The risk of regulatory conflict in the transportation of natural gas*

O risco de conflito regulatório no transporte de gás natural

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ABSTRACT

Natural gas is normally transported in closed systems through pipelines. However, there are other possible ways to transport this material, such as by road. This method was also highlighted by Law 14134/21, which disposes about activities related to the transport of natural gas, among other measures. Despite expressly bringing the road modal as an alternative, the Law does not clearly delimit the role of the competent regulator, and this omission increases the risk of regulatory conflicts arising from divergent decisions given by different regulators. This article was developed through a logical-inductive method, along with the due bibliographic review, and it aims to analyze the regulatory contradictions that can happen in order to provide standards to the coordination of the regulators involved. When it comes to hypostasis

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that the Law 14.134/21 would create regulatory conflicts, the article concluded positively, and having that in account, the article provides initial parameters for regulatory coordination.

KEYWORDS

regulatory conflict — transportation of natural gas

RESUMO

Gás natural normalmente é transportado em sistemas fechados por meio de dutos. Contudo, há outros modais possíveis para efetuar o transporte deste material, como o rodoviário. Esse método, inclusive, foi ressaltado pela Lei nº 14.134/2021, que dispõe sobre atividades relativas ao transporte de gás natural, entre outras providências. Apesar de trazer expressamente o modal rodoviário como alternativa, a lei não delimita de forma clara o papel do regulador competente, e esta omissão incrementa o risco de conflitos normativos proveniente de decisões divergentes dadas por diferentes reguladores. Este artigo se propõe a analisar por meio do método lógico indutivo, junto com a devida revisão bibliográfica, as inconsistências regulatórias que podem ocorrer e fornecer parâmetros para a coordenação regulatória entre os atores envolvidos. Em relação à hipótese de que a Lei nº 14.134/2021 teria o condão de gerar conflitos regulatórios concluiu-se positivamente; diante deste cenário, foram apresentadas balizas iniciais para a solução do problema.

PALAVRAS-CHAVE

conflito regulatório — movimentação de gás natural

Introduction

Natural gas, as a rule, is transported in closed systems, through pipelines. However, it is possible to transport natural gas in steel cylinders or other pressured containers in trucks. The transportation of compressed natural gas with high methane content must comply with a series of regulatory health, environment and safety standards. The issue of road transport of natural gas was revived with the recent publication of Law no. 14.134, April

8, 2021,[1] which stresses that the ANP will regulate the activities related to packaging for transport and the furnishing of gas to the final consumer through alternative means, other than pipeline.

Notably, road transport is an example of an alternative method listed in the law itself.[2]

However, the aforementioned rule is silent about the role of the *Agência Nacional de Transportes Terrestres* (ANTT), despite a clear thematic relationship with the regulatory activity of the transport agency. This omission increases the risk of normative conflict arising from divergent regulatory decisions.

It is important to highlight that ANTT provides a series of regulations on the transport of dangerous goods by road.[3] It is important to note, also, that Law no. 14.134, April 8, 2021, may generate conflict between the ANP and state regulatory agencies, such as *Agência Reguladora de Energia e Saneamento Básico do Estado do Rio de Janeiro* (*Agenersa*).[4]

This article will discuss whether Law no. 14.134, April 8, 2021, may generate regulatory conflicts, since there seems to be a clear need for regulatory coordination between ANTT and ANP.[5] This is justified with the observation that the matter has not been subject to specific regulation by the ANP. Thus, the diagnoses of possible inconsistencies presented in the article may serve as a guide for the fixing of initial parameters with regard to regulation. Arguments are based on a logical-inductive method, using normative evidence, together with an extensive literature review, to contextualise the problem.

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1 Provides for the activities related to the transport of natural gas, dealt with in art. 177 of the Federal Constitution, and on the activities of distribution, treatment, processing, underground storage, conditioning, liquefaction, regasification and commercialization of natural gas; amends Laws no. 9.478, of August 6, 1997, and 9.847, of October 26, 1999; and revokes Law No. 11,909, of March 4, 2009, and the provisions of Law No. 10.438, of April 26,2002.

2 See the article in question: Art. 25. The ANP will regulate packaging activity for the transport and commercialization of natural gas to the final consumer by means of alternatives to the pipeline. § 1 – Alternatives are understood as road, rail and waterways. § 2 The ANP will articulate with other regulatory agencies to adapt the transport regulation referred to in § 1 of this article, when it is the case.

3 Perhaps the main example stems from Resolution No. 5.848, of June 25, 2019.

4 Created by State Law No. 4.556, June 6, 2005. Based on Article No. 2, item I, the purpose is to exercise regulatory power, monitoring, controlling and inspecting public service concessions and permissions granted in the energy area of the state of Rio de Janeiro, including the distribution of piped gas and other forms of energy, in which the State features, by legal or contractual provision, such as Granting Power or Permission, under the terms of the relevant regulatory and consensual legal rules.

5 State entities, such as *Agenersa*, are mentioned in a residual sense, since there are a series of questions which frustrate current analysis of potential inter-federative conflicts that may arise.

Finally, it should be noted that the description does not intend to exhaust the topic, since road transport depends on pouring[6] natural gas in metallic tanks and cylinders, the technical specificities of which are beyond the *expertise* of this scholar.[7]

The work will be divided into three sections. The first concerns the operationalization of a functional concept of regulation for the road transport sector, specifically involving the road transport of natural gas.[8] The second section analyses the potential conflict in the existing norm. The final section ventures into the normative and prescriptive fields, seeking solutions to the potential conflict.

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[6] The definition is given in the following terms by article 24 of Law no. 14.134/2021: "Natural gas conditioning will be carried out by a company or consortium of companies incorporated under Brazilian law, with headquarters and administration in the country, at the expense and risk of the entrepreneur, upon authorization from the ANP.
§ 1 The filling of the gas pipeline, as well as the increase or decrease in pressure does not qualify as natural gas conditioning.
§ 2 The conditioning of natural gas in tanks, in its gaseous or liquefied form, will be authorized separately or within the scope of the terminals or plants to which they belong".

[7] By way of example, the ANP itself highlights the following standards: (i) ABNT NBR Standard 17.505 — Storage of flammable and combustible liquids; (ii) ABNT NBR Standard 15.216 — Storage of fuels — Quality control in storage, transport and supply of aviation fuels; (iii) Standard ABNT NBR 15.186 — LPG storage, bottling and distribution base — Design and construction; (iv) ABNT NBR 7.821 Standard — Storage of flammable and combustible liquids — Welded tanks for storing oil, derivatives and liquids in general; (v) Standard ABNT 15.280 — Terrestrial Pipelines Part 1 — Project; Part 2 — Construction and Assembly; (vi) NBR15216 — Storage of flammable and combustible liquids — Control of quality in the storage, transport and supply of aviation fuels; (vii) NR 20 — Combustible and flammable liquids; (viii) American Society of Mechanical Engineers (*Asme*) Standard B31.3 — Process Piping; (ix) *Asme* Standard B31.4 — Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids, The American Society of Mechanical Engineers; (x) *Asme* Standard B31.8 — Gas Transmission and Distribution Pipeline Systems — The American Society of Mechanical engineers; (xi) Norm *Asme* Boiler and Pressure Vessel Code (BPVC), Code Section VIII; (xii) API 650 Standard — Welded Steel Tanks for Oil Storage; (xii) API Standard 653 — Tank Inspection, Repair, Alteration, and Reconstruction; (xiii) API 2000 Standard — Venting Atmospheric and Pressure Storage Tanks: Non Refrigerated and Refrigerated; (xiv) API 620 Standard — Design and Construction of Large Welded Low Pressure Storage Tanks; (xv) NFPA 59A Standard — Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG).

[8] It is useful to specify the spectrum of conceptual operationalization referred to, for purposes of precision. In any case, possible utilitarian expansions of the concept cannot be discarded.

I. Functional concept of regulation of natural gas road transport

It seems reasonable to say that, often, the development of a legal concept takes as its starting point an idea common to everyday discourse. It also seems appropriate to recognize that, in most cases, the law, by incorporating everyday concepts, ends up modifying them, to adapt them to the requirements of special doctrines. Besides common concepts, the law also appropriates technical and extra-legal concepts, and, in the same way, does not necessarily respect the technical elaborations of specialist knowledge areas.

In other words, the process of choosing and defining concepts may, in some cases, be in other disciplines. Thus, they may already have been developed in a systematic way based on extra-legal criteria. Even if the concepts are systematically developed in other disciplines, the law does not necessarily adopt them directly,[9] but may, depending on the understanding of the legislator,[10] modify them to meet specific legal needs.[11]

The systematisation of concepts forms (or should form) a disciplinary matrix in which a particular field of knowledge, such as the legal field, is developed. This can be understood as a set of premises that unites scholars.[12] Such a set enables relatively problem free communication, as it is based on a majority consensus and/or a unanimous understanding of "professional opinions"[13] on studies involving conceptual analyses. It is on this basis that

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[9] There is some discussion about the possibility of incorporation vis-a-vis exogenous concepts (principles), such as the field of morality. According to Joseph Raz: "My conclusions cast doubts on the incorporation thesis, that is the view that moral principles can become part of the law of the land by incorporation". RAZ, Joseph. *Between authority and interpretation. On the theory of law and practical reason.* Oxford University Press, 2013. p. 183.

[10] This discussion could be extended to the debate regarding the existence of a unified ontology of law. Is there a legal fact? There is a legal fact independent of people? In this sense, could there be an exclusively legal concept? In this light, Łukasz Kurek develops his theory. KUREK, Lukasz. The unit of law and the internal point of view. In: HELLWEGE, Phillip; SONIEWICKA, Martha (Ed.). *Die Einheit der Rechtsordnung*. Tübingen: Mohr Siebeck, 2020. p. 28.

[11] POSHER, Ralph. The hand of midas: when concepts turn legal, or deflating the Hart-Dworkin debate. In: HAGE, Jaap C.; PFORDTEN, Dietmar von der (Ed.). *Concepts in law.* Dordrecht: Springer, 2009. p. 100.

[12] The idea of matrix can be exemplified with reference to Fernando Schuartz, with regard to competition law: "Prominent examples are in the Guides to merger economics analysis, spread across almost all jurisdictions with virtually identical concepts and guidelines; or else, in the presumptions, more or less explicitly, of the precedents related to the legal treatment of horizontal and vertical anti-competitive measures — in line with and consistent with the theoretical and empirical results accumulated in the specialized literature". SCHUARTZ, Luis Fernando. A desconstitucionalização do direito de defesa da concorrência. *Revista do Ibrac*, v. 16, n. 1, p. 327-329, 2009.

[13] AARNIO, Aulis. *The rational as reasonable*. A treatise on legal justification. Dordrecht: D. Reidel Publishing Company, 1986. p. 17

some level of consensus is possible, concerning the concept as well as the evaluation of the technical merit of a particular work. Thus, legal dogmatics is more objective, in contrast, for example, with the social sciences or the discipline of history. In other words, the "legal dogmatics matrix helps us to be more exact than the aforementioned epistemological perspective, formally typical of legal dogmatics".[14] An important concern is to understand how conceptual analysis works. According to Dietmar von der Pfordten,[15] two models are dominant: a classical and a reductionist-positivist model.

Pfordten[16] states that the classical model of conceptual definitions stems from the doctrine that concepts are epistemologically dominant, vis-a-vis linguistic phenomena such as words and phrases. On the other hand, the reductionist-positivist model of explaining conceptual frameworks is natural and historical, though not necessarily, the realist or nominalist view that concepts are linguistic qualities or entities such as words or word connections.

In this sense, the classical model entails four basic definitions in a broader sense: (i) definition in terms of the higher, more abstract concept, whereby conceptual analysis focuses on describing the specific difference between the properties of the abstract and the specific; (ii) determination through analysis of properties of the investigated concept with more concrete concepts; (iii) determination by the descriptive listing of the characteristic parts/properties and forms of the object to which the concept refers, widely used in other fields of scientific study, such as palaeontology;[17] and (iv) distinction between descriptive and normative concepts, such as the practical language of Charles L. Stevenson, expressed in his *Ethics and Language*.[18]

Regarding the positivist model mentioned by Pfordten,[19] it is useful to consider Rudolf Carnap's[20] criteria for the development of conceptual analysis: (i) similarity: in most cases, the conceptual properties used in the analysis must be able to replace the operationalized concept; (ii) accuracy: rules for the

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14 Ibid.

15 PFORDTEN, Dietmar von der. About concepts in law. In: Jaap C. Hage and Dietmar von der Pfordten, *Concepts in law*, op. cit., p. 24.

16 Ibid.

17 WELLNHOFER, P.; KELLNER, A. W. A. The skull of Tapejara wellnhoferi Kellner (Reptilia, Pterosauria) from the Lower Cretaceous Santana Formation of the Araripe Basin, Northeastern Brazil. *Mitteilungen der Bayerischen Staatssammlung für Paläontologie und Geologie*, v. 31, p. 89-106, 1991.

18 STEVENSON, Charles L. *Ethics and language*. New Haven: Yale University Press, 1944.

19 Dietmar von der Pfordten, About concepts in law, op. cit., p. 24.

20 CARNAP, Rudolph. *Logical foundations of probability*. University of Chicago Press. 1962. p. 7.

conceptual use of necessary properties must be given in an exact way in order to be integrated into a system grounded in scientific concepts; (iii) fertility: the conceptual properties must operationalize general propositions and statements, enabling use of the concept in a broad spectrum of hypothesis; (iv) simplicity: the concept should be as simple as possible. That is not to say concepts must be simple and/or that complexities do not exist. This is a normative assessment since simplicity facilitates clarity, and ultimately communication.

Pfordten states that the models are not in contradiction and/or direct *prima facie* confrontation. "The classical view is a way of getting to the first demand of Carnap's vision, the demand to achieve likeness. The only difference is that the classical view has, in its first instance, the objective of giving a synonymous definition that is now considered questionable."[21]

Therefore, it is reasonable to argue that the models may be combined.

Legal concepts must be considered in accordance with an initial observation: they are grounded in law embedded in common language.[22] Thus, prima facie, it is unclear whether legal concepts have a legal, semantic[23] or dual nature.[24] Such an observation is important, as it can influence the choice and definition of concepts.

In the same sense, we may ask whether normative aspects influence the choice and definition of concepts. According to Lorenz Kähler,[25] it seems intuitive to reserve a role for normative reasons in choosing and defining concepts considering the legislative process itself. For example, legislation is imbued with normative objectives in the proposal of a bill. This finding is significant as the choice of words may reflect the semantic dimension previously mentioned.[26]

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[21] Dietmar von der Pfordten, About concepts in law, op. cit., p. 27.

[22] An important point is to think about the usefulness and limitation of an analysis of terms in common language. As Schauer explains: "*Attention to the distinctions embedded in ordinary language is often analytically illuminating, but the techniques of ordinary language analysis, ones I occasionally employ in this book, are hardly exclusive when the goal of the enterprise is other than analysing a particular word".* SCHAUER, Frederick. *Playing by the rules.* A philosophical examination of rule-based decision-making in law and life. Oxford University Press. 2002. p. 15.

[23] Schauer (ibid., p. 55) even speaks of the semantic autonomy of language: "*The contrast between the conversational and the entrenchment models focuses our attention on the semantic autonomy of language, the ability of symbols — words, phrases, sentences, paragraphs — to carry meaning independent of the communicative goals on the particular occasions of the users of those symbols*".

[24] KÄHLER, Lorenz. The influence of normative reasons on the formation of legal concepts, p. 81. In: Jaap C. Hage and Dietmar von der Pfordten, *Concepts in law*, op. cit., p. 81-97.

[25] Ibid.

[26] It is important to highlight that, despite the language used is based on objectives, the idea of meaning is not reduced to that objective. It is in this sense in which Schauer argues: "*Although language is invariably used for a purpose, meaning is not reducible to that purpose, at least not to the purpose for which language is used on a particular occasion*". Frederick Schauer, *Playing by the rules*, op. cit., 55.

Another consideration is that the process in which legal framework concepts are established is not necessarily intentional. In everyday experience, legal concepts may gradually evolve in an unconscious way. Thus, when we talk about choice and definition of concepts, we refer to conscious and/or unconscious processes. The influence of normative reasoning here is used in a broad sense to include any reason capable of prescribing an action or assessment.[27]

In this sense, normative reasons are not limited to the "moral" or "ethical". We can see, for example, aesthetic considerations related to the symmetry of a conceptual schema.[28] In the same sense, the concept of normativity[29] may be used in a simplified form, in the sense that a normative phenomenon[30] is capable of providing reasons and/or partially grounded in reasons. If the definition of legal concepts is influenced by normative reasons, it seems correct to say that the process of construction of the referred concept cannot be regarded as a purely descriptive undertaking.

Returning to the example used earlier, a legislator or parliamentary group, when drafting a bill, may use established concepts, introduce new concepts or reformulate existing ones. Thus, we can exemplify how normative reasons may influence the deliberation: (i.) a particular legislator may consider it preferable to use an established concept to avoid misunderstandings and unnecessary operations; (ii) another may argue the obsolete character of an existing concept and support the need for a new, distinct one.

Considering there are varied options for choosing and defining concepts, it is considered natural that such a choice and definition depend on normative reasons. Otherwise, legal concepts would be arbitrary, in the case of an absence of reasons, or neutral, with purely descriptive reasons.

In this sense, we may discuss whether rationality[31] is a necessary and/or accidental property of the process of choosing and defining concepts by, for

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[27] Lorenz Kähler, The influence of normative reasons on the formation of legal concepts, op. cit., p. 82.

[28] Ibid, p. 81-97.

[29] A more simplified way of thinking about normativity, without going into lengthy theoretical distinctions, is to consider that practical normativity and theoretical normativity make up part of a larger genre called normativity. See: RAZ, Joseph. *From normativity to responsibility*, Oxford University Press. 2013. p. 9.

[30] For normativity as an attribute of law, see: JESTAEDT, Matthias. *Das mag in der theory richtig sein…* Vom Nutzen der Rechtstheorie für die Rechtspraxis. Tübingen: Mohr Siebeck, 2006. p. 53.

[31] Talking about rationality here, we can think of instrumental rationality, in the sense that the choice of a concept may or may not be suitable for the purpose intended by the legislator. In any case, there are discussions about the existence of such a species, beyond rationality. Joseph Raz, for example, states: "*it appears that there is no such thing as instrumental irrationality. That is, there is no distinctive set of deliberative standards that are involved in getting us to reason correctly from ends we have to means, and that are different from those that are involved in reasoning about which ends to have*" Joseph Raz, Between authority and interpretation, op. cit., p. 187.

example, the legislator, in that rationality[32] allows for the identification, albeit incorrectly, of real-world facts, enabling a response, or otherwise, to what has been established, often involving a cause-and-effect assessment.[33] The choice of concepts may be based on an evaluation of cause and effect, even if it does not occur in practice.

In other words, rational action vis-à-vis a concept choice and/or definition by the legislator can be explained in a generic way as the possibility of identifying and reacting to real world phenomena presented to the agent. This is only a possibility, since any reaction or accurate identification is contingent on the concept of rationality.[34] The legislator may err in assuming that a bill that mentions efficiency automatically implies an increase in economic efficacy, since there are other interpretive possibilities.[35]

Lorenz Kähler[36] presents four arguments that may be used to deepen the investigation that legal concepts are independent of normative reasons and, in this sense, neutral: (i) normative reasons do not stem from legal concepts (neutral consequences thesis); (ii) normative reasons do not determine the choice of legal concepts (neutral choice thesis); (iii) normative reasons do not determine the content of legal concepts (neutral content thesis); and (iv) regulatory reasons do not determine the process as legal concepts are defined (neutral process).

Based on the argument presented in item (i), the concepts by their nature do not prescribe actions and therefore cannot have normative implications. In this sense, legal consequences arise from rules that encompass concepts, and not the isolated concepts considered. In other words, the mere fact that a normative proposition relies on a certain concept is insufficient to draw a normative conclusion. The normative nature of legal norms does not imply that their

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[32] Ibid., p. 187.

[33] As Joseph Raz states: "*In all these cases some features of the world make appropriate the existence, or the coming into existence, of another feature of the world. More specifically they make some reactions by appropriate, and-given that we are rational agents – they constitute reasons agents for those reactions. The explanation of normativity is the explanation of all features of the structures I point to*". Ibid., p. 5.

[34] Again, the discussions of Joseph Raz (Joseph Raz, *Between authority and interpretation*, op. cit., p. 4) offer clarity: "I will describe this polarity by saying that agents' rational capacities enable them (fallibly) to identify some values in some options and to respond to them, i.e. to recognize that those aspects of the option that make it valuable are reasons for taking it, and they enable them also to do so, to take that option for those reasons".

[35] On polysemy and the lack of definition of the term efficiency, see: SILVA, Gabriel Cozendey Pereira Silva. *Eficiência administrativa na Jurisprudência do STF*. Análise crítica e proposta conceitual. Vermelho Marinho. Rio de Janeiro: FGV Direito Rio, 2018. p. 73.

[36] Lorenz Kähler, The influence of normative reasons on the formation of legal concepts, op. cit., P. 81-97.

concepts are chosen and defined on the basis of certain normative reasons. There is no transfer of normativity between the norm and the concept individually considered, even in the case of deontic concepts, such as "ought" or "right".[37]

Although the application of legal concepts in a particular instance must be justified on normative grounds, no normative implication follows from the mere fact that the law makes use of these concepts. An example is the idea that several norms use legal concepts indeterminate in evaluative terms, in the sense that they are concepts that can be used both to validate or invalidate a situation or action. From the referred evaluative indeterminacy, we may infer the referred concepts are incapable of prescribing an action, valuation or reaction. So, there would seem to be no necessary link between a legal concept and the legal assessment of the situation to which it applies. This may explain how it is possible for different legal systems to use equivalent concepts despite considerable political, economic and even ideological differences.[38]

The claim that normative reasons do not originate from concepts, as with item (i.), does not mean normative reasons cannot influence the choice of certain concepts, as with item (ii). A useful way to exemplify the item (ii) argument is the idea that not all legal framework concepts may be equally suitable to prescribe behaviour by way of legal rules.

The concepts may, therefore, vary in their suitability, depending on the desired goal, for example, of the legislator, whose objective is to supply certain legal consequences arising from the legal text produced. This is what Alexander Hellgardt[39] calls the regulatory objective of law. Eduard Picker[40] describes a regulatory goal and/or objective of private law and highlights the direct influence on the choice of concepts. The regulatory objective of the legislator can therefore influence the choice of a legal concept. Thus, under certain conditions, specific concepts may be more suitable to achieve legislative objectives.

This idea is useful when defining concepts. In the same way a normative reason can influence the choice of concept, it can determine the definition of a concept. On the other hand, we observe the argument that the definition of a concept depends only on descriptive propositions.

In this sense, instead of using a new concept, a norm can redefine an existing one. That is, in the redefinition process, the legislator may exhibit a

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37 Ibid.

38 Ibid.

39 HELLGARDT, Alexander. *Regulierung und Privatrecht. Mohr Siebeck*. Tübingen, 2016. p. 408.

40 PICKER, Eduard. *Privatrechtssystem und negatorischer Rechtsschutz. Tübinger Rechtswissenschaftliche Abhandlungen*. 92. Mohr Siebeck. Tübingen, 2019. p. 49.

preference for brief, specific definitions, which would be normative in kind. On the other hand, in the absence of any preference, another definition may be used, which to some degree appears counterintuitive with respect to the law. For example, we may cite the relevance of the "Jurisprudence of Concepts" (*Begriffsjurisprudenz*)[41] and the time dedicated to conceptual investigations.

Legal concepts would seem to be essential in enabling communication[42] through normative texts and influencing administrators of norms, whether public or private actors.[43] Considering the possibility of an objective, determined content, the formulation of such content appears immune to the influence of normative reasons. In Kähler's words, "this is especially important due to the lack of a consensual methodology"[44] regarding the investigation and definition of legal concepts.

Concerning the legal concept of the term *regulation*, there is a particular consensus as to the lack of a static or predominant concept.

One way of conceptualizing regulation is to look at the phenomenon as a set of specific rules applied by an institution dedicated to this end.

Another possibility is to consider that the phenomenon represents the entirety and any form of deliberate influence vis-à-vis the State in the private field. Here the concept is broader, with the potential to encompass any state action intended to influence economic, commercial and social behavior. Perhaps the best way to characterize this second possibility is to highlight that the phenomenon is limited to positive state action.[45]

Finally, there is an extremely broad understanding which may be considered as regulating all mechanisms affecting behavior, whether derived from the State or from other sources. According to Robert Baldwin and Martin

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41 SOHM, Rudolph. Über Begriffsjurisprudenz, 1909. In. KRAWIETZ, W. *Theorie und Technik der Begriffsjurisprudenz*. 1976, p. 363.

42 Such communication has relevance when considering Raz's position, that the law is, at least in part, a set of rules made by human beings for conditioning the behavior of other human beings. From this perspective, communication is essential, and well-defined concepts fulfil an instrumental function (Joseph Raz, *Between authority and interpretation*, op. cit., p. 187).

43 KRELL, Andreas J. *Discricionariedade administrativa e conceitos legais indeterminados*. Limites do controle judicial no âmbito dos interesses difusos. 2. ed. Porto Alegre: Livraria do Advogado, 2013. p. 49.

44 Lorenz Kähler, The influence of normative reasons on the formation of legal concepts, op. cit., p. 81-97.

45 Robert Baldwin and Martin Cave (BALDWIN, Robert; CAVE, Martin. *Understanding regulation*. Theory, Strategy and Practice. Oxford University Press, 1999. p. 2.) list the following examples in the first edition of *Understanding Regulation*: economic incentives, taxes, subsidies, contractual powers, distribution of resources, franchising, provision of information or other techniques.

Cave,[46] "Within this use of the term 'regulation', there is no requirement that the regulatory effects of a mechanism be deliberate or designed rather than merely incidental to other purposes."[47]

A possibly intuitive way of understanding regulation with respect to road transport of natural gas is to consider the principle of precaution.[48] On this point, Luís Fernando Schuartz writes: [49]

> The name — *precautionary principle* — recognized the principle used occasionally in the United States and in Europe on the occasion of risk regulation discussion, especially environmental and health risks. It is a rule for decision-making under "conditions of ignorance", in which information about the occurrence of the relevant states, real or imaginary, cannot be obtained at an acceptable cost.

As explained: the risks associated with road transport of natural gas may be divided into two categories: security and regulatory risk. Thereby, the regulatory risk may be represented by externalities produced by regulatory decisions.

Both categories show the following trade off:

> on the one hand, the risks and uncertainties to which regulation seeks to respond, and, on the other, the risks and uncertainties generated by the regulation itself, especially considering legislation intends to combat risks generated by the actions of economic agents, a diffuse interest bias in terms of resolving this type of trade-off.[50]

The security risk appears related to the prevention of undesirable consequences, such as an explosion or related environmental impact

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[46] Ibid.

[47] Translated from Baldwin and Cave (ibid.): "*Within this usage of the term ´regulation´ there is no requirement that the regulatory effects of a mechanism are deliberate or designed rather than merely incidental to other objectives*".

[48] SUNSTEIN, Cass R. *Laws of fear*: beyond the precautionary principle. Cambridge: Cambridge University Press, 2005. p. 4.

[49] SCHUARTZ, L. F. Quando o bom é o melhor amigo do ótimo. A autonomia do direito perante a economia e a política da concorrência. *Revista de Direito Administrativo*, v. 1, p. 113, 2007.

[50] L. F. Schuartz, Quando o bom é o melhor amigo do ótimo, op. cit., p. 114

associated with road transport of gas.[51] On the other hand, the risk of regulation is linked to anticompetitive consequences, the resulting burden and increase in transaction costs.

The concept of regulation adopted later refers strictly to the state control of public services[52] and the competitive environment of natural gas road transport. In this sense, linking the hitherto mentioned concept of regulation to the precautionary principle, along the lines portrayed by Luís Fernando Schuartz, an approach is suggested which perhaps indicates a normative option in terms of a functionalist theory of regulation which considers the precautionary principle as a meta-rule of decision-making

II. The potential normative conflict

Law no. 14.134, April 8, 2021,[53] appears to anticipate the possibility of normative conflict, by providing, in § 2 of article 25, the possibility of articulation between the ANP and other regulatory agencies with the purpose of adapting the transport regulation referred to in § 1 of article 25, following the example of road transport.

In fact, article 22, item VII of Law no. 10.233, June 5, 2001, expressly provides that the market is subject to regulation by ANTT of transport of special and dangerous loads on highways and railways.[54]

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[51] In this sense: "*Regulation is often thought of as an activity that restricts behaviour and prevents the occurrence of certain undesirable activities (a 'red light' concept)*" (Robert Baldwin and Martin Cave, Understanding regulation, op. cit., p. 2.). See also: HARLOW, C.; RAWLINGS, A. Law and administration. 2. ed. London, 1997. cap. 2.

[52] It is important to note that paragraph 2 of art. 1 of Law No. 14.134, of April 8, 2021, seems to exclude from the concept of public services some activities related to transport of natural gas. See: § 2. Activities undertaken resulting from the authorizations dealt with in this Law shall be at the entrepreneur's own risk and expense and do not, in any way, constitute a hypothesis of the provision of public service. In any case, this fact does not preclude the conceptual option.

[53] Provides for the activities related to the transport of natural gas, dealt with in art. 177 of the Federal Constitution, and on the activities of transport, treatment, processing, underground storage, conditioning, liquefaction, regasification and commercialization of natural gas; amends Laws No. 9.478, of August 6, 1997, and 9.847, of October 26, 1999; and revokes Law No. 11.909, of March 4, 2009, and the provisions of Law No. 10.438, of April 26, 2002.

[54] Note: "Art. 22. The following constitute the sphere of action of ANTT:
I — rail transport of passengers and cargo through the National Traffic System;
II — railway infrastructure and leasing of corresponding operating assets;
III — interstate and international road transport of passengers;
IV — road transport of cargo;
V — the federal road infrastructure;
VI — multimodal transport;
VII — the transport of special and dangerous loads on highways and railways.

Resolution no. 5.848, June 25, 2019, expressly states what is incumbent upon ANTT, under the terms of Law No. 10,233, of June 5, 2001, establishing complementary technical standards and norms related to land transport of dangerous materials, and determining prohibitions on the transport of specific products.

In this regard, it is important to highlight that, based on the legal competence of ANTT, there is a series of normative regulatory acts which appear to be directly affected by the literality of Law no. 14.134, April 8, 2021. For example, ANTT published, in *the Diário Oficial da União* (DOU), 7/30/2015, Resolution no. 4.799, July 27, 2015, which regulates procedures for registration and maintenance in the *Registro Nacional de Transportadores Rodoviários de Cargas* (RNTRC). Additionally, it is worth noting Resolution no. 5.232, December 14, 2016, *Instruções Complementares ao Regulamento Terrestre do Transporte de Produtos Perigosos.*

It should also be noted that ANTT submits to the *Orange Book*,[55] prepared within the scope of the United Nations Committee of Experts on Transport of Dangerous Goods.

Finally, note the attribution of *Instituto Nacional de Metrologia, Normalização e Qualidade Industrial* (Inmetro), regulating and monitoring assessment and inspection of packaging, large packaging, intermediate bulk containers (IBCs) and portable tanks, in accordance with the provisions of Law no. 5.966, December 1973, and Law no. 9.933, December 20, 1999.

It should be added that § 2 of article 25 of Law no. 14.134, April 8, 2021, appears in line with the provisions of Chapter IV of Law no. 13.848, June 25, 2019.[56] At the same time, there seems to be a substantial distinction which may

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[55] See: UN MODEL REGULATIONS. UN recommendations on the transport of dangerous goods — Model regulations nineteenth revised edition. 2015. Available at: https://unece.org/rev-19-2015. Accessed on: 14 May 2021.

[56] Chapter IV deals with the articulation between regulatory agencies.
Art. 29. In the exercise of their powers defined by law, two or more regulatory agencies may edit joint normative acts concerning matters whose discipline involves economic agents subject to more than one sectoral regulation.
§ 1 The joint normative acts must be approved by the board of directors or by the collegiate board of each regulatory agency involved, by a procedure identical to that of approval of an isolated normative act, observing in each agency the rules applicable to the exercise of the normative competence provided for in the respective internal regulations.
§ 2 Joint normative acts shall contain rules on the supervision of their execution and provide for dispute settlement mechanisms arising from its application, which may admit solution through mediation, pursuant to Law No. 13.140, of June 26, 2015 (*Lei da Mediação*), or through arbitration by an integrated commission, among others, by representatives of all regulatory agencies involved.
Art. 30. Regulatory agencies may set up committees to exchange experiences and information with each other or with the bodies that make up the *Sistema Brasileiro de Defesa da Concorrência* (SBDC), aiming to establish common guidelines and procedures for the exercise of regulation in the respective areas and sectors and to allow reciprocal consultation concerning norms that imply changes in the conditions of the regulated sectors.

generate conflict between ANTT and ANP. In this regard, Law no. 13.848/2019 and Law no. 14.134/2021 point to a species of prima facie hierarchical prerogative in favour of the ANP. On this point, note the literalness of the paper analysed:

> Art. 25. The ANP will regulate handling for the transport and commercialization of natural gas to the final consumer through alternative modals to the pipeline.
>
> § 1º Alternative modals to the pipeline are understood as the movement of natural gas by road, rail and waterway.
>
> § 2 The ANP will coordinate with other regulatory agencies to adapt the transport regulation referred to in § 1 of this article, in these cases.

The wording of the lead paragraph of art. 25 and its § 2 appear to confirm the argument previously developed. It is also important to consider that Law no. 14.134/2021 may generate conflict between regulatory standards of the ANP and State Regulators.[57]

Note that Law no. 14.134/2021 states that the independent consumer, the autonomous producer or importer, cannot be served by the piped gas distributor. The state may build and implement, directly, facilities and pipelines for specific use, upon execution of a contract that assigns operation and maintenance to the distributor.

It is noteworthy that the movement of natural gas may occur in an intermodal way, covering road transport. The competence of state entities is addressed in § 1, § 2 and § 3 of article 29[58] of the text in question.

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[57] In the introduction, the example cited is the *Agência Reguladora de Energia e Saneamento do Estado do Rio de Janeiro (Agenersa*) which has competence in the natural gas market.

[58] § 1 The fees for the operation and maintenance of the facilities will be established by the state regulator in compliance with the principles of reasonableness, transparency and advertising and the specifics of each installation.
§ 2 If the facilities and pipelines are built and implemented by the state gas distributor channel, in setting the tariffs established by the state regulatory body, investment, operation and maintenance costs must be considered, in compliance with the principles of reasonableness, transparency and publicity and the specifics of each installation.
§ 3 If the distribution facilities are built by the free consumer, the self-producer or importer, as provided for in the header of this article, the distributor of state piped gas may request that the installations be dimensioned in in order to facilitate other users, negotiating the necessary requirements with the consumer, self-producer or importer, under the arbitration of the state regulator.

In light of these normative premises, the working hypothesis is confirmed. Law no. 14.134/2021 has the potential to generate conflict between regulatory agencies from different sectors and federative entities, and is directly related to security and regulatory risks.[59] The next section considers some solutions to the problem.

III. Possible solutions

A suitable way of dealing with the apparent normative conflict arises from the correct understanding and regulatory application of the term "governance".[60] The point is that "*no single actor can control the decision-making" processes*,[61] a premise that applies to ANP, ANTT and other actors involved in the road transport of natural gas.

The good governance practised by the sector agencies, notably the ANTT and ANP, as well as by the players in the natural gas road transport market, would be an apparent solution as it works as a kind of reputational guarantee[62] that "the operations of that enterprise are carried out on a solid ethical basis, in compliance with the norms in force and that, for this very reason, are reliable".[63]

Focus on good governance might resolve conflicts arising from the norms under analysis and may be important to increase the accountability[64] of industry players.

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[59] Robert Baldwin and Martin Cave, *Understanding regulation*, op. cit., p. 2.

[60] According to Bruno Dantas (DANTAS, Bruno. Consensualismo, eficiência e pluralismo administrativo: um estudo sobre a adoção da mediação pelo TCU. *Revista Jurídica da Presidência*, v. 22, p. 268, 2020): "Governance is a method or mechanism for regulating a wide range of problems or conflicts, whereby actors regularly arrive at mutually satisfactory, binding agreements, through negotiation and cooperation", characterized by "horizontal forms of interaction" between actors who have contradictory interests, but who are sufficiently independent that neither of them can impose a solution alone, being sufficiently interdependent that 'all of them' lose if no solution is found".

[61] Ibid, p. 261-280.

[62] CARPENTER, Daniel P. *Reputation and power*: organizational image and pharmaceutical regulation at the FDA. Princeton, NJ: Princeton University Press, 2010. p. 1.

[63] DANTAS, Bruno; GOMES, Valdecyr Maciel. A governança nas agências reguladoras: uma proposta para o caso de vacância. *Revista de Informação Legislativa*: RIL, Brasília, v. 56, n. 222, p. 11-31, abr./jun. 2019. Available at: http://www12.senado.leg.br/ril/edicoes/56/222/ril_v56_n222_p11. Accessed on: 21 May 2021.

[64] BRASIL. Tribunal de Contas da União. *Referencial básico de governança aplicável a órgãos e entidades da administração pública/Tribunal de Contas da União*. Versão 2. Brasília: TCU, Secretaria de Planejamento, Governança e Gestão, 2014.

Another possibility arises from the transfer of norms with the purpose of filling gaps and avoiding conflicts arising from monothematic application of legislation[65] to transport contracts.[66] In any case, the scenario under analysis involves the possibility of overcoming an express rule, considering the wording of the lead paragraph of article 25. Paragraph 2 of Law no. 14.134/2021 in fact enshrines a kind of hierarchy in favour of the ANP.

The discussion relates to the idea of defeasibility.[67] The rule (prerogative in favour of ANP regulation) extracted from the header of article 25 and its 2nd paragraph would be a first order "defeasible" justification [68] when it does not serve the substantive justification of the related rule vis-a-vis the safety and regulatory risk of the natural gas road transport sector.[69]

Finally, it is reasonable to establish the role of the precautionary principle[70] in the case in focus. Possible solutions to regulatory conflicts that may arise from the publication of Law no. 14.134/2021 relate to the idea of risk regulation.[71]

The regulation of alternative modes other than pipelines for the movement of natural gas must be concerned with the risks that the aforementioned transportation offers, as well as the risks regulatory measures offer to the sector.[72]

Conclusion

The hypothesis of the article seems correct. Indeed, there are several provisions in Law no. 14.134, April 8, 2021 (Nova Lei do Mercado de Gás) which are in apparent conflict with attributions and competences of regulatory agencies other than the ANP, such as the ANTT.

The existence or not of normative conflicts, however, does not affect the hypothesis of this article, since the diagnosis and proposals formulated serve as an initial primer for identifying a still unknown problem, at least, academically, given the lack of specific works on the topic.

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65 Robert Baldwin and Martin Cave, *Understanding regulation*, op. cit., p. 46.
66 DAINTITH, T. Regulation by contract: the new prerogative. 1979. Current Legal Problems 41.
67 Frederick Schauer, *Playing by the rules*, op. cit., p. 75.
68 Ibid., p. 76.
69 L. F. Schuartz, Quando o bom é o melhor amigo do ótimo, op. cit., p. 114.
70 Cass R. Sunstein, *Laws of fear*, op. cit., p. 4.
71 Robert Baldwin and Martin Cave, *Understanding regulation*, op. cit., p. 138.
72 L. F. Schuartz, Quando o bom é o melhor amigo do ótimo, op. cit., p. 114.

The regulation of alternatives to pipelines for the movement of natural gas offers a rich field for debate as regards regulatory law, as it is a multidisciplinary, complex subject, requiring mapping and monitoring.

The issue is related to the essential function of the law. From a functional perspective, the law has the task of translating positions and interests in advantageous legal positions and relating them to one other.[73] This fact may encounter resistance based on the diagnosis herein.

As for solutions, it is natural, considering the novelty of the issue, to adopt normative views. Importantly, the main purpose of the text is not a specific criticism of the ANP, ANTT or even *Agenersa*, with reference to the examples used. In fact, ideally, it is intended to stimulate a dialogue about the inter-institutional relationship between the actors involved in the regulation of natural gas road transport.

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[73] VON ARNAULD, Andreas. *Zur Rhetorik der Verhältnismäßigkeit.* Verhältnismäßigkeit. Tübingen: Mohr Siebeck., 2015. p. 278.

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