Access to petroleum under the licensing and concession system," 38.
[52] Cameron, P. D., *International Energy Investment La*, (Oxford: Oxford University Press, 2010), 238-9
[53] Smith, "From concessions to service contracts," 515.
[54] Smith, "From concessions to service contracts," 515.

Be that as it may, generally these days, PSAs are said be the most common form of legal award mechanisms particularly in the developing countries.[55] Not only host states fade up with classical concession but also the investors operating in developing countries gave their support for PSAs. Investors sought PSAs as an alternative to cope up with growing resource nationalism and consequent political risk of nationalization. This is due to the perception that this arrangement is self-contained in the sense that it routinely regulates every aspect of the host-investor relationship.[56] By concluding such a self-contained contract, the foreign investor seeks to obviate the existing legal environment and acquire guarantees of certainty and protection from the host state.[57]

2.3 Service Agreements (Risk Service Contract)

The other alternative arrangement for exploration and production petroleum is the service agreement. Under this arrangement, as it developed in relation to the development of mineral resources generally, "a company agrees for a fee or a share of production to provide the host country or its state oil company with services or technical information."[58] However, this form of service contract has evolved into a specifically designed arrangement for developing petroleum reserves and commonly takes the name 'risk service contract.'[59] The defining feature of risk service contract is that the investor as the contractor assumes all risks and costs associated with exploration and development but receives a reimbursement of all costs only in the event of declaration of commercial productivity.[60] The manner and extent of compensation differ widely. For example, under the Brazilian risk service contract, the compensations

[55] Taverne (2013), *Petroleum, industry and governments*, 239.
[56] …"Investment at an impasse: Russia's production-sharing agreement law and the continuing barriers to petroleum investment in Russia," *Duke Journal of Comparative & International Law* 7 (1997), 681-2.
[57] See section 3.3 below.
[58] Smith, "From concessions to service contracts," 519.
[59] Smith, "From concessions to service contracts," 520.
[60] Cameron, *International Energy Investment Law*, 238-9.

consists reimbursement of exploration costs without interest but development costs with interest plus further remuneration based on production volume and crude oil prices.[61] On the other hand, the Argentinean contract simply provides for a twelve percent royalty, and then allocates the remaining net production between the state oil company holding the concession and the contractor according to their percentage share while few other risk service contracts simply provide for payment directly in petroleum.[62]

[61] Smith, "From concessions to service contracts,"521.
[62] Smith, "From concessions to service contracts,"521.

3 LEGAL FRAMEWORK FOR AWARDING PETROLEUM OPERATIOS IN ETHIOPIA

3.1 Preliminary on the Constitutional Framework

Virtually all counties[63] adhere to the tradition of public ownership of petroleum resource, at least as it exists in its natural state.[64] Constitutions provide the framework through which governments manage the resource for the benefit of the public.[65] So does the Ethiopian Constitution. It reads as "ownership of rural and urban land, as well as of all natural resources" exclusively to the State and in the peoples of Ethiopia.[66] Not only petroleum but also all natural resources are under public ownership in Ethiopian law. In federal states like Ethiopia, where two layers of governments with supposedly autonomous power interact, the question of which division of power for the management of this publicly owned resource would arise.[67] Thus, the constitution bestowed the power to enact laws for the utilization and protection of land and other natural resources to the federal government while the regional states may only administer the use of natural resources as may be mandated by the federal law.[68] So the regional states are unlikely to have significant role in petroleum operations. One notable recognition pertains to taxation, art. 98(3), where both federal and regional states are empowered to "jointly levy and collect taxes on incomes derived from large-scale mining, petroleum and gas operations, and they shall determine and collect royalties." But practically, regional states are just recipients of what the federal government collects and allocates to them. Hence, the Federal Government exclusively enacts the petroleum legislation and ad-

[63] Taverne (2013), *Petroleum, industry and governments*, 126. The notable exception is USA. In the USA mining law, the owner of the land (public or private) owns natural resources on the surface or the subsoil.
[64] Taverne (2013), *Petroleum, industry and governments*, 126.
[65] George Anderson (ed.), *Oil and Gas in federal systems* (Canada, Ontario: Oxford University Press, 2012), 3.
[66] Proclamation No. 1/1995, "Constitution of the Federal Democratic Republic of Ethiopia Proclamation No. 1/1995," *Federal Negarit Gazeta* 1,1 (21st August, 1995) (here in after FDRE Constitution), Art. 40(3).
[67] See George Anderson (ed.), *Oil and Gas in federal systems*, 3-4.
[68] FDRE Constitution, Arts. 51 (5)&52(2)(d).

ministers petroleum operations. The primary federal legislation for the exploration and production of petroleum resource is Proclamation No 295/1986. Petroleum Operations Income Tax Proclamation No. 296 of 1986 and Petroleum Operations Income Tax Proclamation (amendment) No. 226 of 2000 also have direct impact on petroleum operations. Plethora of legislation including investment laws may also have ramifications.

3.2 The Alternative Legal Regimes for Petroleum Operation Awards in Ethiopia

The preamble of Proc. No 295/1986 underscored that petroleum resources need to be exploited, and it should be done in such a way that greatly contributes to the economic growth and "welfare of the Ethiopian broad masses". The necessity of using modern technology and dearth of domestic capability in this regard is also acknowledged.[69] Thus, this legislation, though issued during the socialist regime,[70] capitalized the indispensability of private investors' (both foreign and domestic) participation for undertaking effective petroleum operations.

Then, what sort of arrangements with the investors (contractors)? Petroleum operations shall be undertaken via "Petroleum Agreement" which is defined as "…***a contract or other arrangement*** between the Government and a contractor to conduct petroleum operations" (emphasis added). [71] Thus, the law categorized the legal instruments for access to petroleum resources in Ethiopia into either contractual or non-contractual. This goes inline with Taverne's dual characterization of the alternatives for petroleum operations that classified them into either a "licensing regime" or a "contract of work regime".[72] Furthermore, Article 7(3) sheds light on the question of what these contractual and non-contractual arrangements

[69] Proclamation No. 295/1986, see the preamble, parags 2&3.
[70] "Government ''means the Government of Socialist Ethiopia, Proclamation No. 295/1986, Art. 2(3).
[71] Proclamation No 295/1986, Art.2(9).
[72] Bernard Taverne (1999), *Petroleum, industry and governments*, 136.

could be. It authorized the Ministry to prepare "model petroleum agreements including production sharing or modern concession agreements, which will serve as basis for the negotiation of a petroleum agreement." As such, modern concession (licensing regime) and PSA (as representative of contractual arrangement) are explicitly recognized. However, as can be inferred from the word 'including', arrangements other than production sharing or modern concession are also depicted. In addition, the contractual nature of service arrangement makes it part of the petroleum regime recognized in the dual categorization of petroleum agreements. Furthermore, Art.5 of the petroleum operations law,[73] reads as "the Government may undertake petroleum operations through contractors in accordance with a petroleum agreement." The wording "through contractors" makes the government the petroleum developer and contractor as service providers for that operation. This tends to be a more explicit recognition of service contracts where by the operator is the government but using the service of contractor. At last, the possibility of using joint venture undertakings as an alternative for petroleum operation cannot be ruled out. Valid inference for this could be drawn from the generic definition of petroleum agreements as contractual or other arrangement, and from the illustrative nature of the list of petroleum arrangements in Art.7(3) as well. Joint venture agreements between governments and investors are also one of the well-known investment cooperation forms, which is also true in Ethiopian.[74] Therefore, the Ethiopian principal legislation has endorsed all the typical approaches for access to petroleum.

Not only that the petroleum operations law- Proclamation No.295/1986- gave recognition to all the typical approaches (both contractual and non-contractual modes) for access to petroleum but also that it attempted to establish the basic framework for petroleum operations. Although it is the discretion of the Ministry to choose either contractual or non-contractual modes of access to petroleum or a combination of them, Ethiopian law has stipulated some

[73] Proclamation No. 295/1986, Art.5.
[74] See for instance Proclamation No 769/2012, " Investment Proclamation No 769/2012 (of Ethiopia)," *Federal Negarit Gazeta* 18, 63(September 17, 2012) See Arts. 2(9), 6 cum 9.

of the minimum matters any petroleum arrangement has to deal with.[75] In other words, regardless of whether the modality of petroleum agreement to be chosen by the ministry, i.e. whether it is contract based or non- contractual, certain basic subject matters has to be addressed in the model agreement. With the seemingly commanding introductory clause that "[a]ny petroleum agreement shall provide, inter alia, for the following particulars…," Art. 9 of the Proclamation aspires to establish the irreducible minimum requirements that any arrangement-contractual or non-contractual-should meet. Accordingly, Article 9 of the petroleum operations proclamation directs the Ministry to address an illustrative[76] list of subject matters[77] in the model agreements.

In addition to these lists in Art.9, other provisions of the law has also specifically regulated certain aspects of petroleum agreements.[78] The combined list of matters to be regulated in petroleum agreements include the ownership of petroleum, term(duration) petroleum agreements, minimum working programme commitments, control of operations, option of the state for participation, government take, local content requirements, access to oil for domestic consumption, stability of investment terms, environmental protection, and dispute resolution.[79]

As such, these enumerations in article 9 as supplemented by other provisions in the proclamation correspond, by and large, to what Alex Wawryk identified as subject matters commonly addressed by petroleum agreements generally.[80] For Wawryk, contracts between host governments and international oil companies (be it concession, production sharing or service contracts)[81] "contain similar provisions, clauses, structures and approaches, regardless of the

[75]Proclamation No 295/1986, Art. 9.
[76] See Proclamation No 295/1986, Art. 9 (15).
[77] Proclamation No 295/1986, Art. 9.
[78] See Proclamation No 295/1986, Arts. 11, Art. 20.
[79] See Proclamation No 295/1986, Arts .4, 9, 11, 14, 20, 22, 23, 25.
[80] Cf. Wawryk, "Petroleum regulation in an international context," 14-15.
[81] Wawryk, "Petroleum regulation in an international context," 14.

identity of the host state".[82] He emphasized this conclusion, by citing Duval[83] who boldly asserted that "[t]he basic features of various types of host government contracts are shared to such an extent that it has been estimated that at least 80% of the contents of these agreements consist of the same clauses, 'irrespective of their label'".[84] Thus, this conclusion holds true in Ethiopian petroleum regime as well for the law generally directs the ministry to include the above discussed clause irrespective of the choice of the regime (contractual or non-contractual regime) it made.

None the less, although this seemingly compelling article 9 listed most of the matters to be addressed, the provision does not set substantive requirements. It other words, it just informs and directs the Ministry about areas to be dealt by the agreements without any requirements as to the minimum standards, content wise, to be used in these areas of relationships. Thus the applicable contents of PSA including on the issues of government take, the minimum work programme commitment, the degree of governmental control in petroleum operations and so on are to be established by the Ministry engineered model agreements, and particular terms in each specific petroleum agreements.

In sum, Ethiopian petroleum regime recognized all the typical approaches (both contractual and non-contractual modes) for access to petroleum. The law has also indicated the essential areas of relationship between the government and the contractor that must be addressed in all of petroleum agreements. It is up to the Ministry to choose which of the regimes are appropriate and to determine the actual terms of most of the areas required to be addressed.

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[82] Wawryk, "Petroleum regulation in an international context," 14.
[83] Claude Duval et el, *International petroleum exploration and exploitation agreements: legal economic and policy aspects* (New York: barrows, 2009, 2nd ed.), 54.
[84] Wawryk, "Petroleum regulation in an international context," 15.

3.3 Evaluation of the Modern Concession and PSA as Alternative Petroleum Operations Regimes under Ethiopian Law.

The subsequent sections explores whether the alternatives for petroleum operations provide real alternatives as their multiple name implies, and if so to what extent, or whether they are just a matter of historical experiences of a country. Ethiopian petroleum law is the focal point. Comparison of the modern concession and PSA would also help us appreciate the potential advantages that the country would obtain for adopting one and not the other. The juxtaposition of modern concession and PSA would be based on what are identified as the common subject matters dealt by all petroleum agreements. The risk contract alternative is not discussed here for the PSA is representative of the contractual regime. To date, the Ministry has prepared model PSA.[85] The models for Modern Concession agreements and other potentially recognized arrangements have not been prepared yet[86] but the Ministry may do so sooner or late in the future. The potential implications of using the licensing regime in Ethiopia is evaluated by relying on its basic characteristics as elaborated in literature[87] and as adopted in other countries particularly Brazil, Norway and UK.

[85] Ministry (of Federal Democratic Republic of Ethiopia), "Model Petroleum Production Sharing Agreement," 26 August, 2011, updated 2014, http://www.momines.gov.et/home/-/asset_publisher/Fbdi3GaR8IrA/document/ (here in after Ethiopian Model Petroleum Production Sharing Agreement), http://www.mom.gov.et/upload/Model%20Petroleum%20Production%20Sharing%20Agrement(MPPSA).pdf

[86] As of January 2017, the Ministry's website shows that only the model PSA is in place. See at http://www.momines.gov.et/home/-/asset_publisher/Fbdi3GaR8IrA/document/.

[87] Some authors concluded that modern petroleum agreements are not only similar in structure and clauses they contain but also that the contracts are often similar content wise. See, for example, Zhiguo GAO, "Recent Trends and New Directions in International Petroleum Exploration and Exploitation Agreements," *Kluwer Law International*, (2007), 122-3. Yet there are some distinctive features of the various alternatives. The principal distinctive characteristics of concessions as compared to PSA is that the host state retains considerable flexibility to modify terms and condition fixed by legislation that form part of the investment environment.

3.3.1 Ownership of Petroleum Produced

It remained virtually[88] uncontested who owns petroleum in its natural state. Yes the state owns petroleum in its natural state. But that state monopoly over its natural resource would cease at some point where the investor or someone authorized meddles with the resource. What portion of the petroleum and at what point in time the ownership of petroleum should be transferred to the investor has been a point of variation for petroleum legislation of different countries. The legal standing on this issue had been the dividing line as to whether a licensing regime or the production-sharing regime (contractual regime) should be adopted. In the concession system, the licensee acquires ownership of petroleum at the time it is produced. The Norwegian Petroleum Act, for instance, provides that "the licensee becomes the owner of the petroleum which is produced."[89] Similarly, the UK petroleum regulation grants the "licensee exclusive licence and liberty….to search and bore for, and *get*, Petroleum"[90](emphasis added). According to the Brazilian concessions law, the concessionaire is entitled to the property of oil or natural gas produced, subject to the relevant charges and relevant legal or contractual participation.[91] The design of these legal regimes validates the claim in the literature that licensing regime awards ownership of the petroleum produced though they lack precision in specifying the time when petroleum is said to be produced.[92]

On the other hand, in the contract-based arrangements, such as the PSA, the contractor does not own the petroleum produced but in the end it shall receive part of the oil produced as

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[88] Taverne (2013), *Petroleum, industry and governments*, 126. See Silvana Tordo, David_Johnston and_Daniel_Johnston, Petroleum Exploration and Production Rights: Allocation Strategies and Design Issues, world bank working paper no. 179,(2010), 9.

[89] Norwegian Petroleum Act 29, Section 3-3, parag 3

[90] Petroleum Licensing (Production) (Seaward Areas) Regulations 2008 (of UK)(hereinafter UK Petroleum Regulation 2008), section 2.

[91] Law No. 9478 of August 6, 1997, the Regulation of the petroleum industry in Brazil(hereinafter Brazil Concession Law No. 9478/1997), Art 26.

[92] There may be some degree of variation on the description of the point of production. Taverne holds that petroleum is said to be produced and as such owned by the licensee when the petroleum enters into a well drilled in accordance with the terms and conditions of the license. See Taverne (1999), *Petroleum, industry and governments*, 137.

compensation for costs incurred and by way of profit for its investment. The status of the contractor is analogous to a person buying oil from the owner, in this case the host state.[93] The ownership to the portion of petroleum produced is transferred but just based on contractual transaction.

In the archetypical Indonesian PSAs, the contractor does not receive title to his share of the crude oil until it reaches the point of export, [94] as opposed to the concession system that transfers ownership at the time it is produced (point where the oil enters into the drilled well). In the same vein, the Kenyan Model PSA stipulates that change of ownership of crude oil will occur at the Crude Oil Delivery Point,[95] which is defined as the point at which petroleum passes through the intake valve of the transportation system. Ethiopian law took the same stand. Ownership of petroleum existing in its natural condition is vested in the state and ownership of petroleum when produced is to be determined by the petroleum agreement.[96] According to the EMPPSA,[97] title to petroleum produced, to which the Contractor is entitled, shall pass to the Contractor at the Point of Delivery. [98]

Generally, countries that adopted the contractual regime seems to be agnostic to transfer of ownership at time of production. Indeed, the desire to ascertain ownership over petroleum resource is alleged to be among the factors that propelled host states away from concession. Nevertheless, given that PSAs only postpone the time for transfer of ownership, the practical

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[93] Taverne (1999), *Petroleum, industry and governments*, 137.

[94] Robert Fabrikant, "Production Sharing Contracts in the Indonesian Petroleum Industry", *Harvard International Law Journal* (1975), 340.

[95] Republic of Kenya Model Production Sharing Contract (hereinafter Kenya Model PSA),Section 44(1).http://www.erc.go.ke/images/docs/Model_Production_Sharing_Contract_2015-210115.pdf . Delivery point is defined as "the point at which petroleum passes through the intake valve of the pipeline, vessel, vehicle or craft at a terminal, refinery, processing plant in Kenya or such other point as may be agreed by the Government and the contractor, with such point to be specified in the production sharing contract." See section 2(1).

[96] Proclamation No 295/1986, Art.4.

[97] EMPPSA, Section 8.2.3.

[98] ″Point of Delivery″ means "the point where Petroleum is delivered at the outlet flange at the point of either exportation from the State or entry into the State domestic system or any other transfer point mutually agreed between the Parties." See EMPPSA, Section 1.2.25.

significance of reserving ownership to the state up to the point of delivery invites further examination. The status of the contractor as an owner or a contractual claimant might have different legal implications depending on the applicable laws of the countries. Under Ethiopian law, ownership vests the enjoyment of the right to use or dispose in any manner the owner would like subject to the rare instances of restriction.[99] Reserving ownership to itself, the state may be placed in a better position about enjoyment of rights over the petroleum produced. Ownership at the same time carries with itself liability to the owner. Aware of this implication, Ethiopian law shifted the liabilities to the Contractor in advance of the transfer of ownership. The contractor must take out all necessary insurance policies in order to cover liabilities that may arise at all ant stages of petroleum operations including production and transportation of all petroleum to the point of delivery.[100]

Such a design of the legal framework in production sharing systems tends to maximize the interest of the host state whereby it enjoys the virtues of ownership while shifting the risks to the contractor, which tends to be a paradox to the established legal jurisprudence that risk resides with the owner. The production sharing system tends to assure the state control of its own resource while creating safe heaven against risks. This portrays PSAs as one unparalleled by the licensing system particularly seen in light of the classical concession where the concessionaire enjoys wider control over the resource including the discretion how much to produce and when.

However, reviewing the structure and content of modern concession would diminish the value attached to PSA in this regard. Modern concession systems have a number of clauses

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[99] Civil Code Proclamation No. 165/1960, "Civil Code of the Empire of Ethiopia," *Negarit Gazeta Extraordinary Issue* 19, 2(1960)(hereinafter Civil Code), Art. 1205.

[100] EMPPSA, Section 8.2.3; Proclamation No 295/1986, Art.19. Cf. Civil Code, Art. 2069. --*Dangerous activities.* -1. *Principle.*

(1) A person who exposes another to abnormal risk, by using or storing explosive or poisonous substances, or by erecting high-tension electric transmission lines or by modifying the lie of the land, or by ***engaging in an exceptionally dangerous industrial activity***, shall he liable where the danger he has created materializes, thereby causing damage to another.

ensuring equivalent state control of its resource before and after production. For instance, the Norwegian petroleum licensing law provided that "the licensee becomes the owner of the petroleum which is produced"[101] but at the same time a number of provisions have assured the state's control of the petroleum produced. The production schedule needs approval of the state (Ministry of Petroleum and Energy);[102] the Ministry may make a decision that on-going production shall be continued or increased;[103] the King may decide that deliveries to cover national requirements be made from production.[104] Therefore, the deviation of the contractual regime from the licensing regime in relation to postponement of title transfer does not seem to have actual significance other that the political appeal for states that want to show they are in control of national resources.

3.3.2 Geographic Area Coverage and Duration

As discussed above, the scope of geographical coverage over which the investor takes control had been one of the subject of criticisms in the classical concessions where in some cases the entre territories could be put into the exclusive control of an investor. This has been changed in recent petroleum arrangements. The contract or license areas are often divided into geometrical grid that is commonly knowns as blocks[105] that covers areas just enable sound economic exploitation. Under the Norwegian Petroleum Act, for example, licensed areas are divided into blocks, and a production licence to one licensee may cover one or several blocks or parts of blocks.[106] The requirement of periodic relinquishment of licensed areas further complements the economic rationalization of areas under the control of the licensee.[107] The same approach prevailed in countries that adopted the production sharing approach as

[101] Norwegian Petroleum Act 29, Section 3.3.
[102] Norwegian Petroleum Act 29, Section 4.4.
[103] Norwegian Petroleum Act 29, Section 4.6.
[104] Norwegian Petroleum Act 29, Section 4.12
[105] Taverne (2013), *Petroleum, industry and governments*, 128; Petroleum (Exploration and Production) Act of Kenya, Revised Edition 2012 [1984](hereinafter Kenyan Petroleum Act of1984 (Revised Edition 2012), www.kenyalaw.org, Section 2 &7.
[106] Norwegian Petroleum Act 29, Section 3-3, parag 1.
[107] See Norwegian Petroleum Act 29, Section 3-14.

well.[108] In Ethiopia, the license area is left to be fixed by the specific agreement with the individual contractor. [109] Practically petroleum operation areas are divided into geometrical grids consisting blocks.[110] Comparing the prevailing licensing and contractual regimes as regards area coverage, one can hardly find this aspect of the regimes as point of differentiation and choosing criterion.

The duration of the petroleum agreements received much attention in reformulating the classical petroleum agreements. The recent petroleum arrangements have significantly shortened the agreed period. Taverne mentioned, for instance, that the 1930s concessions in the middle east used to extend over half a century while the recent ones are significantly shortened.[111] Modern petroleum regimes divide the entire license duration into two or more successive stages of petroleum operation but usually into periods of exploration and production.[112] Exploration, as a preliminary stage is usually shorter in duration and entails lesser commitment on the part of the license.[113] According to Norwegian law, the exploration licence is, in principle, for a period of 3 years with a possibility for extension;[114] production license could be given for 10 years or even shorter but could be prolonged to 30 years and in some exceptional cases up to 50 years.[115]

Ethiopian law took firm stand as regards duration. While many of the subject matters to be addressed are left to the discretion of the ministry, when it comes to the term of petroleum

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[108] Kenyan Model PSA, Section 4.

[109] In the Ethiopian context "Contract Area″ is described as "the area escribed and delineated in Appendix II hereto as adjusted in accordance with the provisions of this Agreement regarding term, surrender and termination." See EMPPSA, Section 1.2.9 . But so far there had not been Appendix II.

[110] See Ministry , http://www.mom.gov.et/Ecaragemap.aspx,

[111] Taverne (2013), *Petroleum, industry and governments*, 130 & 157.

[112] The UK petroleum regulation categorized the license term into initial term, second term, and third term with varying commitments. UK petroleum Regulation 2008, Section 3-8; The Brazilian concession law holds that "the concession contracts shall foresee two stages exploration and production." Brazil Concession Law No. 9478/1997, Art.24.

[113] Norwegian Petroleum Act 29, Section 1-6 (e).

[114] Norwegian Petroleum Act 29, Section 2-1,parag 1.

[115] Norwegian Petroleum Act 29, Section 3-9, parag 1&2.

agreement all petroleum agreements should be within the mandatory specifications in the petroleum law. The law provided for differentiated periods that extends from two years up to twenty-five years depending on whether agreement concerns exploration or development of petroleum and production. The relevant section reads as:[116]

> The periods under a petroleum Agreement shall be:
> a. up to two years for activities under non – exclusive petroleum agreements
> b. up to four years for exploration under exclusive petroleum agreements, and
> c. up to twenty –five years for development and production under exclusive petroleum Agreements.

Where these stipulated timeframes are found to be insufficient for reasonable performance of the activities, the exploration periods could be doubled and the development and production period could be extended by ten years. Neither is the possibility for a second extension, under certain circumstances, ruled out [117] but this extension as well shall not in any case exceed the first extension plus 6 month.[118] The EMPPSA set the maximum durations for the first term and first and second extensions. As far as it remains within that range, specific the durations shall be fixed in the individual agreements.[119] Overall, the general message is that the time schedules should be tightly followed.

Therefore, as regards duration, whether the licensing regime or the contractual regime is adopted does not make any difference for the Ethiopian law has specified mandatory time bounds to be met by any petroleum agreement.

3.3.3 Government Take

Given the variety of arrangements, comparative assessment of the profitability of concession contracts and PSA's is difficult. However, there appears to be a general assumption that PSAs would fetch the host state a better share of its natural resource than the royalty/tax based

[116] Proclamation No 295/1986, Art. 11.(1).
[117] Proclamation No 295/1986, Art. 11.(3)
[118] EMPPSA, Section 2.2.3, parg.2
[119] EMPPSA, Section 2.2.

licensing regime could do. We also noted in the forgoing discussion that the desire to garner a better share had been the main motive for the developing countries to switch to the PSA alternative. On the other hand, it is pointed out that, PSAs may not necessarily guarantee host states garner a greater percentage of the earnings than those with the licensing system. For example, Smith noted that in the early days of the Indonesian PSAs, for every barrel of oil produced Indonesia receives less than does a Middle Eastern country using a concession contract.[120] Tina Hunter also mentioned that PSAs in Nigeria has yielded in favor of licensing for they had been marred by corruption, which in effect means the state could not fetch expected benefit.[121]

Let us review the Brazilian petroleum law on this particular point. It combined both the licensing and the PSA regimes. Even though the established legal regime for Brazil had been the concession system, the country has introduced a new PSA law[122]following discovery of high quantity, low risk and high quality oil reserve across the central-southern seashore (the "Pre-Salt" area). The applicability of this PSA law is limited to the so called oil rich Pre-Salt and other strategic areas. The idea behind such an approach was, among others, to increase government take and government stake in future entrepreneurships.[123] Indeed, the then president of (Brazil) was quoted for saying that "the only reason to keep a concession system is if a country is not certain it will find petroleum."[124]

Reviewing the Brazilian concession law on government take, we will find varieties of charges including signature bonus, royalties, special participation, and fees for the occupation or retention of area that constitutes the government take.[125] In principle, an amount

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[120] Smith, "From concessions to service contracts,"338.
[121] Hunter, "Access to petroleum under the licensing and concession system," 372.
[122] Law 12351/2010 –the Production Sharing Act of Brazil, as cited in Laís Palazzo Almada and Virgínia Parente, "Oil & gas industry in Brazil: a brief history and legal framework," *Panorama of Brazilian Law* 1, 1 (2013), 230.
[123] …"Production Sharing Contracts and Concessions in the Brazilian Subsalt Region: Comparative Analysis" (Master's thesis, University of Oslo, 2010), 3.
[124] PSAs and Concessions in the Brazil, 9.
[125] Brazil Concession Law No. 9478/1997), Art.47.

corresponding to 10% (ten percent) of the production of oil or natural gas shall be due to the state as royalty but taking into account the geological risks, production expectations, and other relevant factors, the national petroleum agency (ANP) may reduce the amount down to a minimum of 5% (five per cent) of the production.[126] Royalties and area fees are mandatory while the remaining signature bonus and special participation may or may not be collected.[127] Signature bonus shall be part of the bidding announcement and will be equal to the payment offered in the proposal for obtaining the concession while special participation depends on presidential decree. According to Article 50, which opens up more flexibility at the risk of less predictability, "in case of a large production volume, or great profitability, there shall be a special participation, to be regulated by Presidential Decree."[128]

Not all these flexibilities in the concession system seem to have convinced the Brazilian government about their ability to fetch a fair share from the national resource. Hence, the new PSA law was introduced in 2010. According to the new PSA law, Petrobras- the Brazilian state controlled oil and gas company- will hold a minimum of 30% of participating interests.[129] It is also interesting to note that the remaining 70% of participating interest may be offered, in a public bidding procedure, to international oil companies or it may not.[130] The Brazilian PSA recognized not only "profit oil" as government take, as typically set forth in this kind of contract, but also that bonus and royalty are included. The PSA law established royalty rates at 15%.[131] The new law has also bolstered national participation in the petroleum operation. Petrobras will be the only operator of all fields. In addition to the regulatory

[126] Brazil Concession Law No. 9478/1997), Art.47, Part 1.
[127] Brazil Concession Law No. 9478/1997), Arts. 45, part 2., Arts. 46&50.
[128] Brazil Concession Law No. 9478/1997), Art.50.
[129] Almada and Virgínia Parente, "Oil & gas industry in Brazil", 231.
[130] Almada and Parente, "Oil & gas industry in Brazil," 231-232. Where it is not opened via public bidding, the Union, through the Ministry , Petroleum and Natural Gas and Energy, will enter into production sharing contracts directly with Petrobras.
[131] Almada and Parente, "Oil & gas industry in Brazil," 232.

agency, ANP, and Petrobras, another state company- Pré-sal Petróleo S.A. –PPSA [Pre-Salt Petroleum Co.]- will sign this contract, and it is vested with various responsibilities. [132]

Given the increment in royalty rate and the state itself as a shareholder, the Brazilian PSA appears to ensure better share of resource produced. Yet it natural to ask if these alleged merits are uniquely attached to the PSA. The answer is no. As it is pretty obvious, the rate of royalty could be increased by amending the concession law. Indeed the concession law vests the president power to impose special participation if production goes exceptionally appealing.

As regards the question of state participation, modern concession systems as well reserve the right of participation for the host state. The Norwegian licensing regime is a case in point where the state reserved the right to participate in petroleum activities, and vows to manage its commercial interest via state owned limited company.[133] Thus, what the new Brazilian PSA regime aims at could be achieved using the Norwegian licensing regime, without shifting to a new PSA regime.

In sum, the actual earnings are determined by the particular content of the arrangement instead of the choice of which system. Most of the issues to be addressed in a petroleum agreement including government take are a matter of special expertise and requires significantly wider administrative discretion. A variety of factors including geological risks, production expectations, and other relevant considerations affect the allocation of benefits between the host state and the investor. Thus, petroleum laws are supposed to give way to administrative discretion of the respective government authorities. Yet when it comes to "sharing the pie," the practice in several jurisdictions reveals that government take is largely out of the domain

[132] See Almada and Parente, "Oil & gas industry in Brazil," 231.
[133] Norwegian Petroleum Act 29, Section 11-, 11-2, 1 of

of administrative discretion. The principal forms of government take revenue are either fixed by legislation, or where flexibility is a must, the discretion is exercised by a higher authority.

In the Brazilian arrangement, for example, the national petroleum agency (ANP) takes the mandate on most of the matters to be addressed on petroleum agreements,[134] but ANP does not have significant mandate on government take. Of the four kinds of government take, ANP plays a role in determining fees for occupation[135] and signature bonus is determined by bidding.[136] Royalty as the primary source government revenue is fixed by legislation.[137] Special participation (production bonus), as the other potentially meaningful source of revenue, is subject to presidential decree.[138]

Reviewing the Norwegian system, one can soon discover the same trend. In general the Norwegian law reserved the petroleum resource management to the King as guided by the *Storting* (Parliament).[139] Specifically on government take, the amount of the various forms of government revenue (area fee, production fee (royalty), signature bonuses) should be determined by regulations to be issued by executive council, which is headed by the King while the Ministry's power is just decide when and how these payments could be effected.[140] Accordingly, they are fixed by regulation.[141] Special tax is the primary petroleum revenue. Only the *storting* (parliament) decides on the amount of special tax, which it revises each year.[142]

If we look at Indonesian petroleum and gas law,[143] article 11(2), just like article 9 of Ethiopian petroleum operations law, contains a list of matters that a petroleum agreement should

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[134] Brazil Concession Law No. 9478/1997, Art.8.
[135] Brazil Concession Law No. 9478/1997, Art.51.
[136] Brazil Concession Law No. 9478/1997, Art.46.
[137] Brazil Concession Law No. 9478/1997, Art.47.
[138] Brazil Concession Law No. 9478/1997, Art.50.
[139] Norwegian Petroleum Act 29, Section 1-2.
[140] Norwegian Petroleum Act 29, Section 4-10. Ministry refers to the Ministry of Petroleum and Energy.
[141] See annex 1, specifically on government take.
[142] Norwegian Petroleum Taxation Act 13, Section 5.
[143] Petroleum and Natural Gas Law of Indonesia, Law no. 22/2001, Art. 11(2).

deal with including government revenue. The responsibility of executing PSA rests with the. However, unlike most of the issues that are under the discretion of 'executing agency', "provisions on the stipulation of amounts of the state portion, state levies and bonuses as well as procedures for remitting them"[144] are required to be stipulated by a government regulation, which is enacted by the President to implement laws.[145]

Ethiopian law recognized multiple forms of government take. In addition to taxes and a share in profit oil, it may consist of royalties, surface fees, bonuses, rentals or any other payments to the state.[146] However, none of these potential charges are quantified in the basic law. Nor does the law provide any clue about computing any of these forms of government take. One may wonder how the legislation- proc. No. 295/1986- is quite mute on government take,[147] which is the most critical stake. It is totally left to the discretion of the Ministry.[148] It is also interesting to observe that the model PSA prepared by the Ministry does not speculate any amount as regards any of the charges to be due to the government (bonuses, rentals, royalties and other payments). It all depends on individual negotiations with the individual contractors.

Perhaps all this is tolerable and may not be that much disturbing as these payments to the government are incidental in PSA arrangement, the basic form of government take being the share in the profit oil. What is more frustrating is neither the law nor model agreement dared to specify a cap on percentage of cost oil, and there is not provided any speculation on the minimum government share in the profit oil, although the EMPPSA depicted incremental

[144] Petroleum and Natural Gas Law of Indonesia, Law no. 22/2001, Art. 31(5).
[145] Hauser Global Law School Program, The Indonesian Legal System and Legal Research, 2011, http://www.nyulawglobal.org/globalex/Indonesia.html#legislative.
[146] Proclamation No. 295/1986, Art. 9(1), Art. 22.
[147] Proclamation No. 295/1986, Art. 9(1). Article 9 (1) simply prescribes that any petroleum agreement shall provide for "royalties, surface fees, bonuses, rentals or any other payment to the state excluding taxes levied pursuant to the income tax laws of Ethiopia."
[148] Proclamation No. 295/1986, Art. 9(1), Art. 22.

share depending on the volume of production per day[149]. Therefore, the unbounded discretion to the Ministry on government take does not cohere with the practice of most other jurisdictions.

Of course, there you can find Kenyan law apparently having the same stance as Ethiopian law. The Kenyan petroleum act vested the responsible ministry the power to prepare model petroleum agreements and to make regulations for or with respect the f*ees or any other payments to be made by the contractor under a petroleum agreement.*[150][emphasis added] However, the Kenyan model PSA has provided for this sophisticated and yet predictable formula for production sharing. [151]

R-factor	Government	Contractor
Less than 1.0	[50]%	[50]%
Equal to or greater than 1.0 and less than 2.5	[65]%	[35]%
Equal to or greater than 2.5	[75]%	[25]%

EMPPA does not even have such counterpart. Thus, in the Ethiopian scenario, both the legal framework and the practice happen to be perhaps unique and untypical of laws in an industry prone to corruption.

In conclusion, in Ethiopia, government take is not only totally the discretion of a single ministry but also that the Ministry did not specify predictable standard in advance. Negotiation

[149] EMPPSA, Section 7. The incremental stages are; First 20,000 Barrels/day---Next 20,000 Barrels/day---Next 20,000 Barrels/day---Next 20,000 Barrels/day---Next 20,000 Barrels/day---Any Volume over the First 100,000 Barrels/day---.

[150] Kenyan Petroleum Act of1984 (Revised Edition 2012), Sections. 5(3) & 6(1)(f).

[151] Kenyan Model PSA, Section 37. The R-Factor at a given date shall be calculated as follows: $\boldsymbol{R}=\boldsymbol{X}/\boldsymbol{Y}$, whereby: X is equal to the Contractor's Cumulative Cash Inflows at the end of the preceding Calendar Quarter and Y is equal to the Contractor's Cumulative Cash Outflows at the end of the preceding Calendar Quarter.

in each case determines the result. Well, as a country yet to experiment its oil reserve potential, the difficulties to legislatively quantify the optimal level of allocation are understandable. On the other hand, the wisdom of letting a single Ministry to subject the nation to a lasting commitment on this finite resource is questionable. With due recognition of the limitations and uncertainties, some benchmarks would have been advisable and possible. That is what the Kenyan PSA did. Therefore, as PSAs are inherently prone to corruptions even as compared to the licensing approach, it would be unwise to wait until bribery marred the practice.

In general, in recapitulating this section, the actual as government take are determined by the particular content of the arrangement instead of the choice the regime. The implication of this conclusion in the Ethiopian case is that whether Ethiopia should implement the licensing regime or a PSA regime would be of lesser importance than the very content of the provisions on government take. However, this should not obscure the fact that PSAs are superior to the licensing regime in that government take in PSA is self- adjusting. Changing circumstances such as change in oil price, unexpected rich discoveries, increment or decrement of production costs do not entail fortuitous benefits or losses to either the host state or the contractor due to the fact that their benefits and losses are directly tied to the amount of profit oil.

3.3.4 Stability of (Investment) Terms

So capital intensive and long term investment petroleum operation projects are, international oil companies, particularly those investing in the developing countries, worry much about potential political risks of nationalization or any other unilateral actions affecting the balance of investment contracts. Therefore, they sought a safeguard against unilateral alteration of the initial contract terms through legislative or administrative action. In devising a risk man-

agement framework, they often insist and secure stabilization clauses as part of the investment terms. Stabilization clauses, though they could be of different types,[152] generally aim to maintain the terms and conditions of an investment project. They are meant to restrain or at least mitigate the host state's prerogatives.

The effectiveness of stabilization clauses in restraining sovereignty has been a subject of discourse in investment academia. [153] International arbitration awards upheld the legality and binding nature of stabilization commitments as regards nationalization.[154] On the other hand, the consequences of stabilization clauses on regulatory measures short of expropriation have not been properly experimented.

In spite of alerts that stabilization clauses might have far reaching implication on host state's sovereignty over natural resources, governments in developing countries have been acquiescent to stabilization clauses. The Ethiopian petroleum law required that any petroleum agreement (to be prepared by the Ministry) should contain stabilization clause.[155] Accordingly, the EMPPSA incorporated the 'economic equilibrium' type of stabilization clause.[156] Thus, apparently it makes no difference whether the Ministry opted for the contractual regime or the licensing regime as the law required stability terms in any petroleum agreement.

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[152] See Mario Mansour & Carole Nakhle, "Fiscal Stabilization in Oil and Gas Contracts: Evidence and Implications" (Oxford Institute for Energy Studies, OIES PAPER: SP 37, January 2016). The main types are Freezing Clause and Economic Equilibrium. Freezing clauses, as the name implies, seeks to free the exercise of sovereign authority of the host state to enact laws affecting the contract. Economic Equilibrium Clauses or Rebalancing Clauses aim to keep the investor in the same financial position through a renegotiation mechanism.

[153] International oil companies have used contractual, legislative and treaty- based stabilization terms.

[154] In the 1970s, there were several disputes in relation to the nationalization of the oil companies' interests and properties. This was the case in Texaco v. Libya, 33 Kuwait v. Aminoil,34 AGIP v. Congo,35 Revere Copper v. OPIC,36 and (implicitly) in Methanex v. US.37.

[155]Proclamation No 295/1986, Art. 9(10).

[156] EMPPSA, Section 16.1.3. It provided that where economic benefits to be derived by a Party are substantially affected by new laws and regulations, the Parties shall agree to make the necessary adjustments.

Never the less, there prevailed a general perception that claims PSAs are inherently more stable than the licensing regime. This line of argument draws distinction between the contractual and licensing regimes based on scope of legitimate governmental discretion. Administrative discretion is wider than contractual discretions,[157] according to this view. Licenses are said to be straightforward agreements focused on the commercial terms, without the burden of devising contractual provisions to fill in gaps in the legal system. A substantial part of the terms and conditions are supposed to be regulated by legislation. As such governmental intervention in the licensing regime is conceived as exercise of administrative/regulatory discretions. In licensing the government reserves reasonably wider room for administrative discretions while the scope of discretion in PSAs is supposed to be constricted by detailed and consequently rigid contractual terms.[158]

The proper exercise of wider discretion in licensing system presupposes credible and capable legal and institutional infrastructure including the judiciary while in PSA the investor places his trust on the terms of the contract. Indeed, this characterization of the two regimes resulted in attributing licensing as petroleum regime as typical of one that fits into the context of developed countries. On the contrary, the contractual regime is reported as a petroleum regime virtually confined to the developing countries that lack comparable reliable legal and institutional infrastructure.[159]

Hence, PSAs are supposed to provide a shield from the dynamics of legislation mainly in developing countries. And the rhetoric goes like this: "[t]he principal feature of a PSA contract, however, is that it is entirely self-contained."[160] The foreign investor and the host state

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[157] Terence Daintith, "Contractual Discretion and Administrative Discretion: A Unified Analysis," *The Modern Law Review Limited* 68, 4 (2005); Jenik Radon, "The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-sharing Agreements," 71, http://openoil.net/wp/wp-content/uploads/2011/12/Chapter-3-reading-material1.pdf.

[158] Giuditta Cordero Moss, "Contract or Licence? Regulation of Petroleum Investment in Russia and Foreign Legal Advice," *Journal of Energy & Natural Resources Law* 16, 2 (1998), 187.

[159] Radon, "The ABCs of Petroleum Contracts," 63, 69.

[160] "Investment at an impasse: Russia's production-sharing agreement law," 682.

negotiate a contract enumerating all the rights and obligations of the parties. By concluding such a self-contained contract, the foreign investor seeks to obviate the existing legal environment and acquire guarantees of certainty and protection from the host state. In particular, changing fiscal legislations had been the principal political risk for investors. The objective of such a design of PSA is to limit total state takings to the value of its percentage oil share, without any more claims in the form of income tax, VAT, export and other taxes.[161] Thus, though PSA evolved mainly due to the urge from the host states, investors have also cheered PSAs.[162]

True that the archetypical Indonesian standard PSAs were designed in such a way that 'Pertamina shall pay the Contractor's income tax out of the value of the "profit" oil to which Pertamina is entitled.'[163] In spite of this tradition of the PSAs in the pioneering Indonesia, recent law in Indonesia further eroded alleged self-contained traditions of PSAs by allowing the government to issue regulations to specify various receipts to the government.[164] Many other modern PSAs are not set up as self-contained legal documents, particularly as regards taxation. Provisions meant to absolve investors from changing tax legislation in Russian PSA law had been in a series of complex legislative changes depriving certainty.[165] The Kenyan PSA as well provides that "contractor shall be subject to and shall comply with the requirements of the tax laws in force in Kenya."[166] The same goes with Ethiopian law. Contractor and a subcontractor are subject to applicable income tax laws of Ethiopia.[167] Therefore, over all, the characterization of PSA as self-contained legal arrangement is no more valid at least as regards tax liability. Moreover, PSAs as contractual arrangements are likely

[161] "Investment at an impasse: Russia's production-sharing agreement law," 684
[162] "Investment at an impasse: Russia's production-sharing agreement law," 681-2.
[163] Fabrikant, "Production Sharing Contracts in the Indonesia," 324.
[164] Petroleum and Natural Gas Law of Indonesia, Law no. 22/2001, Art. 31(1)
[165] See Arina Shulga, "Foreign Investment in Russia's Oil And Gas: Legal Framework and Lessons for the Future," *U. Pa. J. Int'l Econ. L* (2001), 1085-93; See also Moss, "Contract or Licence?"
[166] Kenyan Model PSA, Section 39(1).
[167] Proclamation No 295/1986, Art. 23; EMPPSA, Section XI. Additional payments whether in the form of tax or otherwise, may also be specified in the petroleum agreement (bonuses, rentals, royalties and payments).

to be affected by various legislations as far as they are arrangements within a given legal system. For instance, Ethiopian law provided that petroleum agreements are generally subject to Ethiopian law as may be applicable.[168]

In further fine-tuning the distinctions, the status of PSAs as administrative contract or just civil contract may also have its own impact on the stability of the investment terms. PSAs with administrative contract status resemble concessions for the government enjoys wider discretion in making unilateral adjustments. On the other hand, in civil contracts, the parties cannot unilaterally alter the terms of the contract. Confusion as regards this categorization and its potential implications reigned. Moss, writing on Russian PSA, noted that:

> *It is uncertain whether a PSA would fall within the category of civil law contracts or within the category of administrative law. Exactly because of this uncertainty, and on the insistence of the advisory forum, the first drafts of the PSA law had an article that expressly gave PSAs the character of contracts in civil law; this article has not, however, been incorporated in the text of the enacted PSA law, thus increasing the uncertainty about the civil law character of these contracts.*[169]

It is likely that the PSAs under Ethiopian law would invite similar ambiguity. A fast track determination of the status of PSAs in Ethiopian law may be to look at their treatment as regards arbitrability. While administrative contracts are not arbitrable under Ethiopian law,[170] the petroleum law unequivocally proclaimed that petroleum agreement disputes, not settled by negotiation, shall be resolved by arbitration,[171] the procedural and other details of

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[168] Proclamation No 295/1986, Art. 26.

[169] Moss, "Contract or license?", 197. Cf: (Russian)Federal Law No. 225-FZ of December 30, 1995 On Production Sharing Agreements (with the Amendments and Additions of January 7, 1999, June 18, 2001) . Art. 1.(3) "The rights and obligations of the parties to the production sharing agreement which by nature pertain to civil law shall be established pursuant to this Federal Law and the civil legislation of the Russian Federation."

[170] Civil Procedure Code of the Empire of Ethiopia, Negarit Gazeta - Extraordinary Issue No. 3 of 1965, Art. 315(2). "No arbitration may take place in relation to administrative contracts as defined in Art. 3132 of the Civil Code or in any other case where it is prohibited by law."

[171] Proclamation No 295/1986, Art. 25(2)

which are to be specified in the petroleum Agreement.[172] Yet this may not lead us to a bold conclusion vesting PSA civil contract status; indeed, not all disputed matters related to petroleum agreements are likely to be subject to arbitration. Disputes may pertain to laws other than the petroleum law such as environmental law, which can hardly be taken to arbitration.

Indeed, PSAs share some apparent characteristics that the law specified as features of administrative contracts. The need to use model specifications, general clauses and conditions and common directives;[173]and the requirement of tender procedure for the of allocation contracts[174] may assimilate PSAs to administrative contracts. Yet not all contracts with the government, and that merely display some features of administrative contract would qualify as administrative contracts. The general presumption holds that all contracts with the government shall be treated just like any civil contract between private parties but there are exception.

Depending on whether the contract is civil or administrative, contracts with the government are subject to somewhat different sets of rules under Ethiopian law. On this issue, the Ethiopian Civil Code[175] has the following to say:

> Art. 3131 - Rules applicable to contracts of administrative authorities.
> (1) Contracts concluded by the State or other administrative authorities shall be governed by the provisions of this Code which relate to contracts in general or special contracts.
> (2) The provisions of this Title shall *supplement or replace* such provisions where the contract is in the nature of an administrative contract. (Emphasis added).

[172] See EMPPSA, Section 16.2. Among others, it provides that "[t]he difference or dispute referred to under Section 16.2.1 shall be finally settled by arbitration in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law."
[173] Civil Code, Art.3135; Proclamation No 295/1986, Art.7(3).
[174] Civil Code, Art.3147; Proclamation No 295/1986, Art.7(4).
[175] Civil Code, Art.3131.

The differential treatments and in particular the administrative maneuverability of administrative contracts, whereby the general rules of civil contracts would be supplemented or replaced, is detailed in the subsequent provisions.[176] In recognition of this variability in legal treatment, attempt is made to define which of the contracts with the government are to be treated as administrative contracts. Pursuant to Art. 3132, a contract shall he deemed to be an administrative contract where:

(a) it is expressly qualified as such by the law or by the parties; or
(b) it is connected with an activity of the public service and implies a permanent participation of the party contracting with the administrative authorities in the execution of such service; or
(c) it contains one or more provisions which could only have been inspired by urgent considerations of general interest extraneous to relations between private individuals.

Neither the petroleum law nor the EMPPSA incorporated a clue qualifying petroleum agreements as administrative contract. In addition, it is unlikely that individual negotiation could do that for the Ministry can hardly cite any legislation empowering it to change the legal status of government commitments. The second criterion depends on the notion of public service and the permanency of service provision. Again, petroleum operation agreements can hardly fit into this notion of public service,[177] as conceptualized in the Civil Code. In particular, the description of agreements (concession) of a public service as a contract whereby the grantee of the concession runs a public service *getting a remuneration therefor by means of fees received on the use thereof* [emphasis added] makes petroleum contracts to fall out of the ambits of this conceptualization. Nor does the third criterion-provisions uncommon in private contracts inspired by urgency considerations- seem to be able to grab the petroleum

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[176] Civil Code, Arts. 3179 ff.

[177] Civil Code, Art. 3207. Definition.

(1) Any activity which a public community has decided to perform for the reason that it has deemed it to be necessary in the general interest and considered that private initiative was inadequate for carrying it out shall constitute a public service.

(2) The concession of a public service is the contract whereby a person, the grantee, binds himself in favour of an administrative authority to run a public service getting a remuneration therefor by means of fees received on the use thereof.

PSAs so as to make them administrative contracts, inconceivable as it is to consider investment in petroleum operation as a matter of urgency.

In general, however, from all the analysis we made above, it appears that PSAs in Ethiopia are likely to be treated as civil contracts. Though far-fetched the claim that PSAs are self-contained legal documents, still they are likely to assure the investors better scale of stability. Their civil contract status and the relative exhaustiveness of their terms conflate to constrict their amenability to governmental discretion. Yet whether international tribunals would subscribe to and influenced by this distinction needs further exploration, which goes beyond the scope here.

3.3.5 Obligatory Exploration Work Programme/Commitment

Looking in retrospect, the classical concession system did not impose significant commitment and time bounds to make a progress on the area under the possession of the concessionaire. This had been the subject of criticism. Consequently, reforms in this aspect of the legal regimes showed substantial change in that host states oblige the contractor/licensee to undertake exploration commitments at each phase after the award. Examining whether the choice of either the license regime or the PSAs secures better commitments to the host state would be part of the assessment of the relative merits of the two regimes.

The licensing regime in Norway has depicted the possibility of setting specific obligatory working commitments in both the exploration and production licenses. Section 3-8 authorized the King to impose, if need be, on the licensee specific work obligations for the area covered by the production license.[178]The King is also empowered to issue regulations addressing the scope of exploration license and the conditions of the license as well as the fee

[178] Norwegian Petroleum Act 29, Section 3-8.

to be paid. Yet the regulation issued lacks the details on obligatory work commitments.[179] However, the model production license depicted some obligatory commitments.[180]

The UK petroleum regulation, that subdivided the exploration and production periods into three periods, obligates the licensee to comply with the working commitments submitted and approved for each stage if the licensee is to continue to the next level of exploration/production period. Moreover, the license may be revoked upon notice, and liability incurred, if any, may be claimed.[181] In the detailed model concession contract of Brazil, the "concessionaire must perform the obligations relating to the minimum exploratory program on the terms and conditions described in Annex II", which includes the 2D and 3D non-exclusive seismic surveys.[182]Financial security of the minimum exploratory program is required for each phases of the exploratory period (first and second exploratory periods).[183]

The Kenyan Petroleum Act[184]as well depicted the need to set the minimum exploration work and expenditure obligations. As detailed in section 5 of the model PSA prepared based on the petroleum act, a list of technical working commitments and financial commitments are required to be part of the deal.[185] The contractor should provide financial security for the performance of the commitments entered, and where there is default the contractor shall pay

[179] Norwegian Petroleum Act 29, Section 2-1, parag. 5; The exploration licence shall be for three years, and a fee amounting to NOK 60 000 per calendar year shall be paid in advance to the State. The limited duration and the area fees may be sufficient inducement. See Norwegian petroleum Regulation No.27/1997), Section 5.

[180] Model production license for awards in predefined areas (mature areas), Section 4, Government.no . The commitments include acquisition of seismic data of the entire area of the Production Licence and conduct relevant geological and geophysical studies within a specified period.

[181] UK Petroleum Regulation 2008, Sections 4, 16.

[182]National Agency of Petroleum, Natural Gas and Biofuel – ANP (Federative Republic of Brazil), "Concession contract for exploration and production of oil and natural gas" (herein after Brazil Model Concession Contract), 2013, section 5.5.

[183] Brazil Model Concession Contract, section 6.1.

[184] Kenyan Petroleum Act of 1984 (Revised Edition 2012), Section 6(1)(e).

[185] See Kenyan model PSA, Section 5.

to the Government the minimum monetary obligation in respect of the work not carried out.[186]

Under Ethiopian petroleum law, minimum working obligations, minimum expenditures and periodic surrender of areas are supposed to be part of any petroleum agreement regardless of the choice of the regime (licensing or production sharing).[187] The modelPSA specified a bulk of technical working commitments required though the exact scope of these undertakings is to be determined at the conclusion of each petroleum agreements.[188] The contractor should provide irrevocable and unconditional bank guarantee for the minimum work obligations.[189] Defaults of the contractor as regards the minimum working commitments is sanctioned by payment of the amount corresponding to the unfulfilled work obligations to the Government.[190]

In conclusion, in both the licensing regime and the production sharing regimes the licensee /contractor is no more at liberty as it was during the classical concession. They provide for the minimum work and financial commitments within the given period. To ensure that the commitments are discharged, the host states require a financial guarantee equivalent to the expenditures required for the work. Defaults are often sanctioned by forfeiture of the financial guarantee committed, as well as cancellation of the license or contract. The contractors/licensees are also pressurized by the requirement of relinquishment of areas not explored as well as the progressive area fees for the unexplored or non-relinquished contract/license areas. The details of the work programme and the expected level of commitment depends on the particulars of the license or the PSA.[191] There are no unique designs of either alternatives in this regard that generally characterizes and distinguishes one option from the other.

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[186] Kenyan model PSA, Section 5(8).
[187] Proclamation No 295/1986, Art. 9(3).
[188] EMPPSA See generally section 5.
[189] EMPPSA, Section 5.2.1.
[190] EMPPSA, Section 5.2.2.
[191] Taverne (2013), *Petroleum, industry and governments*, 131.

3.3.6 Approval of Development Plan

Commercial discovery does not give the contractor automatic right to proceed for production. The development plan need to be prepared by the contractor and approved by the host state's concerned authorities. [192] Borrowing the comprehensive description as stipulated in the Norwegian petroleum law, a development plan is supposed to contain "an account of economic aspects, resource aspects, technical, safety related, commercial and environmental aspects, as well as information as to how a facility may be decommissioned and disposed of when the petroleum activities have ceased."[193] A licensee who decides to develop a petroleum deposit in Norway should submit and obtain approval of a plan for development and operation of the petroleum deposit.[194] Similarly, the licensing regime in the united kingdom provided that the licensee shall not erect or carry out any relevant works for the purpose of getting petroleum nor may it produce petroleum except with the consent of the concerned Minister or in accordance with a programme which the Minister has approved.[195] The Brazilian model concession contract also demands that development plan must be submitted to ANP (national petroleum agency) by the concessionaire within 180 (one hundred and eighty) days from the Declaration of Commerciality. [196]

The same trend prevailed in those that adopted the contractual model. Not only in the the recent petroleum laws of Indonesia that development plans should be approved[197] but also that the early Indonesian model PSAs incorporated clauses requiring the contractor to consult Pertamina before the commencement of development of commercial discovery,[198] and that annual work programmes and budgets should also be approved by Pertamina.[199] The

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[192] Taverne (2013), *Petroleum, industry and governments*, 139.
[193] Norwegian Petroleum Act 29, Section 4.2, parag 2.
[194] Norwegian Petroleum Act 29, Section 4.2, parag 1.
[195] UK petroleum Regulation 2008, Section 17.
[196] Brazilian model concession contract , Section 10.2
[197] Taverne (2013), *Petroleum, industry and governments*, 249.
[198] Taverne (2013), *Petroleum, industry and governments*, 242
[199] Taverne (2013), *Petroleum, industry and governments*, 243.

Kenyan petroleum Act stipulated that in every petroleum agreement, there shall be implied obligation on the contractor to present a development plan,[200] the details of the contents of which is provided in the model PSA.[201] Similarly, the EMPPSA requires the submission and approval of development plan before the contractor reporting commercial discovery is to proceed to production. In addition to the detailed list to be incorporated in,[202] a development plan is required to "be prepared on the basis of sound engineering and economic principles in accordance with generally accepted international petroleum industry practice."[203] It should also "ensure that the petroleum deposits do not suffer an excessive rate of decline of production or an excessive loss of reservoir pressure and shall adopt the optimum economic well spacing appropriate for the development of those petroleum deposits."[204]

In general, the requirement of development plan approval enables the host state to make sure that the drilling design, equipment and installations are in accordance with the best available technology which economically optimal, operationally safest and with minimal effect to the environment. This is grand norm for every state and as such the legal regimes are not likely to differ on this aspiration. How strict and detailed the rules are and their practical enforcement may differ, however. The variation is likely to be a matter of institutional and resource capability instead of the choice of either regimes of the petroleum law.

3.3.7 Control over Petroleum Operations

Once obtaining approval of the development plan and proceeding to production, the contractors remain under scrutiny of the host state in the actual execution of the production process. The host states are desirous that the licensee and other persons engaged in petroleum activities comply with the laws and regulation. They want to see that all operations in

[200] Kenyan Petroleum Act of 1984 (Revised Edition 2012), Section 9(1)(c)
[201] For details see Kenyan Model PSA, Section 29.
[202] EMPPSA, Section 5.4.3
[203] EMPPSA, Section 5.4.2
[204] EMPPSA, Section 5.4.2

connection with the production of petroleum shall take place in accordance with sound economic principles and prudent techniques, in accordance with methods and practice customarily used in good oilfield practice.

Who the operator is seem to have been conceived as determinative of the degree of success in this regard as virtually all modern petroleum legislation incorporate a clause about operatorship. The Norwegian petroleum law defined operator as "anyone executing on behalf of the licensee the day to day management of the petroleum activities."[205] The operator is also generally the center of inquiry that facilitates compliance with obligations of licensee. An extract from the Brazilian model concession contract may help comprehending what responsibility the operator undertakes and why it is so important to assign an operator. It provides that the operator is designated by the concessionaire and undertakes, on behalf of the concessionaire, the responsibility to: [206]

a) Lead and perform all the operations provided for in this Contract;
b) Submit all plans, programs, proposals and communications to ANP; and
c) Receive all responses, requests, proposals and other communications from ANP.

The operator plays indispensable role particularly in the modern trend where the licensee is a consortium of bodies instead of a single entity. Petroleum regimes may vary on the designation of the operator. In most cases, the licensees nominate and the concerned authority's approval is required. The Petroleum licensing regimes in UK[207] and Brazil[208] could good examples for this. The Norwegian system, though a licensing regime like the above two, vested the Ministry apparently wider mandate enabling to either approve a nominee or appoint an operator of its own choice, and it could be a licensee or an outsider.[209]

[205] Norwegian Petroleum Act 29, Section 1.6 (k).
[206] See Brazilian model concession contract, Section 14.2.
[207] See UK petroleum Regulation 2008, Section 24.
[208] See Brazilian model concession contract, Section 14.2 & 14.9.
[209] See Norwegian Petroleum Act 29, Section 3-7.

Reviewing the contractual regimes, we encounter the archetypical Indonesian PSA where all contracts were reported to have a provision providing that "Pertamina shall have and be responsible for the management of the operations contemplated"[210] in the contract. The contractor is bound to submit to Pertamina annual budgets and work programme it proposes to carry out. The contractor executes it under the supervision of Pertamina. Similarly, under the PSA regime in Brazil, Petrobras[211] will be the only operator of all fields, and it must hold a minimum of 30% of participating interests.[212] This is a clear deviation from the pre-existing Brazilian concession regime that permits the concessionaire to designate an operator of its choice though subject to approval. Unsurprisingly, not all PSA regimes adopt this trend. In the Ethiopian context, the EMPPSA simply requires the Contractor to notify the Minister the operator of its own choice[213]. The same holds true in the case of Kenyan PSA regime.[214]

In general, not only that the annual work programmes and budget need to be submitted and approved but also that host states insist on being in control of the actual execution of the production process. The operator as focal point plays indispensable role in this regard. Sometimes the petroleum producer designates the operator and the state approves. In other cases, the state itself may take the responsibility and the power to act as operator. There does not exist universal alignment of either of these approaches to the choice of the petroleum regime. The Norwegian licensing regime could be cited in support of this. The state may approve a nominee or insist on operator of its choice, and that operator could be the state oil company as in case of Brazilian PSA regime or some other person.

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[210] Fabrikant, "Production Sharing Contracts in the Indonesian Petroleum Industry", 312.

[211] Petrobras –Petróleo Brasileiro S.A. [Brazilian Petroleum Co.]–, established by the Law 2,004/1953, is the Brazilian state-controlled oil and gas company which is given a monopoly on oil and gas exploration and production activities. See Almada and Parente, "Oil & gas industry in Brazil," 225.

[212] See Almada and Parente, "Oil & gas industry in Brazil," 231.

[213] The contractor's duty is to notify Minister who the operator is. See EMPPSA, Section 3.8.2.

[214] See Kenyan Model PSA, Section 48 (4). The appointment of an operator by a contractor shall be subject to prior approval.

Yet, there appears to be higher proclivity to take a firm grip of operatorship in the cases of the contractual petroleum regimes as compared to the licensing regimes. The Brazilian petroleum regime, where the licensing and the PSA regimes that run parallel but rely on different modes of assignment of operatorship, validates this claim. This propensity in the contractual regime sounds logical and relatively more feasible. This is so because the state is owner of petroleum produced until the delivery point and, afterwards, takes a portion of the produce in kind, unless it elects to take in cash of course. Moreover, it is likely that in PSA regimes the host state is highly likely to participate via its oil company. Practically these all would scale up the role of the host state to the level of a business partner, beyond sharing what the contractor produced.

4 Conclusion and Recommendation

Petroleum resource constitutes a significant portion of their economy for countries endowed with it. Ethiopia, whose economy is mainly agriculture based, has not been among these notable ones. There has not been commercial production of hydrocarbons so far and contribution of the mining sector to GDP is generally negligible. However, a significant portion of the country is presumed to have petroleum potential, and there have been reported significant gas discoveries and promising signs of oil. The legal framework for petroleum operation has been in place for about three decades yet there had not been success stories in hydrocarbon production.

Be that as it may, this research assessed the Ethiopian petroleum operations legal framework in light of the globally prevailing approaches. In doing so, review of the legal literature uncovered that globally prevailing approaches for petroleum operation are of dual categories .i.e. contractual and non-contractual, the latter one otherwise known as the concession system. Of course, in further fine-tuning, the contractual system could be split further into risk contracts and non-risk contracts depending on whether the investor assumes risks for non-profitable exploration or whether it is entitled to reimbursement. The risk contract is also further subdivided into PSA and service contracts, the main difference being more of on the

modes of compensation. The former one relies on sharing the 'profit oil'- petroleum remaining after cost recovery (cost oil) while the latter one is typically cash based reimbursement.

The concession system (non-contractual category) is also further subdivided into classical concession and modern concession (licensing system). But this classification is of just historical interest for the classical one is no more in place but replaced by the licensing (modern concession). Classical concession is known for grant of extensive area coverage, long periods of control, unfettered operational freedom, and minimal governmental take, classical concession is characterized by its skewedness toward oil companies. Modern concession (licensing) is mainly a reduction to these privileges, in an effort to bring the contents of concession arrangements parallel to PSA. The principal distinctive characteristics of concessions as compared to PSA is that the host state retains considerable flexibility to modify legislation that affect the terms and conditions of the investment.

PSA is a later development, in the early 1970s, and a response to the dissatisfaction with the then existing classical concession system. In essence, PSA is contract in such a way that the investor undertakes to perform, at its own risk and cost, the petroleum operation against a share in the 'profit oil. Service agreement-specifically 'risk service contract'- imposes all risks and associated costs on the contractor subject to reimbursement of costs and extra incentive, but only in the event of declaration of commercial productivity. In certain arrangements the contractor's compensation in risk contracts could be in the form of the portion of oil produced, in which case PSAs and other risk contracts may be indistinguishable.

In short, excluding the obsolete classical concession, the currently prevailing alternative legal arrangements for exploration and/or production of petroleum can be summarized into the licensing (modern concession) arrangements, PSAs, and to some extent service contracts arrangements.

Analysis of the Ethiopian petroleum regime revealed that both contractual and non-contractual (together with its own variants) modes of access to petroleum are recognized. The law has also indicated the essential areas of relationship between the government and the contractor that must be addressed in all of petroleum agreements. It is up to the Ministry to

choose which of the regimes are appropriate and to determine the actual terms of most of the areas required to be addressed. So far, in practice, PSAs are preferred and petroleum agreements are to be based on the model PSA prepared by the Ministry.

The research evaluated the relative legal significance of the various alternatives in general and the comparative legal implications of the licensing system and production sharing system with particular reference to the Ethiopian legal context. And the finding is that modern petroleum agreements are not only similar in structure and clauses they contain but also content wise. The difference is more of nominal and does not meet expectations from legal regimes that are claimed to be alternatives. To be specific, licensing arrangements and PSAs are compared with respect to the common subject matters dealt by all petroleum agreements. The findings are as follows:

- Ownership of petroleum produced: The legal standing on ownership of petroleum produced had been one of traditional hallmark of distinction between the two regimes. The two regimes differ on time for transfer of ownership of petroleum produced to the investor. In the case of licensing, ownership is transferred as of production while in PSA it is postponed to the point of delivery as defined in the legal regime. Up to that point, for all legal implications the investor's position and entitlement is contractual. However, the deviation of the contractual regime from the licensing regime in relation to postponement of title transfer does not seem to have actual significance other than vesting the impression that the state is in control of its national resources, for states that need such political appeal. This is so because the licensing system also guarantees the host state an equivalent control over the petroleum produced though in principle ownership is transferred at production. Ethiopia has so far elected the PSA regime. But, in this regard, it does not make that much of a difference if the PSA is supplanted or complemented by the licensing regime.

- Area coverage and duration of petroleum operation: It is not uncommon to come across literatures making distinction between the two regimes based on area coverage and duration of petroleum operation. Nevertheless, these distinctions make sense only

if the contractual system is compared to the classical concession, not with the modern concession. The modern concession and PSA are harmonized in this this regard, knowingly or inadvertently. But classical concession is now obsolete. As such, whether the licensing regime or the contractual regime is adopted does not make difference. Indeed the Ethiopian law has specified mandatory time bounds to be met by any petroleum agreement.

- The degree of obligatory exploration work programme: this criterion for distinction as well attracts attention. Host states want to see investors make actual contribution. Legal drafters would seek to evaluate if any of the regimes are in a better position to assure that. The analysis showed that there is nothing inherently attributing the achievability of this commitment to either of the alternative regimes. Indeed clauses subjecting the investor to obligatory commitments and financial expenditures at various stages of exploration and production constitute one among the main clauses in both arrangements. Hence, if any difference between the degree of commitment between one nation adopting licensing and the other with PSA, it is about negotiating power and other factors affecting nation's investment environment.

- Approval of development: where exploration ends up in commercial discovery, the host state's focus would be directed on how to make the optimal production with minimal adverse effect. The requirement of development plan approval enables the host state to make sure that the drilling design, equipment and installations are in accordance with the best available technology which is economically optimal, operationally safest, as far as the state of the art permits, and with minimal effect to the environment. As uncontested norms of aspiration these objectives are, for every state, there found no difference between the two regimes. Hence in both the licensing and PSA regimes the host states required mandatory approval of development plan. How strict and detailed the rules are and their practical enforcement may differ, however. The variation is likely to be a matter of institutional and resource capability instead of the choice of either regimes of the petroleum law.

- Control of operation: once the development plan is approved, the host state's desire is to follow up the actual production process. Control over operation could be manifested in various ways but mainly by way of appointment of the operator, and controlling the production rate. As regards operator, there appears to be higher proclivity to take a firm grip of operatorship in the cases of the contractual petroleum regimes as compared to the licensing regimes. The Brazilian petroleum regime, where the licensing and the PSA regimes run parallel but rely on different modes of assignment of operatorship, validates this claim. This propensity in the contractual regime sounds logical and relatively more feasible because the host state is highly likely to be in closer contact with the contractor as its principal take is sharing what the contractor produced. In relation to control of production rate, in both regimes production schedule need to be approved annually. Requirements of reporting and the right to inspect and follow up constitute part of the arrangement in both regimes. And as such no manifest point of differentiation could be inferred.

- Stability of investment terms and space for state prerogative: some distinctions are claimed between the licensing and the PSA regimes as regards stability of investment terms and space for state prerogative. The legal literature conceived the licensing system as more flexible and amenable to state prerogatives at the expense of stability of investment terms. The trust relies on the credible legal, judicial and other institutional system that guarantees stable investment environment. PSA is believed to be an out way for investors in host states that lack such trustworthy legal, judicial and other institutional systems. The conception is that PSA is self-contained contractual document that restrains any encroachment by the state on the terms of the contract. Though far-fetched the claim that PSAs are self-contained legal documents, still they are likely to assure the investors better scale of stability than the licensing regime does. This is often ascertained by incorporating stabilization clauses in PSAs. Thus PSA supposedly curtails the host states regulatory power, and from this perspective the licensing system offers a better advantage for the host state. The Ethiopian petroleum required that any petroleum agreement (to be prepared by the Ministry) should contain stabilization clause. Accordingly, the EMPPSA incorporated the 'economic

equilibrium' type of stabilization clause. Thus, apparently it makes no difference whether the Ministry opted for the contractual regime or the licensing regime as Ethiopian law required stability terms in any petroleum agreement. However, given the prevailing jurisprudence that licensing permits some degree of flexibility than PSA, the judicial interpretation and application of the stability terms in the two regimes would not be the same. Moreover, the status of PSA under Ethiopian law plausibly comes within the category of civil contracts as opposed to administrative contracts. These factors cumulate to erode the regulatory discretion of the Ethiopian government. Therefore, just on this count, the licensing regime could have been a better option for Ethiopia. On the same page, as a state striving to attract investors for its unproven oil potential, a state unlikely to win investors' confidence on its legal and institutional credibility, the country can hardy insist on licensing to avail the presumed regulatory flexibility.

- Government take: there appears to be a general assumption that PSAs would fetch the host state a better share of its natural resource than the royalty/tax based licensing regime could do. Yet experience of some countries and evaluation of the design of the two regimes suggests that the actual earnings are determined by the particular content of the arrangement instead of the choice of which system. One obvious difference, however, is that the licensing regime may vest the investor wind fall where production goes unexpectedly profitable while PSAs assure the host state a proportionate share of its resource however high or low it might be. Of course, the proviso in the licensing regime that authorizes the government to impose special charges where production goes too lucrative could be used, as many licensing regimes do, but it tends to be unpredictable and too subjective thereby eroding investor confidence. In addition, as regards government take, the choice of the regime to some extent depends on the available data. Where there does exist adequate information about petroleum potential and production cost estimates, predetermined royalty and/or tax rate, as mostly the case with licensing regime, could be adopted without much concern. On the other hand, where the country suffers from adequate and relevant data on petroleum potential and production cost estimates, predetermined rate would end

up in gambling with these valuable and finite resource. Thus for countries such as Ethiopia that are yet on trial and experimentation, PSA appears to be a tenable option than the licensing regime. This recommendation, of course, should be taken with caution that absent proper follow up, the investor may inflate cost oil and deprive the host state a fair share. Thus, for Ethiopia, the main concern as things stand now is not whether it should implement the licensing regime instead of PSA regime but the unbounded discretion of a single Ministry in designing the very content of the provisions on government take.

In sum, the question of which legal regime .i.e. licensing or PSA offers the optimal advantage for a host state has lost its weight due to progressive adaptation of the contents of the two regimes. As regards the Ethiopian scenario, both possibilities .i.e. licensing and PSA are recognized and currently the PSA applied in practice. As things stand now, there is no compelling reason to supplant or complement it with the licensing regime. Though the government could have been better off with the licensing regime due to the potential inherent flexibility, this may not necessarily outweigh the advantages of better control on operation and the self-adjustable share of profit oil in periods of lucrative productivity.

However, in the design of the legal framework and practical implementation of PSA, the Ethiopian petroleum regime needs to reconsider its stance as regards the wider discretion of the Ministry. The Ministry exclusively, without approval or similar checking mechanism by collective government organ, chooses what it perceives as the appropriate type of petroleum agreement. This may not entail substantial problem as the licensing and PSA regimes are almost harmonized. But the Ministry also exclusively determines, in preparing the model agreement, the details of the terms of arrangement between the Government and a Contractor. The practice in many jurisdictions shows that government take is subject to collective decision (as fixed by legislation) or subject to discretion of the top authority (such as president of the state). Under Ethiopian legal framework many of the sensitive issues including government take are under the discretion of the Ministry. Thus, the wisdom of letting a single Ministry to subject the nation to a lasting commitment on this finite resource is ques-

tionable. Second, in addition to the our scepticism on the design of the basic legal framework, the practice of the Ministry so far has added further frustration. The Ministry has prepared model PSA, and it did not specify amount of any of the forms of government take. There are only a bulk of blank spaces as quantity. Let alone specific quantity, they are no ranges or even parameters for quantifying the variables, to use the statistical words. Ministry's negotiation with each contractor determines the result. This makes the legal regime unpredictable and absolutely prone to corruption. This is worrisome given that all potentially available oil fields are already out for a deal.

Therefore, the plausible recommendation is that the contents of the model PSA, in particular those dealing with government take should be subject to approval of a collective body for scrutiny. Hence, like other jurisdictions, some minimum bench marks on government take need to be stipulated by parliamentary enactment or at least by regulation which is issued by council of ministers in Ethiopian legal system. And, as regards the remaining discretion, the Ministry should be compelled to specify in advance the range of flexibility on the crucial issues including government take, instead of blank spaces.

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Annex 1: Tabular comparison of the Norwegian licensing Vs Ethiopian PSA petroleum regimes

In this tabular presentation, Norwegian licensing regime and Ethiopian PSA regime are juxtaposed on a relatively more comprehensive and detailed aspect of the matters the petroleum regimes aim to address.

Parameters of comparison	Norway law	Ethiopian law/EMPSA	Remark
1. Ownership of petroleum(in its natural state)	The Norwegian State has the proprietary right.[215]	Ownership is vested in the state / peoples of Ethiopia.[216]	The same (public ownership) except difference in wording.
2. Ownership of petroleum produced	The licensee becomes the owner of the petroleum which is produced (as of the time it is produced)[217]	*Title to Petroleum produced to which the contractor is entitled shall pass to the contractor at the Point of Delivery.[218]	Title transferred at production and at delivery point, respectively.

[215] Norwegian Petroleum Act 29, Section 1.1. The Norwegian State has the proprietary right to subsea petroleum deposits and the exclusive right to resource management.
[216] FDRE Constitution, Art. 40(3); Proclamation No. 295/1986, Art. 4(1).
[217] Norwegian Petroleum Act 29, Section .3.3
[218] Proclamation No. 295/1986, Art. 4(2); EMPPSA, Section 8.2.3.

3. Award Procedure/Method	*As a rule, by public announcement (bid) but exceptionally by without announcement (direct negotiation).[219]	By competitive bidding but exceptionally by direct negotiation.[220]	The same, except difference in wording.
4. Area coverage	The exploration licence shall state the area covered by the licence.[221]	Contract area is supposed to be determined in the model agreement and adjusted individual contracts.[222]	Similar, area as designated in the agreement.
5. Area relinquishment	The licensee is subject to periodic relinquishment of parts of the area covered by the production licence.[223]	Periodic relinquishment of parts of the contract area required.[224]	Similar, except differences in details.
6. Term(duration)			

[219] Norwegian Petroleum Act 29, Section 3-5. As a rule, the granting of a production licence shall be by public announcement (bid). But the King may grant production licences without announcement (direct negotiation)

[220] Proclamation No. 295/1986, Art. 7(4). Petroleum Agreements shall be entered by competitive bidding. But, subject to the directives of the Council of Ministers, by direct negotiation.

[221] Norwegian Petroleum Act 29, Section 2.2.

[222]. EMPPSA, Section 1.2.9. Contract Area″ means the area escribed and delineated in Appendix II hereto as adjusted in accordance with the provisions of this Agreement regarding term, surrender and termination. EMPPSA, Section 1.2.9

[223] Norwegian Petroleum Act 29, Section 3.14& Section 3.9, parag.4.

[224] EMPPSA, Section 2.3.1. At or prior to the end of the initial term of the Exploration/production Period the Contractor shall surrender at least a certain percentage of the area.

6.1. Exploration license	Exploration license is, in principle, granted for a period of 3 years.[225]	For exploration activities:[226] . *Non-exclusive- up to 2 years(and may be extended for 2 more years); *Exclusive Petroleum Agreements-up to 4 years, (and may be extended for 4 more years).	The durations are so close except the negligible numerical difference.
6.2 Production licence	The production licence- up to 10 years. It may be extended, as a rule, up to 30 years, and exceptionally up to 50 years.[227]	For development and production-up to 25 years, and may be extended for 10 more years.[228]	In both cases, the stipulated durations are shorter than the traditional concession system.
7. Obligatory Work Commitment	* The King may impose on the licensee a specific work obligation.[229] *The model licensing agreement required, among other things, to acquire seismic data and conduct relevant geological and geophysical studies. [230]	*Minimum working obligations and corresponding minimum expenditures required be part of any petroleum agreement.[231]*The model PSA	Similar, except differences in details.

[225] Norwegian Petroleum Act 29, Section 2.1, parag.3.
[226] Proclamation No. 295/1986, Art. 11.
[227] Norwegian Petroleum Act 29, Section.3.9
[228] Proclamation No. 295/1986, Art. 11.
[229] Norwegian Petroleum Act 29, Section. 3.8; Section 2.1. parag. 5
[230] The model licensing agreement required, within a certain period of years (to be specified in the agreement) from the time of award of Production Licence, the licensee shall acquire seismic data of the entire area Conduct relevant geological and geophysical studies. Section 4(a)
[231] Proclamation No. 295/1986, Art. 9(3).

		specified a bulk of technical working commitments, and need to be backed by bank guarantee.[232]	
8. Control over Plan for development	The licensee, if decided to develop a petroleum deposit, shall submit to the Ministry for approval a plan for development and operation of the petroleum deposit.[233]	If the Contractor considers that a discovery merits appraisal, the Contractor shall submit to the Minister a detailed appraisal work programme and budget for evaluation.[234]	Similar, except differences in details.
9. Control over operation:			
9.1 Production method	*The production should be "in accordance with prudent technical and sound economic principles…"[235]	*The Petroleum Operations shall be "…in accordance with generally accepted international petroleum industry practice," and at the maximum economic efficient rate.[236]	The same, except differences in wording.

[232] See EMPPSA, Section 5.
[233] Norwegian Petroleum Act 29, Section. 4.2.
[234] EMPPSA, Section.5.3.2
[235] The "production shall take place in accordance with prudent technical and sound economic principles…." Production should avoid waste of petroleum or reservoir energy. Norwegian Petroleum Act 29, Section 4.1
[236] EMPPSA, Section.3.2.1.

9.2. Operator assignment	*The Ministry shall appoint or approve an operator (who may or may not be a licensee), and may undertake the change of operator.[237]	*EMPPSA simply requires the Contractor to notify the Minister the operator of its own choice.[238]	The Norwegian licensing system tends to be more strict than Ethiopian PSA, which is a paradox,[239]at least apparently.
9.3. Rate of production.	"The Ministry shall …. approve the production schedule."[240]	The Contractor shall submit estimated production schedule each Calendar Year and shall submit production reports on a regular basis.[241]	The same, except differences in wording.
10. Option for state participation	*State may reserve a specified share of a license if the King decides to that effect.[242] *A State owned limited company shall manage the commercial interests thereto.[243]	* After the adoption of development plan, the Government may opt to acquire a certain percentage of participating interest, not to exceed a specified share.[245]	Similar though differences in wording and details.

[237] Norwegian Petroleum Act 29, Section. 3.7.
[238] The contractor should notify the " the name and address of the person resident in Ethiopia who will supervise the Petroleum Operations, and prior notice of any subsequent change shall be given to the Minister". EMPPSA, Section 3.8.2.
[239] Ethiopia's specific context may explain the paradox. The conclusion in the discussion part confirms the higher propensity of the contractual regime to take a firm grip of operatorship. However, to do so requires expertise and experience to get too involved in operatorship but Ethiopia's petroleum industry is yet to be experimented and as such the country lacks the capability to take strong hold on operatorship.
[240] Norwegian Petroleum Act 29, Section 4.4.
[241] EMPPSA, Section.8.1.1
[242] State shall reserve a specified share of a licence granted, if the King decides that the Norwegian State shall participate in petroleum activities. Norwegian Petroleum Act 29, Sections 11.1&3.6.
[243] Norwegian Petroleum Act 29, Section 11.2.
[245] EMPPSA, Section.6.1.1; Proclamation No 295/1986, Art.9(9).

	* The company shall be treated as one of the licensees, and acts according to joint operating agreement.[244]	* The Government may acquire such interest *either directly or through a specialized Government entity*.[246] * A joint operating agreement shall establish the relationship but generally, the government shall participate, as regards its participating interest, based on commercial principles.[247]	
11. Government take:			Generally, similar components of government take are recognized. See details below
11.1 Exploration license fee	There shall be paid a throughout the duration of exploration licence. [248]	During the term of the Exploration Period the Contractor shall pay annual rentals(the amount yet unspecified) for all unsurrendered parts of the Contract Area.[249]	Similar/equivalents

[244] Norwegian Petroleum Act 29, Section.11.2.
[246] EMPPSA, Section.6.1.1
[247] EMPPSA, Section.6.1.3
[248] Norwegian Petroleum Regulation No.27/1997), Section 5. A fee amounting to NOK 60 000 per calendar year shall be paid throughout the duration of exploration license.
[249] EMPPSA, Section 11.1.1; Proclamation No. 295/1986, Art. 9(1). This proclamation authorized the ministry to specify various payments.

11.2. Area fee	The licensee shall pay area fee during the period of extension of production license (after the lapse of the first term).[250]	During the term of the Development and Production Contractor shall pay annual rental of (the amount yet unspecified) for each part of the Contract Area designated as such.[251]	Similar/equivalents
11.3 Production fee	The licensee shall furthermore pay a production fee calculated based on the quantity and value of the petroleum at the shipment point (that ranges from 8% upto 16%).[252]	The Contractor shall pay, each calendar month, a royalty at a rate depending on the total daily production (the amount yet unspecified).[253]	Equivalents.
11.4. Non-recurring fee (cash bonus).	"When granting a production licence, a non-recurring fee (cash bonus) may be levied".[254]	Signature Bonus-the contractor shall pay to a signature bonus within 30 days from the day the contract takes effect.[255]	Equivalents.

[250] Norwegian Petroleum Act 29, Section 4.10., parag.1; Norwegian Petroleum Regulation No.27/1997, Section 39. Area fee is calculated per square kilometre which is NOK 7 000 per km² for the first year and thereafter increases by NOK 7 000 per km² per year until it has reaches NOK 70 000 per km².
[251] EMPPSA, Section 11.1.2.
[252] Norwegian Petroleum Act 29, Section 4.10., parag.2; Norwegian Petroleum Regulation No.27/1997), Section 31. The licensee is required to pay a production fee of 8 % of the value of the quantity of oil produced, and this amount may be increased up to 16% with increasing production. A production fee is calculated on the basis of the quantity and value of petroleum produced at the shipment point.
[253] EMPPSA, Section 11.2.
[254] Norwegian Petroleum Act 29, Section 4.10., parag.3.
[255] EMPPSA, Section 11.4.

11.5. Production bonus	"There may be stipulated a fee which shall be calculated on the basis of production volume (production bonus."[256]	Production bonuses-the contractor shall pay production bonuses.[257]	Equivalents.
11.6 Taxes (ordinary taxes)	The ordinary rules of taxation of wealth and income applies.[258] The current ordinary company tax rate is 24 %.[259]	Ordinary income tax- Any person engaged in petroleum operations is subject to the ordinary rules of corporate income tax,[260] which is 30% of the taxable income.[261]	Equivalents.
11.7. Special tax	The oil companies are subject to an additional special tax to be calculated "at such rate as is resolved	Share in Profit oil- ″Profit Oil″[264] shall be share, taken and disposed of between the Government	The special tax component of the Norwegian government take is met by its equivalent-a 'share

[256] Norwegian Petroleum Act 29, Section 4.10., parag.3.

[257] Production bonus shall be paid when the daily average production attains a specified level (yet unspecified) and increases with increasing daily production. EMPPSA, Section 11.3.1.

[258] The Petroleum Taxation Act (Norway), Act of 13 June 1975 No. 35 relating to the Taxation of Subsea Petroleum Deposits, etc. (Last amended by Act of 21 June 2013 No. 66) (herein after the Norwegian Petroleum Taxation Act 13), Section 2. Wealth relating to, and income earned from, the petroleum activities shall be, in principle, liable for tax pursuant to the provisions laid down by other legislation relating to the taxation of wealth and income.

[259] Norwegian petroleum, "The petroleum tax system," http://www.norskpetroleum.no/en/economy/petroleum-tax/, updated: 04.04.2017.

[260] Petroleum Operations Income Tax (Amendment) Proclamation No. 226/2000, *Federal Negarit Gazeta* 7, 8(2000), Art. 2(1). Any person engaged in petroleum operations under a petroleum agreement shall pay thirty percent (30%) income tax on its taxable income.Cf. Ethiopia Petroleum Tax Proclamation no. 296/1986, *Negarit Gazeta* 4, 7(1986), Art. 3.

[261] Income Tax Proclamation No.286/2002, *Federal Negarit Gazeta* 8, 34(2002), Art.19(1).

[264] "Profit oil" is described as the balance of Crude Oil remaining after deduction of the royalty payments recoverable Petroleum Operations Costs. EMPPSA, Section 7.2.1

	by the *Storting*(parliament) for each year.[262] The special tax rate for 2017 is 54 %.[263]	and the Contractor. The shares are not yet specified but an incremental scale of sharing for the government is depicted.[265]	in profit oil', which is typical of PSA.
11.8. Environmental taxes	The carbon tax and the NO_x tax are important environmental taxes in the petroleum sector.[266]	*----	
12. Stability of terms	*-----	Equilibrium type of stabilization clause is incorporated.[267]	
13. Domestic supply	The King may decide that the licensee shall make deliveries from his production to cover national requirements, and provide transportation.[268]	The Minister may require the Contractor to supply Crude Oil to the State to meet the State′s domestic consumption needs.[269]	

[262] The Norwegian Petroleum Taxation Act 13, Section 5.
[263] Norwegian petroleum, "The petroleum tax system."
[265] EMPPSA, Section 7.2.1
[266] Norwegian petroleum, "The petroleum tax system."; Act 21 December 1990 no 72(of Norway) relating to tax on discharge of CO_2 in the petroleum activities on the continental shelf (Last amended by Act 27 June 2008 no 58.), section 1. The *Storting* may resolve that a CO_2 tax shall be paid to the Treasury on the burning of petroleum and discharge of natural gas. In 2016, the average cost of an emission allowance entitling the holder to emit one tone of CO_2 eq was EUR 5.3(NOK 50)
[267] If new laws and regulations substantially affected economic benefits to be derived under this Agreement, the Parties shall agree to make the necessary adjustments to ensure that the affected Party is restored to the same economic condition it would have been absent change in laws. EMPPSA, Section 16.1.3; Proclamation No 295/1986, Art.9(10).
[268] Norwegian Petroleum Act 29, Section 4-12.
[269] EMPPSA, Section 10.1.1; Proclamation No 295/1986, Art.20.

14. Dispute settlement: Forum and applicable law.	Domestic courts seem to be the assumption. The model licensing agreement simply states that Production Licence shall be governed by Norwegian law and be based on Norwegian contractual tradition.[270]	Disputes,[271] not resolved by negotiation, shall be settled by International arbitration,[272] the governing law being Ethiopian law.[273] The forum is to be agreed by the parties, and the arbitration shall be to be guided by the Arbitration Rules of the United Nations Commission on International Trade Law.[274]	The Norwegian system relied on domestic forum while Ethiopian one exported the forum. This is conventional difference between developed and developing countries.

[270] Norwegian model Licensing Agreement (APA), section 7.
[271] Proclamation No 295/1986, Art 25(1). Dispute constitutes "any dispute, controversy or claim arising out of or relating to the petroleum Agreement or the interpretation, breach or termination thereof."
[272] Proclamation No 295/1986, Art. 25(2); EMPPSA, Section 16.2.1, 16.2.2&16. 2.3.
[273] Proclamation No 295/1986, Art. 26.
[274] EMPPSA, Section 16.2.2&16. 2.3.