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► **To cite this version:**

Luciana Palmeira Braga, Elisdíney S. T. da Frota. Reflexões sobre as melhores práticas à luz do direito transnacional. Rio Oil & Gas 2018, Sep 2018, Rio De Janeiro, Brazil. hal-01893453

HAL Id: hal-01893453

<https://hal.science/hal-01893453>

Submitted on 17 Oct 2018

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CONSIDERATIONS ON THE BEST PRACTICES UNDER THE TRANSNATIONAL LAW APPROACH

Luciana P. Braga*; Elisidiney S. T. Da Frota**

Abstract

The present article discusses the best practices of the Petroleum Industry, by explaining the doctrine definition for this expression, characterizing the authors who elaborate these practices and pointing out their legal provisions in the Brazilian regulatory framework. There are some considerations that can be explained on the legal interpretation of the best practices, by comparing the two contrasting theories: the Pure Theory of Law by Kelsen and the Theory of *Droit en Reseaux* by F. Ost and M. Kerchove. The latter is more suitable to analyze the best practices under the approach of the Transnational Petroleum Law. Lastly, the importance of keeping Brazilian Petroleum Agency (ANP) regulators updated on the best practices will be highlighted, in order to monitor their application and comply with the legal provision of the Production Sharing Agreement (PSA) Law.

Keywords: Petroleum Industry, Best practices, Auto-regulation, *Droit en Reseaux*, Transnational Law

1. Introduction

Petroleum¹ guarantees the daily functioning of modern society, because it is used as basic input in the production of fuels, petrochemicals and fertilizers. Considering all means of transport, oil represented 92% of the total energy required for fuels in 2016. For the same year, oil and gas provided 27% of the energy demanded for the world electricity generation (IEA, 2017). Petrochemicals, used to produce plastic, resins and fibers, are an essential component in the production of goods, also has an increasing tendency to use plastic instead of metal and wood. The use of fertilizers has a relevant role, since helps raise the productivity of agricultural production. Therefore, petroleum has been the main primary energy source since World War II, and is essential to the global economy operation (Szklo, 2008; Bagheri and Minin, 2015; Pinto Jr, 2016).

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¹ Petroleum means oil and gas in this article

Meanwhile, in 2016, the '2030 Agenda for Sustainable Development' and the 'Paris Agreement' came into force, signaling the current context of transition to a low carbon economy. As a result, increased environmental demands and rising efforts to replace fossil fuels can be expected, which could lead to a reduction in the demand for oil. The IEA forecast, in a scenario that considers the implementation of the 2030 Agenda and the Paris Agreement – the Sustainable Development scenario - indicates the decline in demand for oil and gas as primary energy sources after 2025, although these resources will still maintain their position through 2040.

The petroleum production by the Pre-salt area should put Brazil among the eight major oil producers in 2040 according to IEA's WEO projections for 2017, which considers the implementation of new policies, without considering the implementation of the Agenda 2030. However, due to the great environmental sensitivity of the Pre-salt area, which is placed on the high seas, it is necessary that environmental protection rules be aligned with the best practices of the petroleum industry. In addition, regulation also needs to be attractive for investment in the upstream sector, aiming to discovering new reserves in order to compensate for the decline of mature field production and to meet the additional demand forecasted by the IEA. According to OPEC World Oil Outlook data for 2017, the level of investment has dropped dramatically since the end of 2014, following the fall in oil prices. With the resumption of oil prices in 2017, the preliminary data for this year indicates a recomposition of the level of investment in this sector. The IEA estimates investments of approximately \$5.8 trillion between 2017 and 2040, even in the scenario of Sustainable Development.

With regard to Brazil's prominent projection of petroleum production for the coming years, it is imperative that Brazilian E&P regulation be efficient, safeguard the national energy policy goals, generate wealth for the current and future generations and preserve the environment and social rights, but also keep attracting investments from private investor companies. As Ribeiro (2012) reminds us, investments must be guaranteed, minimizing risks. Thus, the requirement for compliance with the best practices in the petroleum operations carried out in Brazil can contribute to achieving the objective of efficiency in its regulation and guarantee investments while minimizing risks.

This study aims to share some considerations on the best practices from the Transnational Law approach, considering the theory of *Droit en Reseaux*. The definition of the doctrine will be presented, characterized its authors, pointing out the provisions which refer to these practices in Brazilian legislation and international petroleum agreements.

2. What are the best practices?

Duval et al (2009) defines good oilfield practice as *“those practices and procedures employed in the petroleum industry worldwide by prudent and diligent operators under similar conditions and circumstances, having regard to factors such as conservation of petroleum resources, operational safety and environmental protection.”*

The best practices are, according to Garcia (2015), an instrument that countries can adopt in order to avoid the risk of delays in updating their legislation when faced with industry technological advances, giving operators the obligation to inform themselves and follow the most advanced practices regarding issues such as safety, health, environmental protection and operational efficiency. Therefore, the government transfers regulatory and operational responsibility on some issues to the operators, since they have global reach and, consequently, better access to the sector information.

For Garcia (2012), such practices are materialized in the form of contractual models, industry standards and risk allocation models. Smith et al (2010) still add codes of conduct drafted by companies, industry associations or international organizations.

For Martin (2010), the contractual models aim to standardize the terms adopted in certain types of agreements and in international petroleum transactions. This seeks to achieve efficiency and reduce negotiation costs. This author points out that, given the high complexity of the industry and the high costs required for investment, upstream companies seek mutual benefits by organizing themselves in the form of professional associations. This is because standardization of contracts generates stability in contractual relations and develops a network of economic partnerships (F. Ost and M. Kerchove, 2002).

An example of a model contract is the Joint Operating Agreement (JOA), drafted by the International Energy Committee of the American Corporate Counsel Association (ACCA) and also by the Association of International Petroleum Negotiators (AIPN), which establishes the rules of partnership between consortium companies for exploration and production in a field. According to Ribeiro (2013), JOA is a true code of conduct for setting rules in the sector. Other examples are the Unitization Agreement which regulates the partnerships arising from unitization process² and the

² For more information: Palmeira Braga, Luciana, and Olavo Bentes David. “Why the Unitization Process Is an Important Issue When Dealing with the Brazilian Pre-Salt Polygon.” *The Journal of World Energy Law & Business* 11, no. 1 (March 1, 2018): 17–33.

Farmout Agreement, used to establish the rules for a partial or full assignment of exploration or production rights³, both drafted by AIPN.

The industry standards, according to Garcia (2012), are developed by operators, professional associations such as the American Petroleum Institute (API) and even by some regulators such as Petroleum Safety Authority of Norway (PTLI). The objective of adopting such standards is to ensure the dissemination of the best operational techniques used by the industry, in the form of equipment or services, in the areas of safety, health and environmental protection. Garcia (2012) points out that in 2010 the International Association of Oil and Gas Producers (OGP) had estimated the existence of around 600,000 industry standards, however only 5,180 standards developed by 131 organizations had references in the internal technical specifications of seven of the largest operators.

With regard to the risk allocation models, Garcia (2012) states that standardization results from the frequent usage of this theme in contracts signed by industry players. Examples of these models are the 'safety case', adopted by operators and local regulators to manage risk in order to prevent accidents, and 'knock-for-knock', which aims to delimit responsibilities between operators and service companies.

F. Ost and M. Kerchove (2002) define codes of good conduct as a product of self-regulation developed by companies in an attempt to fill the gaps in corporate law, aiming at better separation of management and control and protection of minority shareholders. According to J. Weaver (Duval et al., 2009), the codes of conduct related to environmental protection reflect the efforts of many professional industry associations to develop rules which would be adopted internationally in the industry. This is accomplished by supplying the absence of an international "hard law", national statutes or contractual provisions on this subject.

For F. Ost and M. Kerchove (2002) these standardized practices give rise to the private law of transnational economic transactions, also called *lex mercatoria*. The branch of this law for the petroleum industry would be the *lex petrolea*, whose existence is supported by part of the doctrine (Garcia, 2012, De Jesus, 2012) and criticized by others (Daintith, 2017).

3. Who drafts the best practices?

As mentioned in the previous section, the best practices are developed by companies, professional associations, international organizations and even regulatory agencies.

³ For more information: Lowe, John S. "Analyzing Oil and Gas Farmout Agreements." *Southwestern Law Journal* 41 (1988 1987): 759.

The companies can be the International Oil Companies (IOCs), National Oil Companies (NOCs) or service companies that operate in a diligent and prudent manner.

The professional associations comprised by these companies pursue mutual benefit, such as the search for greater efficiency in the international petroleum transactions, and justifying the drafting of contractual models. As examples of these associations, in addition to those mentioned in the previous section, Martin (2010) cites: International Association of Oil and Gas Producers (OGP), United Kingdom Offshore Operators Association (UKOOA), International Association of Drilling Contractors (IADC), International Association of Geophysical Contractors (IAGC), Petroleum Equipment Suppliers Association (PESA), Petroleum Services Association of Canada (PSAC), American Association of Petroleum Landmen (AAPL), Canadian Association of Petroleum Landmen (CAPL), Petroleum Joint Venture Association (PJVA), Rocky Mountain Mineral Law Foundation (RMMLF), Council of Petroleum Accountants Societies (COPAS), and Petroleum Accountants Society of Canada (PASC).

The international organizations are arenas of perennial cooperation between sovereign nations, created by these nations' will in order to address various issues. Decisions, after a consensus, are generally materialized in the form of treaties (Lagrange and Sorel, 2013). Some international organizations stand out in the elaboration of the best practices for the petroleum industry, such as the United Nations (UN), particularly the standards issued by its specialized International Maritime Organization (IMO) for offshore operations and with the United Nations Convention on the Law of the Sea of 1982 (UNCLOS). According to Weaver this Convention relied almost entirely on the customs adopted before coding (Duval et al, 2009). The World Bank and the Organization for Economic Co-operation and Development (OECD) also stand out due to the codes of conduct widely adopted by the industry (Garcia, 2015).

Regulatory agencies, in drafting the exploration and production agreements, also called International Petroleum Agreements (IPAs), and in monitoring and inspecting procedures, make comparisons, exchange information, copy and standardize themselves (Garcia, 2015). For Gilardi (2012), the influence of regulation from one country to another is increasingly frequent, representing the transnational diffusion of policies through processes such as: **coercion**, when access to a benefit is conditioned to the implementation of a particular policy; **competition**, when countries compete for a benefit, such as private investment; **learning or benchmark**, when the government seeks good practices in similar regulations⁴; **emulation**, when the adoption of a policy occurs to meet the

⁴ Entre 2007 e 2008 a ANP realizou viagens técnicas com o objetivo de fazer um benchmark dos modelos de licitação de E&P adotados por outras agências reguladoras. Uma dessas viagens é relatada no artigo: Braga, L.P. e Ferreira S.S. Peru e Brasil: uma análise comparativa dos modelos de licitação de E&P adotados por esses países. Rio Oil & Gas 2006.

demands of the international community, such as women's right to vote. This author concludes that if a policy succeeds in one country, it is copied by others.

4. How are the best practices integrated into the Brazilian regulatory framework?

The Brazilian regulatory framework for the E&P activities have referred to the best practices since the publication of the Petroleum Law. The Production Sharing Agreement (PSA) Law gave them a prominent role in determining the obligation of the ANP to enforce their compliance. The International Petroleum Agreements (IPA) adopted in Brazil, in their three types (concession, production sharing and onerous assignment), also refer several times to the best practices.

The Petroleum Law provides that the concession agreement shall establish as a concessionaire obligation to "adopt the best practices of the international petroleum industry and comply with relevant technical and scientific standards and procedures, including appropriate recovery techniques, pursuing a rational production and a control of reserves downfall"⁵.

The PSA Law brings the same provision, but restricts it to the operator of the contract. However, it innovates by adding to the list of ANP duties the obligation to "enforce the best practices of the petroleum industry"⁶.

The most recent concession agreement, launched in the 15th Round, makes more than twenty references to the best practices. This agreement requires the adoption of the best practices to carry out all operations, and make explicit mention to the: minimum exploratory program; the development activities (highlighting the field delimitation and the drafting of the development plan), the production activities (drilling and abandonment of wells), the burning of natural gas, and the decommissioning. It also requires the compliance with these practices in the hiring of staff; in the local content compliance; in the safety and environmental management; in the emergency response procedures and in the risk analysis studies and in the monitoring of activities involving operational, environmental or human health risks. This agreement also provides the ANP's commitment to follow the best practices in the exercise of its discretionary power.

The most recent PSA, published in the 4th Round, makes the same references and adds the commitment of Pré-sal Petróleo SA (PPSA), as the PSA manager, to act in accordance with the best practices of the petroleum industry.

⁵ Free translation of Petroleum Law, art. 44, VI: "adotar as melhores práticas da indústria internacional do petróleo e obedecer às normas e procedimentos técnicos e científicos pertinentes, inclusive quanto às técnicas apropriadas de recuperação, objetivando a racionalização da produção e o controle do declínio das reservas."

⁶ Free translation of PSA Law, art. 11, IV: "fazer cumprir as melhores práticas da indústria do petróleo"

Both agreements provide a detailed and extensive definition of the best practices, which are stated below:

“The best and safest procedures and technologies available in the oil and gas industry worldwide intended to: (i) ensure the operational safety of the facilities, preserving life, physical integrity, and human health; (ii) preserve the environment and protect adjacent communities; (iii) prevent or reduce as much as possible the risk of spill of oil, natural gas, by-products, and other chemicals that may be hazardous to the environment; (iv) preserve oil and gas resources, which implies the use of adequate methods and processes to maximize the recovery of hydrocarbons in a technical, economic, and environmentally sustainable way, with the corresponding control of the reserve decline, and to mitigate surface losses; (v) minimize consumption of natural resources in the Operations. In order to perform the Best Practices of the Oil Industry, the Contractors shall rely on the standards issued by ANP and other Brazilian public bodies, incorporating technical standards and recommendations of internationally recognized bodies and associations of the oil industry, whenever such measures increase the chances to achieve the objectives listed above.” (ANP, 2018)

The onerous assignment agreement refers fourteen times to the best practices, requiring them to be applied in the exploration, development and production operations and to be in compliance with local content. This agreement also provides the ANP's commitment to follow the best practices in the exercise of its discretionary power. As in the onerous assignment there is the possibility of contractual terms revision, this agreement submits such revision to the adherence to the best practices.

5. What is the most suitable law approach to analyze the best practices?

As stated in the previous section, it is possible to say that the best practices of the Petroleum Industry are emanated by non-state players such as transnational companies, international organizations and professional associations, or even by foreign state players, such as regulatory agencies of other countries. Thus, the best practices are an expression of the self-regulation of this industry.

It is important to remember, however, that the Brazilian legal system relies on the Kelsen's Pure Theory of Law, which only recognizes the rules published by the state as member of the legal system, which are coercive and submitted to a hierarchical order, pyramidal, and contained in a closed system. In this order the constitution is the supreme norm located at the top, from which the other norms ramify, subordinated to the constitutional provisions and classified in stratified and hierarchical form. In this way, the lower norms find their validity in the norms of the upper layer.

When analyzing concession agreements, Aragão (2005) interprets the application of the best practices in the light of the Kelsenian theory, subordinating them to the Brazilian Constitution and federal laws, as can be read from the transcription below:

"Starting from the Normative Pyramid and the Gradualist Theory of Kelsen, we find, on the one hand, that every act of the Public Administration is based on a superior act - usually a law - but also on the other hand," every concretion of general rules, any change from a higher grade to a lower grade of the legal order, implies filling a gap, respecting the limits laid down by higher standards.

(...)

It may not, inversely, ex vi of art. 44, VI, of the Petroleum Law, refute the incorporation into the concession agreement of clauses reflecting "petroleum industry international good practices" as set out above, unless, based on any reasonable hermeneutic judgment of other provisions of the Petroleum Law and of the Federal Constitution, there is no space left for the Agency to incorporate them, either in integration (complementing the Law in points not specifically addressed by it) or in the interpretation of the Law. In other words, the best practices can only be disregarded in the concessions if they are contrary to the law or the Constitution. "⁷

However, it is important to consider how best practices and all references are formulated in the Brazilian legal system. There is no disclaimer related to the subordination of the best practices to the Constitution and federal laws. On the contrary, there are commitments registered by the ANP and PPSA to submit themselves to these practices in the exercise of the ANP's discretionary power and of the PPSA's management of the PSA. Thus, the Kelsenian theory proves insufficient to develop an analysis of such practices.

In the same direction, Veronese (2013) argues that the rules created privately, that is, self-regulation such as the best practices, could not be considered as Law in the Kelsen pyramidal model, but he says that in practice these private rules have broad functionality. They would also be increasingly endowed with legitimacy and coerciveness, as would be presupposed by the Kelsenian theory.

Thus, it seems more appropriate to analyze the best practices under the Theory of *Droit en Réseau* elaborated by F. Ost and M. Kerchove (2012), which contrasts with the Pure Theory of Law

⁷ Free translation of the text : "Partindo-se da Pirâmide Normativa e da Teoria Gradualista de KELSEN, constatamos, por um lado, que todo ato da Administração Pública está apoiado em um ato superior - geralmente uma lei -, mas também que, por outro lado, "toda concreção de normas gerais, toda passagem de um grau superior para um grau inferior da ordem jurídica, implica preencher um vazio, respeitando os limites traçados pelas normas de grau superior.

(...)

Não poderá, reversamente, ex vi do art. 44, VI, da Lei do Petróleo, refutar a incorporação ao contrato de concessão de cláusulas que reflitam as "boas práticas internacionais da indústria do petróleo" tal como acima expostas, salvo se não houver, com base em qualquer juízo hermenêutico razoável de outros dispositivos da Lei do Petróleo e da Constituição Federal, espaço deixado para a Agência incorporá-las, seja na integração (complementação da Lei em pontos que não foram por ela especificamente tratados), seja na interpretação da Lei. Em outras palavras, as "boas práticas" só podem deixar de ser acolhidas nas concessões se forem contrárias à lei ou à Constituição."

without disregarding it, although it sustains its erosion. This theory starts from the current reality, considering legal pluralism, the multiplicity of powers and institutions that create law and its interactions.

In Theory of *Droit en Reseaux*, the following can be observed: subordination is replaced by coordination and collaboration; linearity becomes relativized, being more circular and reversing the hierarchical order of relations; the ramification is diluted insofar as the creation of law multiplicity of sources is no longer derived exclusively from a single and sovereign point; the imposition of rules by the state is replaced by governance, by a process of coordination of players, social groups, international and non-state organizations and transnational corporations. For this theory, the regulation assumes a prominent role, as it presents a flexible management that is evolutionary, adaptive and open to negotiation with social factors. This theory also recognizes self-regulation as an integral part of the legal system, justified by the greater flexibility of self-produced and self-controlled standards in order to adapt to ultra-specialized and unstable situations.

The petroleum industry with the complexity of its activities requires ultra-specialized rules that are updated at the same pace of technological development. To meet this expectation, producer countries organize themselves to standardize and diffuse policies, through processes of transnational diffusion as sustained by Gilardi (2012) or through international organizations (UN, OECD e.g.). The transnational petroleum companies also organize themselves through the standardization of contracts and procedures. The interaction of these state and non-state norms does not occur in a hierarchical way, since the state does not maintain itself in a central position. In this case no point is superior or subordinate to another, there is a network structure, and no more pyramid.

According to F. Ost and M. Kerchove (2012), it is possible to observe in the Petroleum Industry regulation a process of co-regulation that is characterized by the association of binding legislative or regulatory rules to the rules adopted by the most involved players (self-regulation), adding their practical experience. Thus, the best practices, as an expression of the self-regulation of the Petroleum Industry, will fill empty spaces left by state power, unable to regulate in a detailed and constantly updated way all the operations of the industry. This legal landscape reshaped is a tangle of logics, in which the element of *Droit en Reseaux* production comes within the increasingly large interstices open in traditional pyramidal construction. However, despite the advantages of self-regulation - speed, flexibility, adaptability to circumstances, effectiveness in implementation - F. Ost and M. Kerchove (2012) indicate as disadvantages the impossibility of guaranteeing the representativeness of all the interests involved without keeping the procedural guarantee elements present in a democratic regulation.

F. Ost and M. Kerchove (2002) present three models for self-regulation. The first requires legal permission as a base for the normative power of private persons, although associated with the general norms drafting, creating the figure of a reflexive or procedural state. In this model the state would only set general objectives and make the procedural framework of a discussion conducted by the interested groups, leaving the private players the responsibility to determine, themselves, in terms of a regulated deliberation, the norms that could be expected of them.

The second model is based on Hayek's political theory, which defends the minimal state and the spontaneous order of the market in opposition to the artificial order of the state. Also, in Haberman's political theory, which supports the definition, a priori, of the common good demands for pluralistic and complex societies.

The third model is the most radical, in defending the state suppression and private regulation outside the hierarchy of legal norms. As an example of this third model, the authors cite *lex mercatoria*, defined as a transnational economic transactions order, meaning the emergence of an autonomous world law, in which the globalization of transactions would show a great deconstruction of the normative hierarchy. In this sense, state sovereignty is replaced by the autonomy of increasingly expansive and differentiated subsystems, in which general rationality is replaced by a plurality of sector logics that are not coordinated.

For F. Ost and M. Kerchove (2002) the three models are ideal types, but find concrete hybrid references in the current reality. However, these authors emphasize that state law and international regulation, produced by international organizations, find a strong competitor in the law of the market. The market would be an example of network organization, devoid of center and top, but not of power, and would be in competition by force. The relationships that are established between their operators (companies) take the horizontal form of contractual relations. The previously fixed and stable rules are replaced by competition law, which imposes itself among the players as a categorical imperative of the markets. In this context the rules are negotiated and the geographical location of companies and agreements are chosen due to tax incentives in competition (law shopping, forum shopping). The law is privatized and the action of the public powers is increasingly confused with that of the private powers. Market law deconstructs the traditional regulatory model, despite recognizing the importance of this model in some social sectors.

From this perspective, Garcia (2015) points out the existence of three legal orders: the national order, the international order and the transnational order. The latter is best suited to the new global economic order, where state and non-state players seek together joint solutions through cooperative

relations. Thus, the transnational order would be based on the theory of *Droit en Reseaux*, since this theory does not fit into the hierarchical model, centered on the state, as proposed by the Kelsenian Theory.

Djelic and Sahlin-Anderson (2008) characterize the transnational order by the plurality of players, in which the state remains a player, but not more important than the others. There is a proliferation of players, regulatory activities, and connection networks. This term suggests ill-defined and entangled boundaries, which does not take into account territorial space and national sovereignty and autonomy.

The European Union (EU) would be an example of a transnational order. In the EU the state is not the only public instance of integration, territory is not the only politically relevant space, national citizenship can be composed of other citizenships, normative hierarchies can change and sovereignty can be relative without disappearing, autonomy can be reconciled with interdependence (F. Ost and M. Kerchove, 2002).

The legal expression of this order would be Transnational Law. Is this the most appropriate branch of law to analyze the best practices?

De Jesus (2012) argues that Transnational Law is based on the paradigms of the global economy, which rejects geographical, political and legal national boundaries, which addresses flexible long-term contracts with a distinct approach to *pacta sunt servanda* and the idea of the intangibility of contracts. Transnational Law accepts legal pluralism that recognizes that a norm can be created by non-state institutions and yet be legitimized and valid.

Daintith (2017) and Garcia (2015) defend the existence of a Transnational Petroleum Law. The latter argues that, since petroleum industry players are members of a cross-border community, they create and legitimize transnational rules, meaning rules whose application goes beyond the territorial boundaries of a single country. The process of creating and legitimizing these norms occurs through the repetition of uses and practices, which are translated into the 'best practices', an expression adopted in the laws and agreements of several countries.

Considering that the 'best practices' express legal pluralism and their adoption does not obey boundaries, it is prudent to agree with Daintith (2017) and Garcia (2015) on the existence of a Transnational Petroleum Law. In addition, since this branch relies on the foundations of *Droit en Reseaux*, which recognizes the legitimacy of self-regulation, this would be the most appropriate way to deepen the reflections on the best practices. It is important to recognize that state sovereignty continues to be exercised insofar as it allows the introduction of self-regulation in its legal system. At

the same time, the erosion of this sovereignty is evident by recognizing the validity of norms issued by non-state agents. Furthermore, there is the commitment of the ANP and PPSA to comply with such standards, as can be seen in the clauses of recent Brazilian IPAs that require compliance with the best practices in the exercise of discretionary power and in the management of the PSA, respectively.

6. How to enforce the best practices?

As discussed in Section 2 (What are the best practices?), the best practices represent an extensive number of standards, models, and practices. How would it be possible for the regulator to become aware of this infinity of information in order to enforce compliance?

Initially, the regulator must accept that is impossible to know everything regarding what could be considered as best practices. However, for Garcia (2012) it is possible to keep up to date with the dissemination of new practices, by participating in forums such as the International Regulator's Forum and the Offshore Technology Conference (OTC). The guides that record the best practices such as the International Association of Oil & Gas Producers (IOGP), API and ISO catalogs can also be easily accessed.

This author also highlights the importance of regulators constantly investing in education, professional training and technology in order to guarantee a high level of efficiency in the monitoring of the industry, keeping the same knowledge level of its operators.

Furthermore, from the point of view of the cooperation brought by the *Droit en Reseaux* theory, the regulators should act in close proximity to the operators so that they can follow the development of the best practices and, if necessary, require its replication by other operators.

7. Conclusions

This article proposes some considerations on the best practices, discussing the authors that elaborate it, its presence in the Brazilian legal system and raises some legal reflections on its interpretation. The best practices, as an expression of the self-regulation of the Petroleum Industry, represent an important tool to keep regulation up-to-date and ensure its effectiveness. However, it is important that regulators are prepared to identify such practices and enforce them, thereby complying with the legal rule of the PSA Law.

8. Acknowledgments

The authors thank Prof. Catherine Locatelli, Prof. Sylvain Rossiaud, Prof. Marilda Rosado, Prof. Julian Garcia for all the advice received throughout the preparation of this article. Author Luciana P. Braga also thanks the IDEX for funding her travel grant to research at the University of Houston Law Center (UHLC).

9. Referencies

ANP. *Contratos e Editais: Modelos e Extratos*. Available at: <http://rodadas.anp.gov.br/pt/legislacao/contratos-e-editais-modelos-e-extratos> Access on: 14 Jun 2018

Aragão, A. S. “O contrato de concessão de exploração de petróleo e gás.” *Revista de Direito Administrativo* 239, no. 0 (January 23, 2005): 411–38.

Bagheri, K. S., and Di Minin, A. “The Changing Competitive Landscape of the Global Upstream Petroleum Industry.” *The Journal of World Energy Law & Business* 8, no. 1 (March 1, 2015): 1–19. <https://doi.org/10.1093/jwelb/jwu036>.

Daintith, T. “Against ‘Lex Petrolea.’” *The Journal of World Energy Law & Business* 10, no. 1 (March 1, 2017): 1–13.

De Jesús, A. O. “The Prodigious Story of the Lex Petrolea and the Rhinoceros. Philosophical Aspects of the Transnational Legal Order of the Petroleum Society”. Available at: <http://adejesus.com/pdfs/DE%20JESUS%20O.%20Alfredo%20-%20The%20Prodigious%20Story%20of%20the%20Lex%20Petrolea%20and%20the%20Rhinoceros.pdf>. Access 12 Jun 2018

Djelic, M. and Sahlin-Andersson, K. “Transnational Governance: Institutional Dynamics of Regulation” Cambridge University Press; 1 edition 2008

Duval, C., Le Leuch, H., Pertuzio, A., Weaver, J. L., Owen L. A., R. Bishop, D., and Bowman, J. P. “*International Petroleum Exploration and Exploitation Agreements: Legal, Economic and Policy Aspects*” Second Edition. New York, NY: Barrows Company, 2009.

Garcia, J. C. “*Best Industry Practices and Environmental Regulation for Offshore Petroleum Operations A Contribution to the Study of the Lex Petrolea.*” Transnational Petroleum Law Institute. Vol. 1 – N° 2, 2012

_____. “Reflexiones sobre la Educación y la Práctica del Derecho Transnacional Petrolero. Transnational Petroleum Law Institute. Houston, 2015

Gilardi, F. “*Transnational diffusion: Norms, ideas, and policies*”. 2012. Disponível em: https://www.fabriziogilardi.org/resources/papers/gilardi_handbook_IR_v2.pdf Acesso em 14 Jun 2018.

Kelsen, H. *Pure Theory of Law*. The Lawbook Exchange, Ltd., 2009.

Kerchove, M. V., and Ost, F. “De la pyramide au réseau ? : Pour une théorie dialectique du droit.” Bruxelles: Publications des Facultés universitaires Saint-Louis, 2002.

IEA “WEO 2017.” Accessed March 14, 2018. <https://www.iea.org/weo2017/>.

Lagrange, E., and Sorel, J. “Droit des organisations internationales”. Paris: Lgdj, 2013.

Martin, A. T., and Park, J. J. “Global Petroleum Industry Model Contracts Revisited: Higher, Faster, Stronger.” *The Journal of World Energy Law & Business* 3, no. 1 (March 1, 2010): 4–43. <https://doi.org/10.1093/jwelb/jwp022>.

“OPEC: World Oil Outlook.” Available at: http://www.opec.org/opec_web/en/publications/340.htm. Accessed on: 18 Mar 2018.

Pinto Jr., H. Q. “*Economia da Energia: Fundamentos Econômicos, Evolução Histórica e Organização Industrial*” Editora Elsevier, 2016.

Ribeiro, M. R. S. “*Direito Internacional dos Investimentos*”. Editora Renovar. Rio de Janeiro, 2014.

_____. “Direito do Petróleo”. Rio de Janeiro Brasil: Renovar, 2013.

Smith, E. E.; Dzienkowski, J. S.; Owen L. A.; Lowe, J. S.; Kramer, B. M. and Weaver, J. L. “*International Petroleum Transactions*.” Third Edition. Westminster, Colo.: Rocky Mountain Mineral Law Foundation, 2010.

Szklo, A. S. “*Textos de Discussão em Geopolítica e Gestão Ambiental de Petróleo*”. Rio de Janeiro, RJ: Interciência, 2008.

“United Nations Sustainable Development Agenda.” Available in: <http://www.un.org/sustainabledevelopment/development-agenda/> Accessed on: 14 Mar 2018.

Veronese, A. “Revisitando o Conceito de Direito Em Rede: Uma Crítica Sociológica à Teoria Normativista Do Direito.” 2013 Available in: http://www.academia.edu/33639675/Revisitando_o_conceito_de_direito_em_rede_uma_cr%C3%ADtica_sociol%C3%B3gica_%C3%A0_teor%C3%ADa_normativista_do_direito Accessed on 2 Mai 2018.

Victor, D. G., Hults, D. R., and Thurber M. C. “*Oil and Governance*”. 1st ed. Cambridge University Press, 2011.