Integrating Energy into the World Trading System: Law and Policy

by

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Law

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July 2007

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Acknowledgements

First and foremost, I would like to express my sincere thanks to my supervisor, Professor Julio Faundez, for his guidance and thought-provoking comments during the preparation of this study. Professor Faundez also supervised my LLM Dissertation and it has been a great joy to learn from him over the last six years.

I would also like to thank my wife, Delphine, and also my parents and sisters back in Iran for their unqualified love, support and patience.

My thanks also go to Professor Asif Qureshi (External Examiner) and Professor John McEldowney (Internal Examiner) for their insightful comments and suggestions to improve the quality of my Thesis.

When I began my LLM studies at the University of Shahid Beheshti Law School (Iran) in 1996, a team of dedicated international lawyers (Dr. A. Amir Arjomand, Dr. E. Beigzadeh, Dr. M. J. Ghanbari Jahromi, Dr. A. Hanjani, Professor H. Falsafi, and Dr. J. Seifi) taught me Public International Law subjects. I owe them an intellectual debt for that.

Declaration

I, the undersigned, hereby confirm that the thesis is my own work and does not include any material already submitted for another degree. I also confirm that the thesis has not been submitted for a degree at another university.

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Abstract

Energy is required to manufacture a good or create a service and the energy sector is the backbone of every economy. Until recently, governments worldwide have considered the energy sector too crucial to be left to market forces. Accordingly, energy markets have been fragmented and segmented into national and highly protected markets. Likewise, international trade in energy has traditionally been synonymous with petroleum trade, which in turn has been effectively regulated by the Organization of the Petroleum Exporting Countries (OPEC), outside the reach of the multilateral trading system. However, the past two decades have seen the emergence of a trend towards the introduction of the trade discourse into the energy sector.

This trend has two main components. The first component has its roots in the efforts made at the bilateral, regional, and international levels to impose GATT-type and even GATT-plus disciplines on energy trade. In this regard, mention may be made of the Canada-United States Free Trade Agreement, the NAFTA agreement, and the Energy Charter Treaty. The second component, initially originated at the national level, has been the deregulation movement, namely reforming the electricity and natural gas industries. As a result of this policy shift, the electricity and national gas industries have been evolving from monopolistic into competitive industries with increasing numbers and types of participants. Accordingly, trade in electricity and gas is a new dimension of trade in energy, which is particularly relevant to the trade in services debate. It should be noted, however, that the GATS ongoing energy services negotiations also include the liberalization of oil and gas field services, which are related to the upstream segment of the oil and natural gas industries.

Two WTO agreements, namely the GATT and the GATS, are of particular importance in analysing these components. Furthermore, in order to give the full picture of the current energy trade debate, the dual pricing debate and the relevant developments of the Subsidies and Countervailing Measures Agreement and their potential implications for trade in energy-intensive products should also be examined. The purpose of this study is to explore in extensive detail the two aforementioned components that shape the current energy debate. It is aimed at analysing the relationship between these components in the context of the energy trade discourse. The overall aim is to provide a better understanding of the processes and trends relating to this complex, multidimensional and dynamic subject and to identify how and to what extent trade in energy is integrated into the world trading system. Some tentative observations are also made with the desire to point towards the next steps.

Abbreviations

CUSFTA: Canada-United States Free Trade Agreement

DSO: Distribution System Operator

EC: European Community

ECJ: European Court of Justice

ECT: Energy Charter Treaty

EU: European Union

GATS: General Agreement on Trade in Services

GATT: General Agreement on Tariffs and Trade

GCC: Gulf Co-operation Council

IEA: International Energy Agency

nTPA: Negotiated Third Party Access

rTPA: Regulated Third Party Access

NAFTA: North American Free Trade Agreement

OECD: Organization for Economic Co-operation and Development

OPEC: Organization of the Petroleum Exporting Countries

OAPEC: Organization of Arab Petroleum Exporting Countries

SCM: Subsidies and Countervailing Measures Agreement

TPA: Third Party Access

TSO: Transmission System Operator

Introduction

I. The Regulative Function of International Law

In contemporary international law, international law scholars no longer adhere to the tradition of proving the legal character of their discipline by rejecting the command conception of law and discrediting the classical Austinian position, namely international law is not law "properly so-called"[1], as their first point of enquiry. According to what we may safely call the "mainstream" view, international law is regarded as a system of rules and obligations that imposes constraints on the States and other entities subject to it.[2]

At the same time, it is worth pointing out that in the context of the regulation of international trade, a more recent debate about the role and regulative function of international law seems to raise similar concerns.[3] In this regard, mention should be made of the legalism-pragmatism debate, which is in fact a debate about the role and

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[1] It has been remarked that the problem is mainly one of definition, and different definitions of what constitutes "law" can produce different answers to the question whether any particular body of rules may properly be regarded as "law". See Jennings, R. and Watts, A. (eds.) (1992) Oppenheim's International Law, Ninth Edition, p.9.

[2] See, for example, ibid., pp.4-12; Schachter, O. (1982) "International Law in Theory and Practice", 178 Collected Courses of The Hague Academy of International Law (RCADI), p.58. At the same time, it should be noted that the policy-oriented approach regards international law as a guide for States when deciding on their way of behaviour rather than a command which they have to follow. See Van Hoof, G. J. H. (1983) Rethinking the Sources of International Law, pp.40-44. In this regard, Professor Allott has pointed out that the policy-oriented approach is more about "constructing" rather than "finding" the law and would effectively imply an equation of the form: Fact × Policy = Law, raising important questions about the method and even the nature and function of international law. See Allott, Philip (1971) "Language, Method and the Nature of International law", 45 The British Year Book of International Law, pp.79-135.

[3] Referring to the issue of effectiveness, Professor Jackson has pointed out that: "It is one thing to establish an international norm, but it is another thing to obtain compliance... This doesn't necessarily mean that a norm should never be established unless full compliance is assured. But it does suggest that an appraisal of the degree of compliance possible, and of the mechanisms or procedures that should be instituted along with the norm to achieve a desirable degree of compliance, should be realistic at the time the norm is adopted. " See Jackson, John H. (1969) World Trade and the Law of GATT, pp.775-76.

effectiveness of substantive rules of the multilateral trading system in regulating international trade relations. According to the pragmatist approach, legalism does not contribute to trade liberalization and strict adherence to a rule-oriented system will be counter-productive.[4] Thematic examples of legalism being overshadowed by pragmatism in the GATT system include agricultural trade as well as energy trade, where normal GATT rules have traditionally been by and large ineffective.[5] The point is that the pragmatist approach argues for taking the regulative function of international law less seriously, which is reminiscent of the classical Austinian debate and would effectively reduce international law to "positive morality".

Generally speaking, the key to the understanding of the functions fulfilled by any legal system lies in the structure of its social environment.[6] Professor Schachter has described the importance of this contextual approach as follows:

> "... if we are to understand the significance of international law and how it works and evolves, it is essential to look outside of the law itself. This may well seem to be a task that goes beyond the competence of international lawyer. It obviously demands a wide range of inquiry into conditions that are the province of other disciplines. Nonetheless, it is a task that the international lawyers ... must also carry out within the practical limits of their functions. ... international lawyers, by and large, do not, and cannot, limit their analysis to rules and obligations and ignore the facts and consequences that give those rules and obligations their full meaning."[7]

It is essential to make the point that it does not follow that international law would lose its distinctive normative character. The contextual approach means that international law is not "wholly autonomous", that it has causes and consequences, that it involves power and values. However, the legal system is in essence a system based on a set of "binding" rules and obligations. As a matter of fact, a State may

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[4] For a full discussion of the legalism-pragmatism debate see Hudec, R. H. (2000) "GATT or GABB? The Future Design of the General Agreement on Tariffs and Trade", in Essays on the Nature of International Trade Law, pp.77-115. This essay was originally part of a larger article published in the Yale Law Journal, Volume 80, pages 1299-1386 (1971).

[5] This point will be taken up in Chapter 3 of this study.

[6] See Schwarzenberger, G. (1962) The Frontiers of International Law, p.11.

[7] Schachter, supra note 2, p.24.

decide to ignore or violate the law, but the fact remains that international law is an objective reality.[8] Thus, this study adheres to the twin concepts of "relative autonomy" and "normative character" of international law.[9] It addresses prescription and description, law and policy. At the same time, there is a clear distinction between "law as it is" (*lex lata)* and "law as it ought to be" (*lex ferenda).* In this context, Professor Jackson describes his approach as "normative realism".[10]

II. The International Economic System and Reciprocity

Referring to the hybrid nature of international law, Professor Schwarzenberger noted that international law is not only a law of power, but also a law of reciprocity, and even traces of the law of co-ordination can be diagnosed. Power, and not law, is the overriding consideration in world affairs and in matters that States, especially world powers, consider as "vital", they tend to reserve to themselves complete freedom of action. At the same time, when it comes to regulating activities that from the point of view of power politics are either peripheral or irrelevant, the principle of reciprocity is the dominant principle.[11] Accordingly, although international economic law as a

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[8] Ibid., pp.24-25.

[9] This approach should be distinguished from the approach adopted by Professor Koskenniemi, which does not recognise the distinctive normative character of international law. He has noted that during the early period writers such as Vitoria, Suarez or Grotius engaged in an argument about international law in which the concrete and abstract, description and prescription were not distinguished from each other. Referring to the fact that issues such as statehood, authority, legitimacy, obligation, consent and so on, which stand at the heart of international law, are also hotly debated issues of social and political theory, he goes on to argue that "it would be futile to assume that the assumptions which characterize modern social and political discourse are different, or separable from those which control legal discourse on these same matters". See Koskenniemi, M. (1989) From Apology to Utopia: The Structure of International Legal Argument, Introduction. He maintains accordingly that lawyers' law is constantly lapsing either into what seems like factual description or political prescription, ibid., p.1.

[10] Jackson, J. H. (1995) "International Economic Law: Reflections on the "Boilerroom" of International Relations", 10 American University Journal of International Law and Policy, p.606.

[11] See Schwarzenberger, supra note 5, pp.25-42. More recently, Professor Brownlie in the context of international criminal justice remarks that, "the overall problem remains. Political considerations, power, and patronage will continue to determine who is to be tried for international crimes and who

branch of public international law[12] shares its hybrid nature, the emphasis on the three types of law differs. Not surprisingly, the law of reciprocity is the type of law which forms the working principle behind the bulk of the rules of international economic law.[13]

This is evidenced by the fact that the law governing international economic relations is to a large extent based upon reciprocal bilateral and multilateral treaties reflecting the commercial principle *quid pro quo.*[14] It is worth noting that the enactment of the Reciprocal Trade Agreements Act of 1934 based on Cordell Hall's initiative was based on the idea that reciprocity was the key and trade agreements were the mechanism.[15] During the period from 1934 to 1945, the Act resulted in the conclusion of 32 bilateral trade agreements, which collectively served as a model for the world trading system.[16]

At the same time, it should be noted that international law is also a vehicle for the attainment of certain values – which values in turn must be open to scrutiny and debate.[17] Traditionally, these values have been defined in the context of international law of co-existence and accordingly were related to peace and security. However, the increasing expansion of international law towards the rules of co-operation has

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not.", See Brownlie, I. (2003) Principles of Public International Law, Sixth Edition, Oxford University Press, Oxford, p.575.

[12] For a full discussion of this point see Chapter 2 of this study.
[13] Schwarzenberger, G. (1966) "The Principles and Standards of International Economic Law", 117 Collected Courses of The Hague Academy of International Law (RCADI), pp.25-26.
[14] See, for example, Malanczuk, P. (1998) Akehurst's Modern Introduction to International Law, p.223.
[15] Dam, Kenneth W. (2005) "Cordell Hull, the Reciprocal Trade Agreements Act, and the WTO", in E. U. Petersmann (ed.) Reforming the World Trading System, p.86.
[16] In the words of Professor Jackson: "Almost all the clauses in GATT can be traced to one or another of the clauses contained in these trade agreements". See Jackson, supra note 2, p.37.
[17] See Higgins, R. (2003) "Reflections from the International Court" in Malcolm D. Evans (ed.) International Law, p.5.

undoubtedly broadened the range of these values. Therefore, international law may also be a vehicle for the spread of market-based reforms.

III. Aim, Scope, and Structure of the Research

Since the entry into force of the WTO Agreement in 1995, international trade law has developed from a technical backwater of international law to one of its most vibrant fields.[18] The expansion of the trade liberalization discourse to include trade in energy, albeit with somewhat of a lag, should be viewed in this context. It is worth noting that the ongoing negotiations under the GATS Agreement in the context of the Doha Round mark the first time that energy issues have been formally negotiated within the GATT/WTO framework. The integration of international trade in energy into the WTO system is a challenging and ambitious task.

In this context and to help clarify the current energy trade discourse, this study has identified a set of processes. The first process is aimed at expanding the reach of GATT rules to trade in energy goods and in particular, trade in petroleum. The second process is related to trade in energy-intensive products such as petrochemicals and the potential relevance of the disciplines of the Subsidies and Countervailing Measures Agreement. The third process has focused on liberalizing electricity and natural gas trade under the GATS Agreement. A related process in the context of the GATS is the liberalization of oil and gas field services. These processes are briefly introduced in the following paragraphs respectively.

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[18] Van den Bossche, Peter (2005) The Law and Policy of the World Trade Organization, Preface.

Until relatively recently, the strategic importance of petroleum trade to the world economy has been such that it has been treated as a "special" case, in a largely political context (subject to the law of power) and not within the GATT framework. It appears that there has been a "gentlemen's agreement" to this effect.[19] In any case, until the 1980s, most of the developing country exporters of petroleum were not contracting parties to the GATT. Therefore, technically, the subjection of energy trade to normal GATT rules was not possible. However, the fact that WTO is gradually approaching universal membership means that the technical barrier is disappearing, which underlines the importance of addressing the scope of the gentlemen's agreement, its practical implications throughout the last 60 years, and its possible transformation in particular during the last two decades.

This situation has been a source of normative confusion from the point of view of the rule of law as well. An often-quoted UNCTAD study noted that the idea for the book originated at a Seminar for Arab countries held in Casablanca in November 1994 to assess the implications of the Uruguay Round for Arab Countries. "It was at this meeting that the misconception that the WTO did not apply to petroleum became apparent."[20] Thus, a systematic examination of the role of the multilateral trading system in trade in energy goods and in particular petroleum trade is necessary.

The importance of the second process stems from the fact that contrary to trade in petroleum where "market access" has not been the issue and in fact barriers to trade have been traditionally introduced by exporting countries, trade in energy-intensive

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[19] See Chapter 3.
[20] UNCTAD, *Trade Agreements, Petroleum and Energy Policies*, UNCTAD/ITCD/TSB/9, 2000, Preface.

products can be adversely affected by trade barriers. Accordingly, the dual pricing debate and the potential relevance of the law of subsidies are worth considering.

As regards the third process, i.e. the liberalization of trade in electricity and natural gas under the GATS, it is worth pointing out that a major characteristic of trade in electricity and natural gas is that they are network-bound industries. This creates additional regulatory challenges for national, regional and international regulators, which are related to the concept of third party access. Moreover, as will become clear during the course of the discussion, the process of the liberalization of trade in oil and gas field services is not surrounded by traditional political sensitivities and therefore can be regulated under the law of reciprocity.

These processes are interrelated and collectively, provide a full understanding of the extent to which trade in energy is integrated into the world trading system. The main theme in treating the subject is cross-fertilization – both thematic (telecommunications) and institutional[21] (the European Union, the NAFTA, the Energy Charter Treaty) – in the context of the interrelationship of international economic law and public international law. Also, in line with the concept of "relative autonomy" of international law, cross-fertilization of law and policy has been in mind throughout this study. In view of the above, the main questions to be addressed are as follows:

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[21] In this regard, and with particular emphasis on the fact that in the substantive law of disparate international trade regimes we can see considerable convergence, Professor Weiler notes that we are witnessing the emergence of a "Common Law of International Trade", in the sense that there is enough convergence to justify a "redefinition" of the field (international economic law) as a single field comprising its various siblings and families sharing a common doctrinal core. See Weiler, J. H. H. (ed.) (2000) The EU, the WTO and the NAFTA: Towards a Common Law of International Trade?, pp.3-4.

1. To what extent trade in energy goods is integrated into the World Trading System? What lessons can be drawn from the NAFTA experience and the Energy Charter Treaty?
2. To what extent trade in energy services is integrated into the WTO system? How well equipped is the GATS Agreement to accommodate energy services?
3. What lessons can be drawn from the EU experience in liberalizing electricity and natural gas? What lessons can be drawn from telecommunications liberalization under the GATS?

The purpose of the study is to explore these challenges in order to provide a better understanding of the processes and trends relating to this very complex and multidimensional and yet dynamic subject. Some tentative observations are made, not with the unachievable ambition of completely meeting these challenges[22], but rather with the desire to point towards the next steps, with a "normative realist" approach. It has therefore a "law and policy research" preference rather than a "theory" preference.[23] In particular, attention is paid to catch the law in the making.[24]

The study has been divided into three parts. Part I (Background) comprises two chapters and sets the scene for the rest of the study. Chapter 1 (Overview of the Energy Sector) provides the basic scientific, factual, and technical contexts. It begins

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[22] See Jackson, John H. (2006) Sovereignty, the WTO and Changing Fundamentals of International Law, p.7.
[23] See Jackson, supra note 10, p.597. With regard to selecting priorities for research and successfully carrying out such research he points out: "Empiricism, multi-disciplinary approaches, and the breadth of legal understanding to relate not only general international law principles with IEL, but also both with national constitutional and other law, create quite a burden." Ibid., pp.598-99.
[24] See Schwarzenberger, G. (1970) Economic World Order?, Manchester University Press, Manchester, pp.3-4.

with defining energy before addressing forms of energy and energy sources. The chapter continues with providing some factual information and concludes with discussing the technical characteristics of the oil, natural gas, and electricity industries. Chapter 2 (Regulatory Reform and the Emergence of International Energy Law) provides a short overview of the concept of regulatory reform before providing a detailed description the changing nature of the energy sector, which contains a discussion of regulatory reform in the electricity and natural gas sectors as well as the outsourcing trend in the provision of oil and gas field services. The discussion is then taken a step further to analyse the emergence of international energy law.

Part II (Trade in Energy Goods) comprises only one chapter. However, Chapter 3 (Trade in Energy Goods under the GATT and GATT-Based Regimes) in fact combines two separate lines of enquiry. It begins with analysing in extensive detail the treatment of trade in energy goods under the GATT before turning to other GATT-based regimes including the NAFTA and the Energy Charter Treaty. It also addresses a separate but related issue, i.e. subsidies and the energy pricing debate. The focus of subsidies debate is on energy-intensive products such as petrochemicals not on energy sources as such. However, it is argued that the alleged subsidies stem from the implementation of dual pricing of energy sources. Due to this linkage, the subsidies debate is discussed in Chapter 3.

Part III (Trade in Energy Services) focuses on trade in electricity and natural gas. Chapter 4 provides an overview of the liberalization of electricity and gas in the EU. It is a commonly held view that the EU experience is the most advanced model for electricity and gas liberalization. Accordingly, this chapter is aimed at giving the

reader an insight into the regulatory aspects of the liberalization process and to set the scene for the discussion of energy services under the GATS. Likewise, Chapter 5 provides an overview of the context and content of the GATS, which also includes an overview of the "Reference Paper" for the telecommunications sector.

Chapter 6 examines the treatment of energy services under the GATS and analyses four negotiating proposals that have been submitted by the United States, the EU, Venezuela and Indonesia. The proposals address oil and gas field services as well as services relating to trade in electricity and gas. Chapter 7 examines the relationship between the GATT and the GATS and its implications for trade in electricity and gas. The discussion is then taken beyond the existing GATS disciplines and some cross-fertilization of experiences based on the EU model and the Reference Paper is suggested. The final chapter, Chapter 8, concludes with summing up the findings of Part II and Part III, which collectively give the full picture of the current energy trade debate.

PART I

Background

Chapter 1. Overview of the Energy Sector

I. Introduction

The energy sector is the backbone of every economy. In fact, throughout history, the use of energy has been central to the functioning and development of human societies.[1] Burning wood for heating, lighting, and cooking purposes dates back to prehistoric times.[2] Undoubtedly, technological advances associated with the Industrial Revolution have brought about a much higher quality of life. However, this comfort has come at a price: a growing reliance on and demand for energy, which in turn creates energy security concerns, social issues such as energy poverty, and, more recently, environmental concerns. In this regard, the International Energy Agency (IEA) draws attention to the fact that:

> "The world is facing twin energy-related threats: that of not having adequate and secure supplies of energy at affordable prices and that of environmental harm caused by consuming too much of it...The need to curb the growth in fossil-energy demand, to increase geographic and fuel supply diversity and to mitigate climate-destabilising emissions is more urgent than ever."[3]

Not surprisingly, energy is a massive business, with an estimated turnover of at least $1.7 – 2 trillion a year.[4] ExxonMobil as the largest non-government energy company produces just two percent of the energy the world consumes every day.[5] Confirming the fact that energy is the biggest business in the world, the chairman of ExxonMobil

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[1] Boyle, G. *et al* (2003) Energy Systems and Sustainability, Oxford University Press, p.3.
[2] Ibid., p.19.
[3] IEA, *World Energy Outlook 2006*, p.37. The outlook explains that the main driver of energy demand is GDP growth. World GDP is expected to grow by an average of 3.4% per year over the period 2004-2030. Also, population grow affects the size of energy demand.
[4] *The Slumbering giants awake,* Survey: Energy, Economist, Vol. 358, 02/10/2001.
[5] ExxonMobil, *Tomorrow's Energy: A Perspective on Energy Trends, Greenhouse Gas Emissions and Future Energy Options*, February 2006, p.1. According to this report, every day, the world consumes about 230 million barrels of energy (expressed in terms of "oil equivalent" or MBDOE).

stresses that, "there just isn't any other industry that begins to compare".[6] For instance, the United States Trade Representative estimates that the global market for electricity, just one segment of the energy sector, is twice as large as the global market for telecommunications.[7] It follows that the economic implications of regulatory initiatives and energy policy shifts are significant and will affect the world economy.[8]

Thus, the multidimensional nature of the energy sector - i.e. security[9], environmental, social, and economic aspects - should be taken into account in carrying out any energy-related legal research. At the same time, the scientific nature of the energy industry means that the legal aspects of energy trade cannot be fully appreciated without having a background in science. Thus, this introductory chapter aims at providing such background as well as giving the reader an insight into the functioning of the energy sector. It begins with addressing such issues as defining energy, forms of energy and energy conversion, and then discusses energy sources. The final part of this chapter provides the technical context by discussing the segments of the oil, natural gas, and electricity industries.

II. Defining Energy

The word "energy" comes from the Greek, *en* (in) and *ergon* (work).[10] This word represents an abstract idea of some subtlety, sharper in its scientific definition and

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[6] Economist, loc. cit.
[7] See U.S. International Trade Commission, *Electric Power Services: Recent Reforms in Selected Foreign Markets*, Publication 3370, November 2000, Appendix 1.
[8] Not surprisingly, the bankruptcy of Enron Corporation, the world's largest energy-trading company, in November 2001 was the largest bankruptcy in the history of the United States.
[9] Both "national security" and "security of supply" aspects.
[10] Slesser, Malcolm (ed.) (1982) Dictionary of Energy, p.88.

richer in its implications than in everyday usage.[11] In the sense that the standard scientific definition is that *energy is the capacity to do work*: that is, to move an object against a resisting force.[12] The scientific concept of energy arose from questions about the nature of motion. Scientists developed the idea that moving objects must possess something that stationary objects lack. This "something" appeared under different names, such as *vis viva* (living force), until in 1807 Thomas Young proposed the term "energy".[13]

A closely related scientific concept is "power", which is defined as *the rate of doing work*, i.e., the rate at which energy is converted from one form to another, or transmitted from one place to another. The main unit of measurement of energy is the joule (symbol J) and the main unit of measurement of power is the watt (symbol W), which is defined as a rate of one joule per second.[14] The joule is a small unit and in practice, amounts of energy are often in multiple units, sometimes so large that we run out of the standard metric prefixes.[15]

At the same time, it is worth noting that the word energy, when it first appeared in English in the sixteenth century, had no scientific meaning and based on a Greek word coined by Aristotle, it meant forceful or vigorous language.[16] In contemporary English, according to the Oxford English Dictionary, energy means *the capacity for vigorous activity*. However, it also refers to the scientific meaning of energy and more importantly, provides us with a third meaning, i.e. *fuel and other resources*

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[11] See Blunden, J. and Reddish, A. (eds.), (1991) Energy, Resources and Environment, p.6.
[12] Boyle *et al*, supra note 1, p.6.
[13] Ibid., p.131.
[14] Ibid., p.6.
[15] Blunden and Reddish, supra note 11, p.26. For instance, for national energy statistics very large metric prefixes such as petajoule (PJ) and exajoule (EJ) are used, which are not always sufficient.
[16] Boyle *et al*, supra note 1, p.6.

used for the operation of machinery etc. In fact, the third meaning is what is meant by energy in governmental reports and non-scientific literature, which has also been picked up by the media. In this regard, mention may be made of "energy policy", "energy security", "energy conservation", "energy poverty", "energy trade", and "energy crisis". In this context, it has been remarked that energy is "a generic term used to cover sources of heat and power without specifying what sort and without regard to quality".[17]

III. Forms of Energy and Energy Conversion

Energy can take many different forms. However, according to the "Law of Conversation of Energy"[18], in any change from one form of energy to other forms, the total quantity of energy remains constant.[19] Accordingly, in any energy process, any energy that seems to be missing must be accounted for in some other form. The usual way energy can seem to be lost is heat or thermal energy.[20]

In other words, energy is "one entity", one actor who can put on many faces.[21] For example, the most familiar energy process, burning fuels to produce heat, is chemical-to-thermal energy conversion.[22] If we take a car as another familiar example, a car uses the chemical energy in petrol that burns explosively in the conditions inside the engine to produce heat (chemical-to-thermal energy conversion). This is in turn converted into mechanical energy in the engine, and

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[17] Slesser, supra note 10, loc. cit.
[18] Also known as the First Law of Thermodynamic.
[19] Boyle *et al*, supra note 1, 131.
[20] Blunden and Reddish, supra note 11, p.13. This heat is produced by friction.
[21] Boyle *et al*, loc. cit.
[22] Blunden and Reddish, supra note 11, p.11.

hence into movement of the wheels.[23] The following section provides brief introductions to different forms of energy, i.e., mechanical, thermal, chemical, electrical, and nuclear, which will be discussed respectively.

A. Mechanical Energy

This form of energy is associated with machines of all kinds; old-fashioned clockwork is a good example. It also arises in everyday experiences with rolling and bouncing balls, in musical instruments and waterfalls.[24] It is important to distinguish two types of mechanical energy, i.e. "kinetic energy" and "potential energy". Kinetic energy is the energy of a moving object.[25] Thus, the kinetic energy of a moving stream of water, air or high-pressure steam can be converted into the rotational kinetic energy of a water wheel, windmill or turbine.[26]

Not surprisingly, the idea that moving objects must possess "something", i.e. motion energy, was a less sophisticated scientific concept than the idea that there exists another type of mechanical energy, which is not associated with a moving object. In fact, the real revolution in ideas came in the 1850s and started with the following scenario: An object thrown upwards slows down and eventually stops, losing its motion energy. Where does this energy go? In 1853, William Rankine noticed that the object is gaining the potential to move. So actual energy disappears and is replaced by "potential" energy. Rankin's term was adopted and eventually "potential

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[23] Ibid., p.4.
[24] Ibid., p.12.
[25] Boyle *et al*, supra note 1, p.132.
[26] Blunden and Reddish, loc. cit.

energy" came to mean not just a potentiality, but a new form of energy, as opposed to motion energy or kinetic energy.[27]

B. Thermal Energy

The concept of thermal energy or heat energy explains how the steam engine turns heat into mechanical energy. Three forms of heating have been known for a long time, that from the sun, that from the burning of fuels such as wood, and that dissipated during mechanical work. However, the reverse process, i.e. producing work from the heat at the industrial level, has only been available since the Industrial Revolution, with the invention of the steam engine and other forms of heat engine.[28] At the same time, it is important to notice that the idea of using steam to drive a machine predates the Industrial Revolution by at least 1700 years. The earliest known example of a steam-operated reaction turbine dates back to about 2000 years ago.[29]

The steam engine involves a cycle of compression, heating, expansion, and cooling of a gas in a cylinder with a moving piston, which makes the thermal-to-mechanical energy conversion possible.[30] Obviously, the essential first stage in any steam engine is the production of steam, i.e. converting water into steam by supplying heat from some external source like coal.[31]

C. Chemical Energy

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[27] Boyle *et al*, loc. cit.
[28] Blunden and Reddish, supra note 11, p.16.
[29] Boyle *et al*, supra note 1, p.188.
[30] Blunden and Reddish, supra note 11, p.18.
[31] Boyle *et al*, supra note 1, p.190.

The concept of chemical energy is based on the concept of chemical reactions, which are understood as rearrangements of atoms into new molecules. Some chemical reactions release energy, whilst others need energy in order to proceed.[32] Thus, the energy released from the former is called chemical energy. Generally speaking, those materials that react with air to give out heat are candidates for consideration as fuels.[33]

For instance, the molecule of methane (natural gas) consists of one carbon and four hydrogen atoms (CH4). When methane burns, its molecules interact with the oxygen molecules of the air and this chemical reaction produces carbon dioxide and water and more importantly, releases the chemical energy stored in natural gas.[34] Similarly, when coal burns, carbon (C), its main constituent, combines with the oxygen of the air producing carbon dioxide and releasing chemical energy.[35] The same is true in the case of oil. However, the "burning" of nuclear fuel is an entirely different process[36], which will be discussed later.

D. Electrical Energy

The electricity we all use everyday is only part of a large family of related forms of energy.[37] In fact, from a scientific point of view, "electrical energy" and "electromagnetic energy" are so closely related that they could be described as a

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[32] Ibid., p.145.
[33] Blunden and Reddish, supra note 11, p.20.
[34] Boyle *et al*, loc. cit.
[35] Blunden and Reddish, loc. cit.
[36] Boyle *et al*, supra note 1, p.157.
[37] Blunden and Reddish, supra note 11, p.14.

single form of energy.[38] As is discussed in more detail below, the generation of electricity in a power station is based on this close relationship. For a simple illustration of the fact that how closely these concepts interact, we need to look at a television set.

A television set requires a supply of electrical energy from the mains, to be converted, among other things, into light from the screen and sound from the loudspeaker. But this can only form a meaningful picture and message if there is a further supply of energy to the aerial socket at the back of the set. This further supply comes from an aerial picking up energy from "electromagnetic" radio waves sent out by television transmitters. The second supply is called a "signal" because the amount of energy involved is tiny compared with that supplied from the mains.[39]

The history of the scientific background of electrical energy goes back over 200 years. In 1799, Alessandro Volta invented the battery[40] and about twenty years later, George Ohm provided scientific explanation for electrical circuits, involving moving electric charges. According to him, an electric current is a flow like the flow of heat, and potential difference is like temperature difference that causes the flow.[41]

Further scientific developments were related to the discovery of an extremely close relationship between "electricity" and "magnetism". Building upon the experiments of Oersted and Ampere, in 1821 Michael Faraday showed that a wire carrying a current would rotate around a magnet (the first electric motor); and a decade later, he

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[38] Boyle *et al*, supra note 1, pp. 142-43.
[39] Blunden and Reddish, supra note 11, p.5.
[40] The most commonly used systems for storing a relatively small amount of electrical energy are rechargeable batteries.
[41] Boyle *et al*, supra note 1, p.137.

found that moving a bar magnet rapidly through a coil of wire caused a current to flow briefly in the coil, converting mechanical energy into electrical energy (the first generator).[42] Further theoretical developments thanks to Maxwell led to the prediction that there can be "electromagnetic waves" that consist of nothing but oscillating electric and magnetic fields, and that these can travel through totally empty space. Finally, in 1887 Heinrich Hertz demonstrated the first man-made "signal" carried by electromagnetic waves, the precursor of radio, TV and microwave transmissions.[43]

E. Nuclear Energy

Nuclear energy was identified during the 20th century from the recognition that the "indestructible" atoms are not the end of the story.[44] The first scientific break-through, which contributed to the discovery of nuclear energy, came in 1911, when Ernest Rutherford showed that nearly all the mass of any atom is concentrated into a tiny central "nucleus", which is surrounded by a cloud of fast moving electrons. Electrons are known to have negative electric charge, but a complete atom is electrically neutral. So the nucleus must have a positive charge so that the resulting electrical force attracts the electrons towards the nucleus, leading to a stable atom. This led naturally to the idea that nuclei might consist of different numbers of identical heavy positive particles, namely the "protons". In 1920, Rutherford

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[42] Ibid., p.140. The word "generator" has come to apply to any rotary device for making electricity, often including the power plant to drive it. Ibid., p.337.
[43] Ibid., p.141.
[44] Blunden and Reddish, supra note 11, p.22.

discovered a second particle in a nucleus, the "neutron", with almost exactly the proton mass, but no electric charge.[45]

However, one important question still needed to be answered. What holds a nucleus together? We know that particles with the same type of electric charge repel each other. So, an assembly consisting only of positive protons with neutral neutrons should instantly fly apart. Another force is therefore needed to bind the nucleus. This force also needs to be very strong at the tiny distances within a nucleus. So, all protons and neutrons are attracted to each other by this "strong nuclear force".[46]

These large binding energies imply that nuclei are stable; and a look at the world around us reveals that most atomic nuclei are extremely stable objects. So, at first sight this does not seem too promising as an energy source.[47] However, beyond the element[48] bismuth (Bi), with 83 protons and 126 neutrons, there are no more stable nuclei. Accordingly, all the elements beyond bismuth – including Uranium[49] (atomic number 92) – are *radioactive*, namely their nuclei spontaneously emit high-energy electrically charged particles, changing into different nuclei in the process.[50] This is a gradual process, which is called *radioactive decay*. The energy of the emissions produced by radioactive decay (also known as radiation) is dissipated, finally as

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[45] Boyle *et al*, supra note 1, pp.147-49.
[46] Ibid., pp.149-50.
[47] Blunden and Reddish, loc. cit.
[48] The chemical elements are those substances that consist of just one type of atom, such as iron (Fe), Oxygen (O), and Hydrogen (H).
[49] It is worth noting that for large nuclei there are no stable forms. So no elements are found naturally with more than 92 protons (Uranium is the largest). Larger nuclei, all radioactive, can be produced artificially; plutonium (94 protons) is a particularly important example.
[50] Boyle *et al*, supra note 1, p.150.

thermal energy. So the gross heating effect of natural radioactivity contributes to the high temperature below the Earth's surface.[51]

Nuclear power stations make use of another process, which is called *fission*. In fission, unlike radioactivity, the nucleus splits into two roughly equal parts and this releases a great deal of energy. There is just one naturally occurring "fissile" material, which is the isotope uranium –235.[52] It is also radioactive, so its nuclei can disintegrate either by emitting a single, much lighter particle or by splitting approximately in half. The controlled use of nuclear energy has been made possible by increasing the rate of fission, which can be increased to billions of times the natural rate, with a corresponding increase in the rate at which energy is released. In fission as in radioactivity, most of the released energy appears first as the kinetic energy of fast moving particles, which is then transformed into heat energy.[53]

Mention also should be made of another nuclear process, which is called *fusion*. As its name implies, nuclear fusion is the coming together of two lighter nuclei to form one heavier one.[54] This process is similar to that underlying the generation of energy within the sun, namely nuclear fusion reactions between hydrogen atoms within its interior.[55] Nuclear fusion technology has been used to produce the hydrogen bomb.

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[51] Blunden and Reddish, supra note 11, pp.22-23.
[52] As mentioned earlier, plutonium does not exist in nature, but is artificially produced in uranium reactors. In an "fast breeder reactor", the plentiful but non-fissile isotope uranium –238 is transformed into fissile plutonium –239, which can then be used as reactor fuel. Also, uranium occurs naturally in the form of oxides, which should first be converted chemically into uranium hexafluoride (UF6) before undergoing the enrichment process. See Boyle *et al*, pp. 422-28.
[53] Ibid., p.150.
[54] Ibid., p.429.
[55] Ibid., pp.19, 24.

However, the controlled production of fusion power for civilian purposes has not yet been materialized.[56]

IV. Energy Sources

Energy sources can be divided into "conventional sources" and "renewable sources". Conventional sources include fossil fuels and nuclear power. Renewable sources in turn may be divided into "traditional renewables" and "new renewables".[57] Traditional renewables include bioenergy and hydroelectricity, and new renewables include solar energy, wind energy, geothermal energy, tidal energy and wave energy.

Electricity will not be discussed in this section, due to the fact that it is not a "primary" energy source. Electricity can be generated as a "secondary" energy source using both conventional and renewable energy sources. In fact, a considerable share of fossil fuels, particularly natural gas and coal, is used for generating electricity and more importantly, hydroelectricity, nuclear power stations, and wind energy are used for the purpose of electricity generation. Also, producing heat and electricity is the result of using solar, geothermal and tidal energy. So, electrical energy is effectively covered throughout the following section. Furthermore, the last part of this Chapter contains a detailed discussion of the electricity industry as one of the main segments of the energy sector.

A. Conventional Energy Sources

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[56] Ibid., p.431.
[57] See U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets,* Publication 3805, October 2005, Chapter 2.

1. Fossil Fuels

Fossil fuels, including coal, oil and natural gas, are the predominant energy sources and currently supply 80% of the world's energy consumption. According to the IEA, they account for 83% of the overall increase in energy demand between 2004 and 2030. As a result, they share of world demand edges up, from 80% to 81%.[58] "As their name suggests, all the fossil fuels were originally living matter: plants or animals that were alive hundreds of millions years ago. With the passage of time, their remains have undergone chemical changes leading to the solid, liquid or gaseous fuels that we extract today."[59]

Fossil fuels are highly concentrated, enabling large amounts of energy to be stored in relatively small volumes, which makes them extremely attractive as energy sources. At the same time, they are composed mainly of carbon and hydrogen, which is why they are called hydrocarbons.[60] As a result, as noted earlier, the burning of fossil fuels produces carbon dioxide, which is one of the most important greenhouse gases causing environmental concerns. It is estimated that global energy-related carbon dioxide emissions will increase by 55% between 2004 and 2030, or 1.7% per year.[61] Compared with oil and gas, coal produces up to twice the amount of carbon dioxide for the same useful heat.[62] Natural gas is the cleanest fossil fuel and per unit of heat output the amount of carbon dioxide produced is less than for oil.[63]

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[58] IEA, *World Energy Outlook 2006*, p.38.
[59] Boyle *et al*, supra note 1, p.157.
[60] Ibid., pp.7-10.
[61] IEA, *World Energy Outlook 2006*, p.41.
[62] Boyle *et al*, supra note 1, p.157.
[63] Ibid., p.259.

The majority of the world's oil reserves are located in the Middle East and North Africa, while the majority of natural gas reserves are split roughly equally between the Middle East/North Africa and the former Soviet Union. Coal deposits are more evenly spread throughout the world. However, around half of world coal reserves are located in just three countries: the United States, Russia, and China. Today, proven reserves are equal to 64 years of current consumption of gas, 164 years of coal and 42 years of crude oil.[64]

Oil is and will remain the largest single fuel in the global energy mix in 2030, although it share will drop from 35% now to 33%. Coal is estimated to see the biggest increase in demand, with China and India account for almost four-fifths of the incremental demand for coal. So it remains the second-largest primary fuel. The share of natural gas will also rise.[65] Globally, demand grows by an average of 2% per year and the power sector (electricity generation) accounts for more than half of the increase in global primary gas demand.[66] Also, the world will increasingly rely on liquefied natural gas (LNG), transported in large volumes across oceans via LNG tankers. As a result, LNG's share of the total gas market will increase from about 5% in 2000 to about 15% in 2030. This means that a truly international market for natural gas is emerging.[67]

2. Nuclear Power

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[64] IEA, *World Energy Outlook 2006,* pp.72-3. However, the outlooks points out that new reserves will undoubtedly be added between now and 2030.
[65] Ibid., p.38. It should be noted that the international market for Coal remains relatively small compared with oil markets and the world industry is still dominated by local production for local use.
[66] Ibid., p.111.
[67] ExxonMobil, *The outlook for Energy: A View to 2030*, 2005, pp.19-20.

Nuclear power is a proven technology for electricity generation and could make a major contribution to reducing dependence on imported gas and curbing carbon dioxide emissions.[68] Nuclear electricity generation now accounts for nearly 7% of world primary energy.[69] Furthermore, it is expected that its capacity will increase from 368 GW in 2005 to 416 GW in 2030. However, its share in the primary energy mix will fall, due to the fact that few new reactors are built and that several existing ones are retired.[70]

Nuclear fuels (uranium –235 and plutonium –239) are more highly concentrated sources of energy than fossil fuels. For example, the complete fission of a kilogram of uranium –235 could produce as much energy as the combustion of over 3000 tones of coal.[71] Moreover, a major advantage of nuclear energy is that nuclear electricity generation results in no emissions of carbon dioxide or of other "conventional" pollutants like sulphur dioxide.[72] Furthermore, uranium resources are abundant and widely distributed around the globe.[73]

However, this technology has its own disadvantages. Nuclear power plants are capital-intensive, requiring initial investment of $2 billion to $3.5 billion per reactor.[74] Furthermore, there are some carbon dioxide emissions from the fossil fuel used in uranium mining, nuclear fuel manufacture, and the construction of nuclear power plants. More importantly, the problem of how to dispose of nuclear waste

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[68] IEA, *World Energy Outlook*, p.43.
[69] Boyle *et al*, op. cit., p.17.
[70] IEA, *World Energy Outlook* 2006, loc. cit.
[71] Boyle *et al*, supra note 1, p.16. In practice, however, the fission is incomplete and there are other energy losses.
[72] Ibid., p.18.
[73] IEA, *World Energy Outlook 2006*, p.44.
[74] Ibid.

products, some of which remain hazardous for many thousands of years, exists. Another related concern is the possibility of proliferation of nuclear weapons.[75]

B. Renewable Energy Sources

Fossil and nuclear fuels are often termed conventional or "non-renewable" energy sources. This is due to the fact that although the quantities in which they are available may be extremely large, they are nevertheless "finite" and so will "run out" at some time in the future. By contrast, "renewable" energy sources such as bioenergy and solar energy are sources that are continuously replenished by natural process. In other words, renewables are essentially *flows* of energy, whereas the fossil and nuclear fuels are, in essence, *stocks* of energy.[76] Taking the broad definition of renewable energy sources, both traditional and new renewables are discussed briefly as follows.

1. Traditional Renewables

Traditional renewables include bioenergy and hydroelectricity. The earliest example of bioenergy use is burning wood for heating, lighting and cooking, which dates back to prehistoric times. Wood is created by photosynthesis in the leaves of plants. This is a process powered by solar energy in which atmospheric carbon dioxide and water are converted into carbohydrates in the plant's leaves and stems. These, in the form

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[75] Boyle *et al*, supra note 1, pp.18-19.
[76] Ibid., p.23.

of wood and other "biomass", can be used as fuels, called "biofuels", which are sources of bioenergy.[77]

As a result of the process of photosynthesis, which is an energy absorbing chemical reaction, plants are able to take carbon dioxide from the atmosphere and release oxygen.[78] However, this is being offset by the release of carbon dioxide when the original trees are burned. Moreover, in practice, the incomplete combustion of wood releases a mixture of greenhouse gases with a greater overall global warming effect (methane) than can be offset by the process of photosynthesis.[79]

A wide variety of biomass fuels, including charcoal, wood, agricultural food and feed crops, and municipal wastes can be used to generate heat and electricity by incineration.[80] Such traditional biofuels are estimated to supply some 11% of world primary energy.[81] This share is estimated to fall by 2030, as developing countries increasingly switch to using modern commercial energy.[82] The prime example of a modern source of bioenergy is alcohol (ethanol) produced by fermenting sugar cane or maize, which is quite widely used in vehicles in Brazil and some states of the USA.[83]

Another energy source that has been used by human beings for many centuries is the power of flowing water, which has been traditionally used for milling corn, pumping

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[77] Ibid., p.19.
[78] Blunden and Reddish, supra note 11, p.20. Plants use energy supplied from sunlight.
[79] Boyle *et al*, supra note 1, p.20.
[80] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 1.
[81] Boyle et al, loc. cit.
[82] IEA, *World Energy Outlook 2006*, p.68.
[83] Boyle *et al*, supra note 1, p.21.

and driving machinery. Since the 20th century, its main use has been in the generation of hydroelectricity, which currently provides some 2.3% of world primary energy.[84] It is estimated that hydropower's share will rise slightly by 2030.[85]

2. New Renewables

New renewable energy technologies, including solar, wind, geothermal, tidal, and wave energy, have benefited from major investment and research and development programmes particularly during the last decade. However, they currently account for just 0.5% of world energy use and it is expected that their share of total energy use will increase to 1.7% in 2030.[86] This trend does not seem to make renewables a real alternative for fossil fuels in the foreseeable future. Not surprisingly, developed countries lead market segments: Germany (wind power), Japan (solar power), the United States (geothermal power), and France (tidal power).[87]

Solar Energy: As mentioned earlier, nuclear fusion reactions between hydrogen atoms within the sun is the source of its radiation. Due to 150 million km distance between the sun and the Earth, just a tiny fraction of this energy reaches to the earth. However, the intercepted solar energy is still equivalent to about 15000 times humanity's present rate of use of fossil and nuclear fuels.[88] Accordingly, solar technologies using radiant energy from the sun may produce electricity (using solar

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[84] Ibid.
[85] IEA, *World Energy Outlook 2006*, loc. cit.
[86] Ibid.
[87] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Executive Summary.
[88] Boyle *et al*, supra note 1, p.24.

photovoltaic panels)[89] to provide electricity to a grid or use it locally without connection to a grid, or may heat or cool air or water. Solar technologies other than those concerned with electricity production chiefly use the sun's thermal energy to produce hot water.[90]

Wind Energy: Wind power, in the form of traditional windmills used for grinding corn or pumping water, has been in use for centuries.[91] However, the development of the modern wind power industry for electricity generation began in the 1970s, in response to the high oil prices of that time. The industry has been growing rapidly and in terms of installed capacity, the wind energy industry is the largest of the new renewable energy sectors, with approximately 47,900 megawatts (MW) in 2004. Although several different types of turbines have been developed for use in the modern wind energy industry, most wind power operations use horizontal axis turbines with two or three blades, to harness the wind's kinetic energy.[92]

Geothermal Energy: Geothermal energy is a renewable energy source that is not derived from solar radiation. As the name implies, its source is the earth's internal heat, which originates mainly from the gradual decay of long-lived radioactive elements.[93] Heat extracted from geothermal resources can be utilized directly, or can be converted to electricity.[94] It is worth mentioning that if geothermal heat is extracted in a particular location at a rate that does not exceed the rate at which it is

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[89] Photovoltaic modules are made of specifically prepared layers of semi-conducting materials (usually silicon) that generate electricity when photons of sunlight fall upon them. See Boyle, p.27.
[90] U.S International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 5.
[91] Boyle *et al*, supra note 1, p.28.
[92] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 4.
[93] Boyle *et al*, supra note 1, p.33.
[94] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 7.

being replenished from deep within the earth, it is a renewable energy source. But in many cases this is not the case and the geothermal heat is in effect being "mined" and will "run out" locally in perhaps a few years or decades.[95]

Tidal Energy: Tidal energy is based on harnessing the energy that causes slow but regular rise and fall of the tides around our coastlines. It is caused principally by the gravitational pull of the moon on the world's oceans. "The sun also plays a minor role, not through its radiant energy but in the form of its gravitational pull, which exerts small additional effect on tidal rhythms."[96] The La Rance barrage in France is the first and only facility built for the commercial generation of electricity from tidal energy. It currently generates 640 million kilowatt-hours of electricity on an annual basis.[97]

Wave Energy: Wave energy technology is based on the idea of harnessing the power of waves to produce electricity. Undoubtedly, the power of waves, as they gradually build up over very long distances, can be very great. However, wave energy technology is not yet as fully developed as wind power or photovoltaic panels.[98] At the same time, wave energy research and development efforts have resulted in the development of onshore, nearshore, and offshore wave energy devices and equipment.[99] Particularly, "oscillating water column" (OWC) is the most widely used technology, In an OWC, which is an onshore device, the rise and fall of the waves

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[95] Boyle *et al*, loc. cit. For instance, the Indonesian proposal for classification of energy services classifies geothermal energy as a non-renewable energy source. See Chapter 6 for more details.
[96] Ibid.., p.31.
[97] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 8.
[98] Boyle *et al*, loc. cit.
[99] U.S. International Trade Commission, *Renewable Energy Services: An Examination of U.S. and Foreign Markets*, Chapter 8.

inside an enclosed chamber alternately blows and sucks air through a special kind of air turbine, which is coupled to a generator to produce electricity.[100]

V. Characteristics of the Oil, Natural Gas, and Electricity Industries

A. The Oil Industry

Oil and natural gas reserves are located beneath the earth's surface in reservoirs held in sedimentary rock. In fact, the word "petroleum" has the literal meaning "rock-oil" and in that sense embraces all hydrocarbon material deposited within the earth's crust.[101] Seismic techniques, which use acoustic signals to determine the structure of underground geologic formations, are normally used in locating oil and gas reserves. Seismic imaging involves measuring the time that it takes for an acoustic signal to travel from a "source" to a "receiver" and evaluating the strength of the signal upon its return. Since different geologic structures reflect acoustic waves in predictable patterns, the data provided by echoes can be used to gauge the likelihood of finding oil and/or gas.[102]

After this initial evaluation stage, the only way to confirm the existence of reservoirs is to conduct exploratory drilling. Thus, after a likely prospect has been identified, a drilling company develops a drill plan and begins to dig exploratory wells or test wells. The next stage of the production chain is logging and recording; as a drilling contractor drills an exploratory well, tests are conducted to measure the rock and

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[100] Boyle *et al*, loc. cit.
[101] Boyle *et al*, supra note 1, p.228. This includes liquid and gaseous deposits.
[102] See U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization,* Publication 3582, March 2003, Chapter 2, pp.1-3.

fluid properties of underground formations. If commercial amounts of oil or gas are discovered, development and completion activities begin. This stage of production chain is aimed at the construction of a flow path through which oil and gas can pass from the reservoir to the earth's surface. First, a well is cased. After that, small-diameter steel pipe known as tubing is strung together and run to the bottom of the cased hole. Last, wellhead equipment, comprised of valves and gauges, is installed at the surface to control the flow of hydrocarbons. The last stage of the production chain is extraction. Once a well is completed, oil and gas are extracted from the well. In most cases, oil initially flows freely due to build up pressures in the reservoir, a process known as natural lift. However, as producing wells mature, the flow rate begins to decline and artificial lifting techniques employing a variety of pumps must be used to maintain the production level.[103]

B. The Natural Gas Industry

Natural gas is both an energy source and an input into some production processes in its own right (as a petrochemical feedstock). The natural gas industry comprises a number of distinct components or segments, which can be distinguished as follows: (i) Production (also referred to as the upstream segment); (ii) Transportation, storage and supply (also referred to as the downstream segments).

1. Production

[103] Ibid., pp.4-7.

Natural gas is often extracted as a by-product of the extraction of oil.[104] This is due to the fact that natural gas does frequently occur in association with oil deposits, which is referred to as "associated gas". However, it also occurs in the absence of oil (non-associated gas).[105] Pipelines from individual wells (gathering lines) transport gas to nearby facilities where the gas is cleaned and processed[106] before being passed into the next stage, such as insertion into a high-pressure transmission pipeline, or cooling into liquid form[107] (LNG). Accordingly, re-gassification facilities are also included within the gas production sector.[108]

2. Transportation: Transmission and Distribution

Natural gas must be transported, often over long distances. Most gas is transported through a system of pipelines varying in pressure and diameter. This pipeline network is conventionally divided into two components: the high-pressure pipeline system known as the "transmission" network to deliver natural gas from the wellhead to distribution companies and to large end users (large industrial consumers or power plants) and the low-pressure, high-density gas "distribution" network for the delivery of gas to small and medium sized consumers.[109]

3. Storage

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[104] OECD, *Promoting Competition in the Natural Gas Industry,* 23 October 2000, p.22.
[105] Boyle *et al*, supra note 1, p.235.
[106]Natural gas processing plants are used to purify the raw natural gas, which means the extraction of almost all materials (such as butane, propane) other than methane. Methane and ethane are directly used as a petrochemical feedstock, but butane and propane are heavier and should be liquefied for use as bottled LPG (liquefied petroleum gas).
[107] This process is called liquefaction.
[108] OECD, loc. cit.
[109] See OECD, supra note 104, p.23; U.S. International Trade Commission, *Natural Gas Services: Recent Reforms in Selected Markets*, Publication 3458, October 2001, Chapter 2, pp.1-4.

Demand for natural gas is highly seasonal and demand at peak times can be several times higher than at Off-peak times. Thus, there is a need for services for "smoothing" the flow of gas through the network. This smoothing function is carried out by gas storage facilities, such as depleted gas reservoirs or disused mines, which are filled at off-peak times and drawn down at peak times. In addition, a certain amount of gas can be stored in the network itself, using the "line pack" technique, which means increasing pressure at off-peak times and letting pressure decline at peak times.[110]

4. Supply[111]

This segment of the natural gas industry includes activities such as the provision of services of contracting with production, transmission and distribution companies on behalf of gas customers and associated billing and metering services.[112] Supply function is subdivided into retail supply and wholesale supply. Retail supply (also known as supply) refers to the resale of natural gas to final consumer. Wholesale supply (also known as gas trading) refers to the resale of natural gas in the wholesale market.[113] Marketers buy, sell, and trade gas and potentially may serve as intermediaries between any and all of the traditional market participants, including producers (importers), transmission companies, distribution companies, end users,

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[110] OECD, supra note 104, p.26.
[111] It is also known as the marketing segment.
[112] Ibid., p.22.
[113] See Juris, Andrej, (1998) *The Emergence of Markets in the Natural Gas Industry*, The World Bank, Policy Research Working Paper 1895, p.6.

and also other marketers. They also provide balancing, financing, and risk management services.[114]

C. The Electricity Industry

Electricity originally had a relatively limited role in society, as is evident from the fact that it was originally synonymous with "electric lighting" and early contracts were drawn up in terms of providing lighting to so many streets for a year.[115] Obviously, today electricity has a central role and is a critical input supporting a wide range of consumption, transportation and production activities. Global electricity demand is predicted to double by 2030. The share of electricity in total final energy consumption worldwide is projected to rise from 16% in 2004 to 21% in 2030. Demand grows most rapidly in households, followed by the services sector. However, industry is expected to remain the largest final consumer of electricity.

Among other things, the crucial importance of oil for transportation has resulted in a trend towards ending the use of oil in power generation. So in 2030 oil use in power generation fuel mix is estimated to be just 3%. The share of coal-fired generation in total generation increases from 40% now to 44% in 2030, while the share of gas-fired generation grows from 20% to 23%. Nuclear power's market share will drop from 16% in 2004 to 10% in 2030. Not surprisingly, non-hydro renewable energy sources,

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[114] U.S. International Trade Commission, *Natural Gas Services: Recent Reforms in Selected Markets,* supra note 109, Chapter 2, pp.2-4.

[115] See Boyle *et al*, supra note 1, p.347. The rise of the electric lighting industry in the late 19th century was mainly due to the invention of light bulbs for commercial use by Thomas Edison. Initially each lighting system had its own generator, most of which were very small. Ibid., pp.337-39.

i.e. solar, wind, biomass, geothermal, wave and tidal energy, will continue to increase their market share from 2% now to almost 7% in 2030.[116]

The different components or segments that make up electricity delivered to the consumer can be distinguished as follows:

1. Generation

As noted earlier, electricity is a secondary energy source or a secondary fuel. It follows that the generation of electricity involves the creation of electric energy using internal combustion engines, steam turbines powered with steam produced with fossil fuels, nuclear fuel and various renewable fuels, falling water, wind turbines and photovoltaic technologies.[117] The fact that electricity cannot be economically stored, coupled with the fact that electricity demand fluctuates in the various time horizons (in a day, a year, or in the business cycle) both randomly and non-randomly, will have the following implications for the generation segment:

"Generation (and transmission) capacity needed to cope with peak demand is partly unused in periods of lower demand;

Reserve capacity may be required to cope with random demand fluctuations or generation shortfalls;

A diversified portfolio of electricity generating technologies is needed to provide the different loads of electricity at least cost."[118]

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[116] IEA, *World Energy Outlook 2006*, pp.138-40.
[117] See Joskow, Paul L. (1997) "Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector", 11 Journal of Economic Perspectives, p.121.
[118] IEA, (2001) Competition in Electricity Markets, p.17.

2. Transportation: Transmission and Distribution

As with the natural gas industry, it is customary to distinguish between two types of transportation. Transmission involves the use of wires, transformers and substation facilities to effect the high voltage transportation of electricity between generating sites and distribution centres, which includes the interconnection and integration of dispersed generating facilities into a stable synchronized AC (alternating current) network and the scheduling and dispatching of generating facilities that are connected to the transmission network to balance the demand and supplies of electricity in real time.[119] The distribution of electricity refers to transportation from the interconnected network to a specific group of end users (residences and businesses) at relatively low voltages.[120]

3. System Operation

The fact that electricity cannot be stored means that unlike the gas industry, the electricity transmission system is not simply a transportation network that moves power from individual generating stations to demand centres; it is in fact " a complex "coordination" system that integrates a large number of generating facilities dispersed over wide geographic areas to provide a reliable flow of electricity to dispersed demand nodes while adhering to tight physical requirements to maintain network frequency, voltage and stability."[121] In other words, the function of system operation is to ensure that the system is constantly in state of static electrical equilibrium, i.e. power supplied equals power demanded at each node of the

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[119] Joskow, loc. cit.
[120] IEA, supra note 118, p.19; Joskow, loc. cit.
[121] Joskow, supra note 117, pp.121-22.

network.[122] This coordination system makes use of ancillary services such as "spinning reserve". It refers to a situation where the (gas or steam) turbine is rotating but not the generating unit, so that it can be brought into operation very quickly.[123]

4. Supply

As with the natural gas industry, this segment includes power procurement and sales functions such as making arrangements for supplies of electricity from generators, metering, billing, and various demand management services.[124] Wholesale supply means sales for resale, that is, sales to distributing utilities or traders. Retail supply means sales to final consumers.[125] This segment was traditionally "bundled" with distribution, but can be performed separately. As a result of the implementation of privatization and liberalization policies over the last two decades, there is an increasing number of value-added services linked to end-user supply such as supplying differentiated electricity (e.g. green electricity), packaging electricity (e.g. with other utility services such as gas), and supplying differentiated reliability and quality (e.g. interruptible supply).[126]

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[122] IEA, supra note 118, p.20.
[123] IEA, (1999) Electricity Market Reform: An IEA Handbook, pp.13-14. Ancillary services also include voltage and frequency support, in order to maintain voltage and frequency fluctuations within a very narrow band, ibid., pp.12-13.
[124] U.S. International Trade Commission, *Electric Power Services: Recent Reforms in Selected Foreign Markets*, Publication 3370, November 2000, Chapter 2, p.2.
[125] Yajima, Masayuki (1997) Deregulatory Reforms of the Electricity Supply Industry, p.2.
[126] IEA, supra note 118, p.21.

Chapter 2. Regulatory Reform and the Emergence of International Energy Law

I. Introduction

The first substantive part of this chapter describes the changing nature of the energy sector in the context of privatization of public utilities. In particular, it builds upon the technical context provided in Chapter 1 and provides a detailed description of the process of regulatory reform in the electricity and natural gas industries. Obviously, this process has significant implications for international trade in energy. Closely connected with the deregulation movement is the "outsourcing" trend in the provision oil and gas field services. The deregulation movement and outsourcing trend therefore should be viewed as part of a broader trend towards the introduction of the trade discourse into the energy sector. At the same time, it is equally important to be familiar with the legal framework within which the energy markets operate. Accordingly, the next part of this chapter briefly examines the evolution of international law towards the recognition of international energy law as a branch of international economic law. The focus of the final part of this chapter will be on international energy law in international institutions. This chapter will address "regulatory institutions", namely OPEC and the International Energy Agency, which were established before the introduction of the trade discourse to energy trade. Liberalizing mechanisms such as the Energy Charter Treaty will be addressed in Chapter 3. Obviously, multinational energy companies have traditionally been important players in the area of international energy law. It is worth mentioning,

however, that due to the fact that this study is being carried out in the context of public international law regulation of energy activities, it has a state-centred perspective and focuses on international organizations not other actors.

II. Privatization of Public Utilities and the Changing Nature of the Energy Sector

A. Regulatory Reform and the Privatization of Public Utilities

The changing structure of the energy sector should be viewed in the wider context of the changing structure of public utilities. Over the last two decades, privatization of public utilities and infrastructure industries has become increasingly popular in many countries around the world. However, it should not be overlooked that for a long time, nationalization and statutory monopoly for public provision of public utility services were perceived as the sole option for providing universal services. Thus, in order to understand how this "paradigm shift" took place, it is necessary to discuss the basis of the traditional paradigm on the role of the state in the provision of public utilities.

In this regard, the definition of "public utilities" deserves close attention. It is suggested that by "public utilities", "we refer to network infrastructures that provide a range of essential goods and services to households and firms. They supply their product/service through a fixed network of pipes, wires or other facilities."[1] It follows that natural monopoly characteristics are among the constituent elements of

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[1] Nestor, S. and Mahboobi, L (1998) "Privatisation of public Utilities: The OECD Experience" in Privatisation, Competition and Regulation, Proceedings of the Helsinki meeting, September 1998, p.16.

public utilities. Under the traditional paradigm, the presence of natural monopoly characteristics in public utilities, which were regarded as strategic and sensitive industries from a national security perspective, was naturally translated to statutory monopoly status for public utilities. In most cases, these monopolistic firms were vertically integrated and under state ownership.[2]

However, over the last two decades a number of economic, technological, and political factors have contributed to changing policies in favour of privatization of public utilities and private provision of utility services. First, on a closer look, it became apparent that natural monopoly characteristics are often strictly limited to some, not all, of the activities in question.[3] It was successfully argued that in any case natural monopolies emerge naturally out of working of a market process. So there is no need to introduce legal barriers to entry by creating statutory monopoly status for public utilities[4]. In fact, the economic argument stressed that utility industries have important elements in common:

> "In particular, they each combine (1) naturally monopolistic activities, such as transmission networks, and (2) potentially competitive activities, such as the provision of services over the networks, which may or may not actually be competitive, for which access to activities of type 1 is an essential Ingredient."[5]

Second, technological developments in the telecommunications and electricity generation[6] industries reduced capital intensity and the lead times involved in the provision of services, and thus expanded the potential for competition in activities that were once dominated by monopolies.[7] Moreover, the end of the cold war was a

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[2] Ibid.
[3] Heimler, A. (1998) "Competition and Regulation in Public Utilities" in Privatisation, Competition and Regulation, Proceedings of the Helsinki meeting, September 1998, p.175.
[4] Ibid.
[5] Armstrong, M et al (1994) Regulatory Reform: Economic Analysis and British Experience, p.3.
[6] For more detailed discussion see *infra*, regulatory reform in electricity and natural gas industries.
[7] Nestor and Mahboobi, supra note 1, p.14.

powerful catalyst in rethinking and narrowing boundaries of national security. In the sense that direct ownership or control of "sensitive" public utility firms by the state has been increasingly viewed as a grossly disproportionate response to a rather narrow problem.[8] Besides, from an institutional point of view, it has been argued that politicization of economic decision-making is a by-product of state ownership, with decisions on matters such as personnel, output, prices, quality, and location of production being made according to political considerations. As a result, some of the most important firms in the economy no longer serve economic objectives.[9]

In view of the above, it should not come as a surprise that privatization of public utilities has been widespread over the past two decades. It is worth noting that there are different forms of privatization. Obviously, in the strict sense of the word, privatization is defined as transfer of ownership from public to private hands. However, usually a wider notion of privatization is intended, which in some cases does not necessarily require the transfer of ownership. For example, in the case of privatization through the commercialisation or corporatisation of the state undertaking, privatization includes the conversion of a state undertaking into a private law company, which may be 100 per cent government-owned.[10] In this regard, it has been remarked that privatization is not limited to the question of legal ownership, but touches upon the overall role of the government vis-à-vis the private sector.[11]

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[8] Ibid., p.17.
[9] Ibid., p.18.
[10] See Roggenkamp, M. M. (1997) "Implications of Privatisation, Liberalisation and Integration of Network-bound Energy Systems", 15 Journal of Energy & Natural Resources Law, pp.52-53.
[11] See Krajewski, M. (2003) National Regulation and Trade Liberalization in Services, p.8.

The main objective of pursuing privatization policies has been introducing competition to the public utilities industries. This is why privatization is happening in conjunction with liberalization and regulatory reform. Privatization often results in transforming vertically integrated monopolies to "vertical separation", i.e., the separation of naturally monopolistic activities from potentially competitive activities.[12] It has been remarked that the degree of success has depended on the post-privatization market structure. Where introduction of competition has not been possible (naturally monopolistic activities), the existence of effective regulatory regimes is vital to make privatization a success.[13] Accordingly, some authors have suggested that privatization actually is resulting in an increase of regulation. Hence, the term "re-regulation" is also used in the literature.[14]

In any event, the processes of privatization and regulatory reform are not seen as a "retreat of state", but rather as a redefinition of its functions. While based on the traditional paradigm, public ownership of key industries such as telecommunications, electricity, gas, water and other natural monopolies was supposed to protect the public interest against powerful private interests, under the new paradigm, privately owned but publicly regulated utilities are perceived as a more efficient way of the provision of utility services. In this context, regulation has a broader definition than just an authoritative set of rules. It refers to sustained and focused control exercised by a public agency and necessitates the creation of specialised agencies entrusted with fact- finding, rule making, and enforcement.[15]

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[12] Armstrong, M et al, supra note 5, p.3.
[13] Nestor and Mahboobi, supra note 1, p.15.
[14] Roggenkamp, supra note 10, p.54.
[15] See Majone, G. (1998) "The Rise of the Regulatory State in Europe" in Baldwin, Scott and Hood (eds.) A reader on Regulation, pp.195-96.

B. The Changing Nature of the Energy Sector

The supply of energy is fundamental to any country's development, given the fact that energy is an essential intermediate input for almost all economic activities. As noted earlier, energy is the biggest business in the world economy, with an estimated turnover of at least US $1.7 – 2 a year. Furthermore, the energy sector is characterized by very high investment needs. The International Energy Agency estimates that global investment in energy between 2005 and 2030 to meet the world's growing hunger for energy should be just over $20 trillion.[16] Nevertheless, international energy trade has been little developed in the context of the multilateral trading system. Moreover, it is necessary to create an international legal framework to foster investment in energy infrastructure.

With regard to the critical nexus between international trade rules and international investment rules in the context of energy trade, it has been remarked that the trade rules — fair access regimes — are necessary to encourage energy trade flows; but investment rules are necessary to encourage the establishment of capital-intensive infrastructure facilities such as transmission grids and pipelines without which there is no channel for energy trade to flow through.[17] At the same time, it should be noted that the prevalence of long term contracts such as "take or pay" contracts in order to facilitate such investments has played a role in restricting competition.[18]

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[16] IEA, *World Energy Outlook 2006*, p.40. Needless to say, the outlook points out that there is no guarantee that all of the investment needed will be forthcoming.
[17] See Walde, T. W. and Gunst, A. J. (2002) "International Energy Trade and Access to Energy Networks", 36 Journal of World Trade, pp. 217-218.
[18] See Slot, Piet Jan (1994) "Energy and Competition", 31 Common Market Law Review, pp.528-30.

Until recently, governments worldwide have considered the energy sector too crucial to be left to market forces. In the words of one commentator, "in the post-war period, the importance of energy has naturally translated into the assumption that governments need to control its production and distribution. Until the 1980s, it was a conventional wisdom of the post-war years that markets are hopelessly inadequate in providing appropriate energy supplies".[19] Accordingly, energy markets traditionally have been fragmented and segmented into national and highly protected markets.

In turning now to international trade, it is worth pointing out that international trade in energy has traditionally been synonymous with petroleum trade. In this regard, it is worth noting that while petroleum is the largest primary commodity of international trade in terms of both volume and value, and international trade in petroleum should in principle have been covered by the multilateral trading system since 1948, this has not been the case.[20] In fact, as discussed in greater detail in part three of this chapter, the Organization of the Petroleum Exporting Countries (OPEC), which is obviously not a trade-based organization, has effectively regulated petroleum trade since its creation in 1960. When OPEC was founded on 14 September 1960 in Baghdad, none of its founding members (Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela) was a contracting party to the GATT.

The past two decades, however, have witnessed the emergence of a trend towards the introduction of the trade discourse into the energy sector. This trend has two main components. The first component has its roots in the efforts made at the bilateral,

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[19] Helm, D. (2004) Energy, the State, and the Market, Oxford University Press, p.1.
[20] This point will be taken up in Chapter 3 of this study.

regional, and international levels to impose GATT-type[21] and even GATT-plus[22] disciplines on energy trade. This component of the energy trade discourse is fully discussed in Chapter 3. The second component, initially originated at the national level, has been the deregulation movement, namely reforming the electricity and natural gas industries. As a result of this "policy shift", the electricity and natural gas industries have been evolving from monopolistic into competitive industries with increasing "numbers" and "types" of participants. For instance, in the European Union, currently a complex of private, public, and mixed capital energy companies are operating under a combination of national and EU regulatory framework.

Obviously, the importance of energy has not been challenged; what have been challenged are the implications of this importance. Thus, although energy is still treated as "special", previous assumptions have been recently challenged at both inter-state and intra-state levels. In the sense that there has been a transition towards the market philosophy and in place of monopolies, privatization and competition became the driving forces of energy policy in recent years. The idea is that markets would commoditize energy and would create sufficient diversity and security of supply.[23]

Accordingly, trade in electricity and gas is a new dimension of energy trade, which is particularly relevant to the trade in services debate. It is worth noting that the public and vertical nature of the utilities and their monopoly position have mostly prevented trade in energy services. In fact, most industries in the energy sector have traditionally been dominated by state-owned vertically integrated utilities, engaged in

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[21] In the case of the Energy Charter Treaty.
[22] In this regard, mention may be made of, for instance, the NAFTA agreement.
[23] See Helm, supra note 19, p.13.

the production, transport and distribution of energy products, leaving little margin for trade and competition. Not surprisingly, one of the difficulties in defining energy services was the fact that the industry itself did not distinguish between goods and services activities, as a result of the vertically integrated structure of many energy markets.[24]

However, this is beginning to change. The recent trend towards privatization and liberalization in the sector has contributed to isolate several economic activities which might constitute services and might be the object of multilateral trade negotiations in the context of trade in services. Despite the fact that the energy sector was often considered as a strategic sector not suitable for privatization process, there has been a policy shift towards the need for privatization of the energy sector as an instrument to obtain efficiency. Furthermore, the energy sector needs capital for development and it is not disputed that the absence of sufficient capital in the public sector necessitates the acceleration of the process of privatization.[25]

At the same time, closely connected with the deregulation movement in the electricity and natural gas industries has been the recent developments in the nature of trade in oil and gas field services. The trend toward encouraging private investment and management of operations in field services has changed the nature of trade and resulted in the increased tradability of field services. As a result, the GATS ongoing energy services negotiations also include oil and gas field services, which are related to the upstream segment of the oil and gas industry. Accordingly, the

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[24] See WTO, *Energy Services, Background Note by the Secretariat,* S/C/W/52, 9 September 1998, Para. 2. The international trade implications of this situation will be discussed in Chapter 7.
[25] See "Report of the Work Group on Privatisation of Energy", in Privatisation of Public Sector Activities, United Nations Department of Economic and Social Affairs, New York, 1999, p.99.

following section begins with providing an insight into what is involved in the restructuring of the electricity and natural gas industries. It then continues with providing a short overview of the nature of trade in oil and gas field services and the outsourcing trend.

C. Regulatory Reform in the Electricity and Natural Gas Industries

For most of the post-war period, the energy sector was typically run by the state through integrated monopolies.[26] The energy sector was part of the planned economy, and also had an important social role to play, which was providing universal access to affordable heating and lighting.[27] The existence of "natural monopoly"[28] elements in the electricity and gas industries, namely the transmission and distribution segments, contributed to a specific model or pattern of structuring that has been dominated in all countries for several decades. That is to say, based on the assumption that the supply of a complete "bundled" product is the most efficient

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[26] Helm, supra note 19, p.14. However, in some countries, notably the United States, this was not the case. In the United States, electricity has traditionally been supplied to consumers by investor-owned or publicly owned (municipal, state and federal) utilities that have de facto exclusive franchises to sell electricity to retail customers in specific geographic areas. The investor-owned segment of the industry accounts for over 75 percent of U.S. retail electricity sales. See Joskow, Paul L. (1997) "Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector", 11 Journal of Economic Perspectives, pp.120-21. Furthermore, it was only after the World War II that many European governments decided that the multitude of small electricity producers had to be merged in a single nation-wide monopoly or several large regional monopolies. For example, France created EdF in 1946. Italy was the last European country to follow this trend and created the state-owned monopoly ENEL in 1962. For a brief history of the electricity sector see IEA, (1999) Electricity Market Reform: An IEA Handbook, pp.19-25.

[27] Helm, supra note 19, pp.14-15.

[28] Natural monopoly is a market situation in which the market is most efficiently served by a single supplier of a good or service. In order to have a full appreciation of this concept, another economic concept, i.e. "economies of scale", should be addressed. Economies of scale occur where efficiency in production is achieved (the average cost of producing a commodity falls) as output is increased. There inevitably comes a point when the average cost ceases to fall and economies of scale can no longer be reaped. That point in called the minimum efficient scale (MES). Where the MES is very large in relation to the market, i.e. a producer has to supply a large quantity of products on the market before the MES is reached, only a few firms, possibly only one, will be able to operate efficiently on the market. So a natural monopoly situation exists when the MES of production means that only one supplier can operate profitably on the market. See Jones, A. and Sufrin, B. (2001) EC Competition Law: Text, Cases, and Materials, pp.7-11.

and reliable way of supplying electricity and gas, these industries were vertically integrated into their different segments.[29] This vertical integration of the "natural monopoly" and "potentially competitive" segments of the electricity and gas industries effectively resulted in expanding the scope of monopoly to the potentially competitive segments, monopolizing the whole chain of supply.

Referring to this model, it has been remarked that its wide acceptance over a long period of time and its impact on the policies of governments suggest that it may be described as the *traditional paradigm* of energy network regulation. By this it is intended to refer not only to certain ways of organizing government relations with the electricity and gas industries, but also to a set of ideas about the scope of competition and the appropriate legal and institutional methods to achieve public policy aims.[30] These vertically-integrated companies have traditionally been obliged to provide and supply electricity and gas, and in return, have been granted exclusive rights of supply over a specific area or territory.

The services provided by these companies have traditionally been seen as essential for communities, and an obligation to supply has often been imposed by governments on the companies, with electricity prices normally being controlled by government and based on costs. Furthermore, the electricity and gas sectors are strategic for the overall economy and for the military capability of the nation-state.[31] They are capital-intensive industries with a high degree of technical complexity, which creates entry barriers and necessitates technical co-ordination in their

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[29] See Joskow, supra note 26, p.121.
[30] Cameron, P. D. (2002) Competition in Energy Markets: Law and Regulation in the European Union, p.6.
[31] Ibid., p.5.

operation. This has led to a structure of regulation that places strong emphasis on reliability of transmission and delivery. This has been particularly evident in the electricity sector, because as discussed in the previous chapter electricity cannot be stored; rapid changes in demand can occur throughout any given day, and each request must be linked with supply.[32] In summary, some of the principal regulatory characteristics of the traditional paradigm are as follows:

- Exclusive rights to build and operate networks, granted under concessions or licences;
- Closure to competition (statutory monopoly);
- Detailed regulation;
- Vertically-integrated operations; namely goods (electricity and natural gas) were "bundled" with services (transmission, distribution, supply); and
- A high degree of planning with tight, centralized control.[33]

Regulatory reform in the gas and electricity industries is widely perceived to begin in the 1980s with the opening of the gas sector in the US followed by deregulation of the gas industry in Britain, and then in the 1990s with the opening of the electricity markets in the UK and the US followed by the opening of the electricity and gas sectors in the EU. However, before turning to the restructuring of the natural gas industry in the 1980s, it is essential to make the point that a review of the relevant Acts and judicial decisions in the United States long before the current wave of restructuring shows a great level of understanding of the interaction between the

[32] Ibid., p.6.
[33] See ibid., p.7.

"natural monopoly" and "potentially competitive" segments of utilities and in particular, the electric power industry.[34]

This awareness seemed to stem mainly from antitrust considerations due to the dominance of investor-owned utilities in the electricity industry. For instance, in considering the bill that became the Federal Power Act of 1935, the Congress had before it the report of the National Power Policy Committee on Public-Utility Holding Companies, which stated that:

> "(w)hile the distribution of gas or electricity in any given community is tolerated as a 'natural monopoly' to avoid local duplication of plants, there is no justification for an extension of that idea of local monopoly to embrace the common control, by a few powerful interests, of utility plants scattered over many States and totally unconnected in operation."[35]

Thus, the resulting Federal Power Act authorized the Federal Power Commission to compel a public utility to establish physical connection with the facilities of one or more other persons engaged in the transmission of or sale of electric energy, to sell energy to or exchange energy with such persons, if the Commission finds such action necessary or appropriate in the public interest.[36]

In turning now to the current wave of restructuring, mention should be made of the Lawson doctrine. In June 1982, Nigel Lawson, Energy Secretary in the Thatcher government, in a speech entitled "The Market for Energy" set out a theoretical vision

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[34] Professor Joskow has pointed out that the decentralized structure of the U.S. electricity sector has led to the development of "competitive wholesale markets". Wholesale power transactions and supporting transmission or "wheeling" arrangements are regulated by the Federal Energy Regulatory Commission (FERC). Wholesale trade expanded rapidly in the 1970s and the Public Utility Regulatory Policy Act of 1978 (PURPA), which required utilities to buy power from co-generators and small independent power producers using renewable fuels offered yet another catalyst. See Joskow, supra note 26, pp.123-24.

[35] Cited in the dissenting opinion in the *Otter Tail* Case, Supreme Court of the United States: Otter Tail Power Company v. United States, 410 US 366, at 383-84 (1973). In this civil antitrust suit, the dispute arose from the fact that among other things, Otter Tail Power, an electric utility company, refused to sell power at wholesale to proposed municipal systems in the communities where it had been retailing power and also refused to wheel power to such systems.

[36] Ibid., p.376.

for the later privatizations of the energy markets in Britain.[37] The central idea was the rejection of planning, which was instrumental in the post-war period, in favour of a more market-oriented framework.[38] In particular, he said it was time "to question both the extent of the natural monopoly, and, where it can be shown to exist, the most effective means of regulation. State ownership is neither a universal necessity nor the only means of regulation."[39]

It should be noted that the first significant practical step in the evolution from "utility regulator" to "trade regulator" was the release of new policy guidelines on the regulation of natural gas imports in the United States in February 1984. The essence of the new approach, in the words of the guidelines, was that "[t]he market, not the government, should determine the price and contract terms of imported gas. U.S. buyers should have full freedom ... along with the responsibility ... for negotiating the terms of trade arrangements with foreign sellers."[40]

This process eventually resulted in shrinking the domain of regulation from the whole gas chain to the natural monopoly segments of transmission and distribution.[41] In fact, the reform has led to the development of two distinct markets: the natural gas market and the gas transportation market. A natural gas market is a market where gas is traded as a "commodity", in the form of gas contracts. In the "physical" gas market, natural gas is traded for physical delivery. In the "financial" gas market,

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[37] Helm, supra note 19, p.57.
[38] See ibid., pp.57-8. Needless to say, it was a revolutionary idea at the time, ibid., p.7.
[39] Ibid., p.58.
[40] United States Department of Energy, New Policy Guidelines and Delegation Orders on the Regulation of Imported Natural Gas (Feb. 1984), cited in Owen Saunders, J. (2001) "North American Deregulation of Electricity: Sharing Regulatory Sovereignty" 36 Texas International Law Journal, p. 167.
[41] It does not follow, however, that the competitive segments are free from regulation. Obviously, regulating the conduct of new participants is necessary to ensure that competition is fair. In fact, the difference between the two segments stems from the type of regulation not regulation *per se*.

financial gas contracts are traded, which are used primarily for managing price risk and not necessarily for physical delivery. A transportation market is a market where transportation services are sold in the form of transportation contracts. Transportation services refer to pipeline capacity and natural gas shipments for delivery of natural gas to a desired location. The transportation market is subdivided into the primary and secondary markets. The "primary" transportation market facilitates the initial distribution of transportation contracts, which give the shippers that buy them the right to transportation services. This market is regulated because of the natural monopoly characteristics of pipeline transportation. The "secondary" transportation market is where holders of unused transportation contracts resell. Its importance is due to the fact that without the secondary transportation market the unused capacity becomes idle. Secondary trading of transportation contracts can take several forms. Auctions and bilateral trading are common forms for trading both long-term and short-term transportation contracts. Trading of short-term contracts may also take place in a spot market.[42]

In the context of the electricity industry, the restructuring was based on the same logic, namely limiting the domain of regulation to the natural monopoly segments of the industry. However, due to a higher degree of technical complexity in the electricity sector, additional technical developments were needed in order to make the restructuring work. The first development was related to the generation segment, i.e. the development of the combined cycle gas turbine. The 1990s have seen a major increase in the use of natural gas in electricity generation worldwide. Highly efficient

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[42] See Juris, Andrej (1998) *The Emergence of Markets in the Natural Gas Industry*, The World Bank, Policy Research Working Paper 1895, pp.13-21. This source provides an excellent discussion of the emerging markets in other segments of the natural gas industry as well, which include natural gas storage, metering and installation of meters, construction of pipelines, and pipeline system balancing.

combined cycle gas turbines, fuelled by natural gas, represent the technology of choice for electricity generation. This led to the reduction of set up costs for electricity generation, which was effectively a natural entry barrier. Furthermore, technological advances in the "system operation" segment of the electricity industry played a crucial role. Professor Joskow, a leading authority in the electricity market reform, argues that given the specific characteristics of the electricity sector, the latter factor has played a more important role:

> "It is sometimes argued that one reason that creating a separate competitive generation sector now makes sense is that the generation of electricity is no longer a natural monopoly as a consequence of technological change. This view is incorrect. Generation per se has not really been a strong natural monopoly requiring very large generating companies spanning a large fraction of regional wholesale power markets for many years.... Rather, it is the attributes of the transmission network and its ability to aggregate and facilitate the efficient operation of generating facilities dispersed over wide geographic areas, over time frames from seconds to decades, that has played the most important role in defining the vertical and horizontal structure of this industry."[43]

Accordingly, as a result of the interaction of technical, economic, and ideological considerations a new paradigm in government-energy industry relations has emerged, based on a greater reliance on markets. It seeks to introduce competition whenever possible, encourage openness, decentralized production with network access, and remuneration on the basis of market prices, not costs. If an activity has the potential for competition, the kind of regulation implied by the new paradigm facilitates competition. If an activity is a natural monopoly, then regulation provides a substitute for the competitive market.[44] In summary, the advocates of a new market-oriented paradigm have successfully challenged the idea that network-bound energy industries, namely electricity and natural gas, defy the introduction of competition because of their natural monopoly characteristics.[45] The principal characteristics of this new kind of regulation may be identified as follows:

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[43] Joskow, supra note 26, pp.122-23.
[44] Cameron, supra note 30, p.8.
[45] Ibid., p.9.

- Separation of activities in order to facilitate the introduction of competition wherever possible;
- Freedom of entry and freedom of investment in competitive activities, instead of a centrally-planned approach;
- Freedom of contract and competitive formation of prices;
- Access to networks and infrastructure;
- Supervision of the model by an independent regulator; and
- Adaptation to the use of information technology.[46]

Another important point to bear in mind is the fact that historically, the players have been different between gas and electricity, with large international companies involved in gas and also often oil business. This situation arose from the fact that gas was usually found in association with oil or as an indirect result of exploration originally directed at finding oil. However, in recent years there has been a trend towards convergence of gas an electricity supply by companies that have become increasingly focused on the provision of several kinds of energy.[47] In fact, following the introduction of gas and electricity sector reform, the number of cross-sectoral merger and acquisition between the gas and electricity sectors rose substantially in the second half of the nineties. The recent convergence trends between the gas and electricity sectors are reflected in most IEA countries by the fact that the regulation of both sectors is under the same authority.[48] For example, in Britain, the electricity

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[46] Ibid., p.8. At the same time, with particular reference to the issue of security of supply, Professor Cameron points out that this transformation does not necessary mean that energy should be treated as "just another commodity".

[47] Ibid., p.23.

[48] See Kyung-Hwan Toh, IEA Working Paper, The Impact of Convergence of the Gas and Electricity Industries: Trends and Policy Implications, p.3.

and gas markets are currently regulated by the Office of Gas and Electricity markets (Ofgem).[49]

D. The Nature of Trade in Oil and Gas Field Services

Our short overview of the upstream segment of the oil and natural gas industries in Chapter one revealed the importance of the provision of a wide range of oil and gas field services throughout the exploration and production processes. Furthermore, the use of sophisticated technology such as creating three-dimensional computer images of subsurface formations for resource identification necessitates the involvement of international energy companies with specialised expertise and equipments. Accordingly, in order to gain familiarity with the structure and functioning of the market a brief review of oil and gas field services providers and consumers is necessary.

The oil and gas field services industry comprises two tiers of firms providing field services: large, integrated companies such as Halliburton (U.S.) and Schlumberger (France) with competence in a broad range of the aforementioned activities; and small and medium-sized firms such as Transocean (U.S) and Nabors Industries (U.S.), which provide drilling services.[50] The primary consumers of oil and gas field services are oil and gas exploration and production companies. They, in turn, may be

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[49] See www.ofgem.gov.uk.

[50] See U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization,* Publication 3582, March 2003, Chapter 3, p.1.

grouped into three categories: major integrated[51] oil and gas companies[52], national oil companies[53], and independent oil companies.[54]

As is well known, initially governments had little direct involvement in developing their resources and simply granted exploration and production rights to private companies through contractual arrangements known as concessions.[55] As a result of the increasing involvement of national governments through national oil companies in the management and control of resource development, other contracting processes such as Production Sharing Agreements[56] and Service Contracts[57] are being used for acquiring the expertise of foreign energy companies. Needless to say, strict foreign investment regimes for oil and gas field services were characteristics of, and closely connected with, the era of nationalization. With regard to the "policy shift" toward the recent relaxation of foreign investment rules in a number of developing countries, it has been remarked that:

"The trend toward state control of hydrocarbon production began to reverse itself in the 1990s, as many countries questioned the wisdom of direct government management of the exploration and production process. As a result, the focus of government policy in a number of countries shifted toward encouraging private investment and management of operations, while retaining clear state control over the rights to natural resources."[58]

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[51] These energy companies are "integrated" in the sense that they are engaged in the production, refining, and marketing of oil and natural gas, ibid., p.2.
[52] Such as ExxonMobil (U.S.), Royal Dutch/Shell Group (Netherlands/United Kingdom).
[53] Such as National Iranian Oil Company, Kuwait Petroleum, Saudi Aramco.
[54] Such as Anadarko Petroleum (U.S.), Burlington Resources (U.S.), which tend to focus exclusively on the exploration and production segment, leaving refining and marketing to the integrated companies, ibid., pp.2-3.
[55] Ibid., p.3. The first concession agreements were long-term contracts covering large geographic areas. More recent concessions are valid only for a well-defined geographic area and a specific period of time. Under a concession agreement, in exchange for the rights to explore and develop resources, the concession holder pays the government a combination of fees, royalties, and taxes on production, income, and/or profits, ibid., p.10.
[56] A Production Sharing Agreement or Contract has three basic elements: cost recovery, a production split between the government and the government and the contracting party, and taxes. The contract generally affords the government a share of production equal to its share of equity investment, as well as tax revenues and royalties based on the private-sector partner's share of production, loc. cit.
[57] Under a Service Contract, a company is hired to provide a particular service, ranging from an individual task on a well to the entire exploration and/or development of and oil or gas field, and the oil and gas produced is controlled by the producing country or national oil company, loc. cit.
[58] Ibid., p.8.

With particular reference to the changing nature of trade in oil and gas field services in recent decades, it has been remarked that formerly, the operators, namely the "oil-companies", performed the technical services by themselves (in-house provision), whereas currently the trend is towards "outsourcing" all activities beyond the core of the management's direct responsibilities for ensuring the success of the venture. This process has resulted in creating a large segment of the current market for oil and gas field services.[59] Not surprisingly, in the context of the ongoing GATS negotiations on energy services, all of the negotiating proposals reflect the current commercial realities of oil and gas field services market.[60] It has been remarked in this regard that liberalizing a country's market for energy services does not require it to yield ownership of underlying energy resources.[61] It is maintained that liberalizing energy services markets provides a choice of resources, suppliers, technology and equipment to a country, which in turn, would lead to a more efficient energy production.[62]

In particular, Canada's proposal exclusively deals with this issue. The proposal points out that market restructuring, technological advances and economic growth all point to an increased demand for oil and gas products, and the subsequent demand for the services to ensure a supply of these products.[63] Canada's proposal draws attention to the fact that small and medium-sized enterprises (SMEs) as well as large

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[59] See Anez, Carlos M. (2003) "The Trade of Technical Services for Oil and Gas Exploration and Production: Observation by an Old Venezuelan Contractor", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, pp.241-42.
[60] For a detailed discussion of some of the proposals see Chapter 6 of this study.
[61] See Ekimoff, L., (2003) "An Overview of the Negotiating Proposals on Energy Services under the GATS Negotiations: United States", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p.108.
[62] Ibid., pp.108-109.
[63] Communication from Canada, Initial Negotiating Proposal on Oil and Gas Services, S/CSS/W/58, 14 March 2001, para. 4.

multinationals are involved in this sector.[64] In fact, relevant in this respect is the negotiating proposal submitted by Canada on SMEs, which stresses that technical developments have provided an opportunity for SMEs to become involved in the international scene. Canada considers that it is important to address the particular situation of small and medium-sized service suppliers in the context of GATS negotiations.[65] With particular reference to oil and gas field services providers, Canada has identified the following market access impediments:

- Restrictions for the entry and stay of energy services managers, professionals and experts;
- Restrictions for the entry of the equipment and tools needed to provide the service;
- Arbitrary business and licensing requirements; and
- Absence of transparent regulatory frameworks.[66]

According to the United States International Trade Commission, additional market access limitations include labour requirements, joint-venture requirements, investment limitations and technology transfer requirements.[67] It should not be overlooked, however, that few countries endowed with energy resources have he domestic capability to provide all field services internally. Accordingly, despite the

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[64] Ibid., para. 3.
[65] De Menezes, Josee (2003) ""An Overview of the Negotiating Proposals on Energy Services under the GATS Negotiations: Canada", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, pp. 84-5.

[66] Communication from Canada, supra note 60, para. 9.
[67] For a full discussion of impediments to trade in oil and gas field services see U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization,* Publication 3582, March 2003, Chapter 4. At the same time, barriers faced by domestic oil and gas field services providers, *inter alia*, include: fluctuating demand, lack of confidence on the part of their costumers, preferential treatment offered to foreign competitors by governments (such as lower bond and guarantee requirement, allowing duty-free temporary imports of equipments), and high cost of quality assurance/quality control systems and certificates. See Anez, supra note 59, pp.248-52.

existence of such impediments, foreign field service providers are not in practice precluded from entering upstream oil and gas field services markets.[68]

III. The Emergence of International Energy Law

A. The Background to the Recognition of International Energy Law

Writing in1948, Professor Schwarzenberger tried for the first time to make the case for specialized studies of different aspects of international law, and particularly, international economic law. Taking into account the rapid expansion of the frontiers of international law in the post-World War II years, he went on to say:

> "It would seem that the time has come for the establishment of separate branches of international law, supplementing treatises on, and teaching in, the general principles of international law. Such specialisation will not only result in providing more adequate knowledge in the narrower fields, but is likely to enrich insight into the nature, functions and principles of the law of nations as such."[69]

It should be noted that in making the case for the establishment of special branches of international law, Schwarzenberger was fully aware of the importance of maintaining the structural unity of international law. In fact, this is the reason why he mentions the need for teaching general courses in international law and the principles of international law besides specialized subjects.[70] With particular reference to

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[68] U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization,* Publication 3582, March 2003, Chapter 4, p.1.

[69] Schwarzenberger, G. (1948) "The Province and Standards of International Economic Law", 2 International Law Quarterly, pp. 403-406.

[70] In his recent remarks, Professor Brownlie stressed the need to maintain the structural unity of international law as a federation of specialized areas. He warned against the tendency to avoid teaching courses in general international law in universities both in North America and in Europe. Brownlie argues that this kind of specialization in itself threatens the structural unity of international law. He believes this neglect of the foundations of international law can lead to bizarre results: "How can the problems of environmental law be explored effectively if the students are ignorant of the law of state responsibility and the law of treaties? How can human rights instruments be applied in the absence of adequate knowledge of the law of treaties?". See Brownlie, I. (2001) "The President's Roundtable: The Past and Future of International Law in the United States, and the Role of the ASIL", 95 American Society of International Law Proceedings, pp.13-14.

international economic law, Schwarzenberger argued that due to the growing importance of issues within the province of public international law that had economic dimensions, there was a need for recognizing a special branch of law addressing international economic relations.[71]

Eighteen years later, in his lecture at The Hague Academy of International Law, Schwarzenberger dealt with the issue more comprehensively. He referred to his thirty-year efforts in order to develop international economic law as a teaching subject in the University of London and defined it as follows:

> "International Economic Law is the branch of Public International Law which is concerned with (1) the ownership and exploitation of natural resources; (2) the production and distribution of goods; (3) invisible international transactions of an economic or financial character; (4) currency and finance; (5) related services and (6) the status and organisation of those engaged in such activities."[72]

One aspect of this definition is of great importance: international economic law is a branch of public international law. Thus, from an institutional and systemic point of view, international economic law cannot be separated from public international law. It is derived from the general system and interacts with it. At the same time, it hardly needs saying that economic aspects of international law work cannot be limited within the purview of public law. In fact, it has been remarked by a leading authority that ninety percent of international law work is in reality international economic law in some form or another.[73] Yet, it should be born in mind that most of the private-law aspects of international economic transactions are well covered by other branches of

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[71] Likewise, in 1950, he addressed "The Problem of an International Criminal Law", identifying international criminal law as another candidate for admission to the rank of specialised branches of international law. See 3 Current Legal Problems, pp. 263 *et seq.*

[72] Schwarzenberger, G. (1966) "The Principles and Standards of International Economic Law", 117 Collected Courses of The Hague Academy of International Law (RCADI), p.7.

[73] Jackson, J. H. (1995) "International Economic Law: Reflections on the "Boilerroom" of International Relations", 10 American University Journal of International Law and Policy, p.596.

law, such as private international law and international commercial law.[74] Thus, although the term "International Economic Law" is used in a variety of ways,[75] which includes both public (economic regulation) and private (commercial practices) aspects of law, there is a plausible case for adhering to the system aspects of international economic regulation.[76]

International economic law, in turn, has been divided into a number of special branches such as international monetary law, international trade law, and more recently, international development law.[77] In this context, the emerging thematic subdivisions include international competition law and notably, international energy law. It is worth noting that before the recent wave of privatization in the energy sector, energy companies traditionally appeared in foreign countries as "investors" not as "traders". Accordingly, there was no need to recognize a new specialisation in the area of international economic law to deal with energy-related activities, which were already covered by international investment law rules. In the words of one commentator:

> "In 1970, there was no international energy law. There were nationally segregated electricity, coal and nuclear industries. Oil was the only exception, as it had to be shipped from far-away producing countries, with the ownership link between extraction on one side and shipping, refining and marketing in the consuming countries just being broken. Even then, national oil markets were tightly regulated, frequently with price controls and exclusivity, or at least preferences, for national oil companies ... As there was no substance matter for international law to regulate, such international law did not exist."[78]

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[74] Schwarzenberger, supra note 72, pp. 7-8.
[75] For a full discussion of the debate on the definition of international economic law see Qureshi, Asif H. (1999) International Economic Law, pp.5-12. Professor Qureshi adopts the narrow definition, i.e. the perspective of public international law.
[76] See Jackson, supra note 73, pp.596-97. Professor Jackson points out that this approach represents a priority choice that downplays the transactional law and focuses more on regulation by government institutions.
[77] See, for example, Qureshi, supra note 75.
[78] Walde, T. (2001) "International Energy Law: Concepts, Context and Players", Provisional First Draft for Book on International Energy Law and Policy, www.dundee.ac.uk/cepmlp/journal/html/vol9/Vol9, p.1.

In this regard, it is worth reminding that even at the domestic level the emergence of "Energy Law" as a generic topic of law is usually regarded as one of the most recent developments in the field. According to one commentator, just as environmental law is a child of the early 1970s, energy law is a child of the latter part of the decade.[79] In the United States, the Department of Energy was established in 1977 and in November 1978 President Carter signed into law the National Energy Act.[80] In addition, with regard to the European domestic energy law it should be noted that the discovery of oil and gas in the Dutch, Norwegian, British and Danish offshore areas resulted, throughout the 1970s, in the emergence of a well-developed body of national oil and gas laws. They were mainly dealing with the licensing of access to exploration and development. Furthermore, much of what happened in the area of oil and gas law in the 1970s and 1980s is paralleled by the current emergence of post-privatization energy law in the area of network-dependent energy trade, i.e. electricity and gas energy law.

As mentioned earlier, until recently, energy-related issues at the international level were almost exclusively related to investment and were subject to international investment law, which in turn was mostly based on customary international law rules. What is happening now is the incorporation of national energy trade disciplines into international law, which in turn, justifies the emergence of international energy law. Accordingly, international trade law rules are now regarded as an important part of international energy law. In summary, the changing nature of the energy sector has resulted in increasing tradability of energy and internationalisation of energy

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[79] See Tomain, J. P., (1981) Energy Law, West Publishing Co., p.XIX.
[80] Ibid.

activities. Thus, international regulation should be seen as a logical response to the internationalisation of external effects of the energy activities.[81]

B. The Scope and Definition of International Energy Law

As with international economic law, international energy law is not limited to public international law rules. It includes both public and private aspects of law, i.e. economic regulation and commercial practices. Even at the national level, energy law contains a very wide range of legal issues and encompasses aspects of contracts, torts, property, constitutional law, administrative law, environmental law, international law and competition law.[82] The inclusion of "international law" as a relevant legal issue for the study of domestic energy law is due to the fact that as mentioned earlier, energy law is increasingly acquiring an international law dimension.[83] Obviously, the increasing attention to the environmental dimension of energy production and use has played an important role in "internationalisation" of energy law. Furthermore, the addition of "trade aspects" following the recent trend towards privatization and liberalization of the energy sector has accelerated the process of internationalisation of the energy sector.

In economic regulation part, international energy law comprises emerging common state practice of regulating the energy activities. However, it also comprises private aspects such as the *lex mercatoria* of international commercial practice developed

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[81] See Walde, supra note 78, p.6.
[82] Bradbrook, A. J. (1996) "Energy Law as an Academic Discipline", 14 Journal of Energy & Natural Resources Law, p.211.
[83] Ibid.

specifically for transactions in the energy industries.[84] It is worth noting that due to the fact that this study is being carried out in the context of international regulation of energy activities, it has a state-centred perspective, which necessitates focusing on economic regulation aspects of international energy law. This is in line with the function of the WTO system, which is essentially to regulate what governments can regulate.[85]

As regards the definition of energy law, it is submitted that it could be appropriately described as "the allocation of rights and duties concerning the exploitation of all energy resources between individuals, between individuals and the government, between governments and between states".[86] It is worth noting that Bradbrook defines "energy law" not "international energy law". However, other authors who write in the context of international energy law have quoted his definition.[87] In this regard, it should be considered that the above definition places emphasis on "the allocation of rights and duties", which can be done at the national or international level.

It is necessary to explore this technical definition in greater detail. An appropriate starting point is the meaning of "energy resources". This clearly includes the primary sources of both finite and non-finite energy reserves, such as oil, natural gas, coal, uranium, solar energy, wind energy, wave energy, hydro-electricity, biomass,

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[84] Walde, supra note 78, p.10.
[85] Jackson, J. (2001) "Regulation and Deregulation of International Trade: Introductory Remarks", in Ian Fletcher *et al* (eds.) Foundations and Perspectives of International Trade Law, p.75. It should be noted that WTO law is public law of international trade.
[86] Bradbrook, supra note 82, p.194.
[87] See Redgwell, Roggenkamp, Ronne, and del guayo (2001) Energy Law in Europe, p.7.

hydrogen, and geothermal energy. However, it is not limited to the primary sources and includes secondary sources such as electricity.[88]

The definition of energy law also refers to the "exploitation" of energy resources. Bradbrook defines exploitation as "the methods of turning energy resources into productive and profitable use" and reminds that these methods differ greatly between various resources. Thus, "the involvement of the law must be separately considered in respect of each resource".[89] He draws attention to the fact that in recent times international conventions have become increasingly important and among other things, he refers to the emergence of important legal issues under the GATT and the NAFTA in relation to international trade in energy.[90] This is in line with the point made by Professor Walde that international trade law disciplines have to be seen as an important and currently much more relevant part of international energy law.[91]

The definition also refers to the "allocation of rights and duties", which is designed to consider the balance of legal rights and duties between all interested parties in respect of each energy resource. Again, the appropriate balance will depend on the nature of the resource. For example, in the case of renewable energy resources such as solar and wind energy, the fundamental issue is access to the resource rather than the issue of ownership rights in the resource.[92] Also, even with regard to a particular resource, it is important to note that the nature of the industry strongly dictates the allocation of rights and duties. For example, the structure of electricity industry varies considerably from one jurisdiction to another. In jurisdictions with a

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[88] Bradbrook, loc. cit.
[89] Ibid., p.195.
[90] For a full discussion of this point see Chapter 3.
[91] Walde, supra note 78, p.8.
[92] Bradbrook, supra note 82, pp.197-98.

government monopoly, there are very few legal rights and duties and the enterprise is usually given carte blanche to do whatever it thinks fit, because of the assumption that it acts in the interest of the people. In such jurisdictions the only effective control over a government monopoly is political, whereas in jurisdictions where the industry is in private hands, an elaborate and comprehensive system of legal rights and duties should be established. Obviously, in this case there is no assumption of acting in public interests. Thus, the law intervenes to balance the rights of the industry operator with the state in general and individual electricity consumers in particular.[93]

C. The Sources of International Energy Law

The evolutionary process leading to the recognition of international energy law supports the need for a wide range of legal sources for this branch of international economic law. It is worth pointing out that Professor Jackson has already made the point that in the field of international economic law, the usual distinction between international and domestic rules and to treat them as *two totally separate fields is not* justifiable. "In fact, the domestic and international rules and legal institutions of economic affairs are inextricably intertwined. It is not possible to understand the real operation of either of these sets of rules in isolation from the other."[94]

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[93] Ibid., 200-201.

[94] Jackson, J. H. (1997) The World Trading System: Law and Policy of International Economic Relations, p.26. For instance, the evolution of the law of subsidies in the world trading system cannot be fully understood without familiarity with the domestic law of the United States. A note of caution here is required. It has been remarked that the conflation of domestic law with international law can serve to buttress unduly the significance of the role of certain national economies, particularly those which have pronounced national legislation in or affecting the economic sphere. See Qureshi, supra note 75, p.8.

This is particularly the case in the context of international energy law. Furthermore, European energy law, which is a "supranational law", is playing an increasingly important role in presenting a model for economic regulation of energy activities. Accordingly, a broad notion of the sources of international energy law is intended in this study, which includes both the formal and material (substantive) sources of law.

As regards the formal sources, Article 38 of the statute of the International Court of Justice is generally regarded as the authoritative statement of the sources of public international law, which includes international treaties, customary international law, and general principles of law as primary sources. At the same time, paragraph (d) of Article 38 refers to some of the material sources of law, namely judicial decisions and the teachings of the most highly qualified publicists, "as subsidiary means for the determination of rules of law".[95] Mention should also be made of the concept of "soft law", which has traditionally been of particular relevance in the international economic system.[96]

Professor Jackson remarks that, "when dealing with international economic law, one is dealing primarily with *treaties.*"[97] This is true in the area of international energy trade law. As discussed in greater detail in the following chapters, at the multilateral level and in the context of the WTO system, mention may be made of the GATT, which regulates trade in energy goods, and the GATS, which regulates trade in energy services. Bilateral and regional treaties with sector-specific rules on energy

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[95] See, for example, Brownlie, I. (1998) Principles of Public International Law, pp.3-4.
[96] The term "soft law" covers a wide range of international instruments, including non-binding instruments as well as formally binding instruments containing soft obligations. A well-known example of a non-binding instrument in the context of the GATS is the telecommunications Reference Paper, which will be discussed in Chapter 5. Designing an energy reference paper for harmonization of regulatory norms in the energy services sector has also been proposed (see Chapter 6).
[97] Jackson, supra note 94, p.27.

trade such as the Canada-United States Free Trade Agreement and the NAFTA agreement are also of particular importance. Mention should also be made of the Energy Charter Treaty, which exclusively deals with the energy sector and creates a GATT-based regime in its trade part.[98] In the context of the European Union, the Electricity and Gas Directives, which aim at liberalizing the electricity and gas sectors, are of particular importance.[99]

In the context of international investment law, due to the non-existence of a universal investment treaty, international energy investment law is still primarily based on customary international law. At the same time, the emergence of sectoral (the Energy Charter Treaty) and regional treaties (the NAFTA) that *inter alia*, create binding rules in the field of international energy investment law should not be overlooked. Furthermore, in the context of the GATS Agreement "trade" has a broad meaning, which also covers "investment".[100] It follows that in the context of trade in energy services, international energy investment law is based on treaty law. However, due to the flexible structure of the GATS, WTO members have a considerable leeway in making specific commitments.[101]

With regard to judicial decisions, despite the absence of the common law doctrine of judicial precedent, the ICJ has, in the interests of judicial consistency, referred to its previous decisions with increasing frequency.[102] The same observation can be made

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[98] See Chapter 3.
[99] See Chapter 4.
[100] See Chapter 5.
[101] See Chapter 5.
[102] See Jennings, R. and Watts, A. (eds.) (1992) Oppenheim's International Law, Ninth Edition, p.41. They went on to argue that, "judicial decision has become a most important factor in the development of international law, and the authority and persuasive power of judicial decisions may sometimes give them greater significance than they enjoy formally.", loc. cit.

in the context of the WTO. Furthermore, although the ICJ has so far found no occasion to rely on writings of international jurists[103], the Appellate Body in *Turkey-Textile* referred to this source in a footnote.[104]

IV. Energy Law in International Institutions

In contemporary international law the legal status of international organizations as subjects of international law, which means that they can have rights and responsibilities "in their own right" under international law, is widely accepted. In the area of international energy law, it is necessary to distinguish between "regulating institutions" such as OPEC and to some extent the International Energy Agency on the one hand, and "liberalizing mechanisms" such as the NAFTA and the Energy Charter Treaty, on the other hand. The focus of our discussion in this Chapter is on the regulating institutions. Liberalizing mechanisms, which are indeed GATT-based treaties, will be examined in Chapter 3 in the general context of trade in energy goods and the GATT regime.

A. The Organization of the Petroleum Exporting Countries (OPEC)

OPEC is a permanent, intergovernmental organization, created at the Baghdad Conference on September 10-14, 1960. All of its five founding members (Iran, Iraq,

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[103] See Ibid., pp.42-3.

[104] In that case, Turkey argued that the right under Article XXIV of the GATT to establish a customs union is an "autonomous right" not an "exception" from other GATT obligations. The Appellate Body considered Article XXIV as a possible "defence" and referred to a body of literature in a footnote, which has described Article XXIV as a defence. Particularly, the Appellate Body quoted from Professor John Jackson: "We note that legal scholars have long considered Article XXIV to be an "exception" or a possible "defence" to claims of violation of GATT provisions. An early treatise on GATT law stated: "[Article XXIV] establishes an *exception to GATT obligations* for regional arrangements that meet a series of detailed and complex criteria." (emphasis added) J. Jackson, *World Trade and the Law of GATT...*". See *Turkey – Restrictions on Imports of Textiles and Clothing products*, Report of the Appellate Body, WT/DS34/AB/R, 22 October 1999, footnote 13.

Kuwait, Saudi Arabia, and Venezuela) were important oil-producing developing countries and OPEC was meant to remain an international organization of major exporters. The following important oil-producing countries later joined them: Qatar (1961); Indonesia (1962); Libya (1962); United Arab Emirates (1967); Algeria (1969); Nigeria (1969); Ecuador (1973) and Gabon (1975). Further developments include losing the last two members, i.e. Ecuador in 1992 and Gabon in 1994, and the addition of Angola in 2007 as its 12th member.

OPEC is regarded as the most influential international organization in the field of energy activities. In terms of proven oil reserves, according to current estimates, close to 80% of the world's oil proven reserves (above 900 billion barrels) are located in OPEC countries and they currently account for close to 60% of world oil demand.[105] Furthermore, some other important oil-producing countries such as Russia and Mexico have been trying to maintain *de facto* cooperation with OPEC whilst benefiting from OPEC's market interventions as free riders.[106]

The creation of OPEC was a reaction to the dominance of the multinational oil companies and in particular, to their unilateral reduction of the "posted prices" for Middle East crude petroleum in 1959 and again in 1960. Accordingly, the first goal of OPEC was to restore the posted prices to their pre-August 1960 levels with the

[105] OPEC, *World Oil Outlook 2007*, p.5. According to the outlook, non-OPEC crude oil supply is expected to rise over the next 13 years, before beginning a gradual decline from around 2020.
[106] Mention also may be made of the Organization of Arab Petroleum Exporting Countries (OAPEC), which was formed after the June 1967 war. The founding members of the OAPEC were Kuwait, Libya, and Saudi Arabia. The OAPEC is not based on economic considerations, as evidenced by its role in the Arab oil embargo of 1973. See Chapter 3.

ultimate objective of controlling both the supply and the pricing of its member's petroleum.[107]

It has been remarked that OPEC's success in preventing multinational oil companies from reducing posted prices in the 1960s was overshadowed by sharp increases in crude oil prices in the 1970s and early 1980s. Among other objectives, however, the founding members declared that the organization's policies would take into account the interests of both producing and consuming countries.[108]

Commenting on the essence of the organization from the point of view of international trade, it has been remarked that while the GATT/WTO system is based on the theory of comparative advantage and encourages free trade, OPEC is the product of the belief that free trade in the petroleum sector only leads to unfettered and wasteful competition among its producers that is destructive to their mutual interests and government control is the only beneficial way of exploiting the sector.[109] In any event, OPEC's objective is to coordinate and unify petroleum policies among its members and Article 2 of the OPEC Statute declares that the principal aim of the organisation is to safeguard the collective and individual interests of its members and to ensure stabilization of international oil prices. More specifically, a landmark "Declaratory Statement of Petroleum Policy in Member Countries" adopted in 1968 made it clear that securing the greatest possible benefit for Member States is of particular importance to OPEC:

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[107] See Samii, M. V. (1995) "OPEC: Past, Present, and Future", in Siamack Shojai (ed.) The New Global Oil Market, p.85.
[108] Ibid.
[109] Desta, M. G. (2003) "The Organization of Petroleum Exporting Countries, the World Trade Organization, and Regional Trade Agreements", 37 Journal of World Trade, p.525.

"hydrocarbon resources in Member Countries are one of the principal sources of their revenues and foreign exchange earnings and, therefore, constitute the main basis for their economic development;....in order to ensure the exercise of permanent sovereignty over hydrocarbon resources, it is essential that their exploitation should be aimed at securing the greatest possible benefit for Member States;..."[110]

This is why OPEC is normally seen as a "cartel" not a regulator for liberalizing international trade in energy; particularly due to the fact that only producer states are members of the OPEC. In fact, OPEC did move closer to the image of a conventional cartel in the 1980s when it set production quotas for its members.[111] Furthermore, in April 2000, OPEC members reached a "gentlemen's agreement" to keep oil prices within a target band of 22-28 Dollars a barrel.[112] At the same time, as evidenced by the occasional collapses in world oil prices during the 1980s and 1990s, OPEC has lost its ability to "set" crude oil prices. In the words of one commentator, "OPEC, at best, could only attempt to regulate the oil market through supply policy."[113]

With these observations in mind, it shouldn't come as a surprise that OPEC's activities have not contributed towards the creation of trade disciplines for international energy law. The organization was founded on producing countries natural interest to increase revenue, which is still its *raison d'etre.* In fact, as discussed in greater detail in Chapter 3, from a purely legal point of view, some of the coordinated practices of OPEC members are inconsistent with WTO rules.

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[110] See "The changing role of the national and international oil company in a geopolitical context", Keynote address delivered by Dr. Hasan M. Qabazard, Director of Research Division at the OPEC Secretariat, to the Peter Ellis Jones Memorial Conference, London, 12 February 2007, available at www.opec.org.

[111] Walde, supra note 78, p.42.
[112] Desta, loc. cit.
[113] Samii, supra note 107, p.92.

This "market control" functioning of OPEC in favour of producers has led to several attempts, particularly in the United States, to use national legal processes to force OPEC and its members to abandon their market control practices.[114] These lawsuits against the organization have been on the basis of the violation of the United States antitrust law by OPEC. However, U.S. courts have dismissed the lawsuits on jurisdictional grounds either under the Foreign Sovereign Immunities Act or by invoking the act of state doctrine.[115]

More importantly, a number of legislative remedies have been considered in Congress in recent years. On June 23, 2000, Representative Gilman[116] introduced the Foreign Trust Busting Act (FTBA). The bill was aimed at applying legal pressure on OPEC and its members so as to force them to lessen their control over the international oil market. Enacting this bill would have eliminated barriers to the effective application of United States antitrust laws to foreign entities, including foreign cartels and foreign countries participating in such cartels, that have manipulated energy supplies or prices.[117] Furthermore, the "No Oil Producing and Exporting Cartel Act of 2000 (NOPEC), was introduced both in the Senate and in the House. The bill was, *inter alia*, aimed at amending the Sherman Act to make it illegal for any foreign state to act collectively with any other foreign state or person to limit the production of oil, natural gas or any other petroleum product; to set or maintain the price of these products or to take action in restraint of trade of oil,

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[114] Desta, loc. cit.
[115] Seidl-Hohenveldern, I. (1989) International Economic Law, Martin Nijhoff Publishers, pp.94-95.
[116] Chairman of the House International Relations Committee.
[117] See Udin, Andrew C. (2001) "Slaying Goliath: The Extraterritorial Application of U.S. Antitrust Law to OPEC", 50 American University Law Review, p.1367. In addition to FTBA, Representative Gilman introduced the International Energy Fair Pricing Act of 2000. This bill introduced a broad definition of "oil price-fixing", which covered "natural gas" as well. See Ibid., footnote 290.

natural gas or any other petroleum product.[118] It is worth mentioning that Congress did not enact any of these bills. Apart from the notorious extraterritoriality debate, as far as OPEC is concerned, their enactment would have been inconsistent with customary international law rules of state jurisdiction, which grant "absolute immunity" to international organizations.[119]

Mention should also be made of the Gas Exporting Countries' Forum (GECF), which was created in 2001 as an "informally structured group of some of the world's leading gas producers[120] aimed at representing and promoting their mutual interests". The GECF members control 73% of the world's gas reserves and 41% of production. They are holding annual meetings and due to the increasing importance of natural gas as the cleanest energy source, gas importers are worried that the GECF has the potential to evolve into a gas version of OPEC.[121] This possibility came a step closer in April 2007. At the 2007 forum meeting in Qatar, an expert panel was set up to study a number of issues including pricing mechanism. If this process leads to setting up a mechanism for pricing gas independently from oil, it will pave the way for the creation of a gas version of OPEC. At the same time, the fact that the WTO is approaching universal membership means that energy-exporting countries might face serious challenges within the WTO system.

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[118] Ibid., pp.1369-70.
[119] For example, Professor Seidl-Hohenveldern has pointed out that: "We have seen the reason for the change from absolute to restrictive State immunity was the increasing dissociation of the commercial activities of the State from *jure imperii* purposes. As far as international organizations are concerned, however, no comparable change has occurred." See Seidl-Hohenveldern, supra note 115, pp.115-16.
[120] Current members include: Algeria, Bolivia, Brunei, Egypt, Indonesia, Iran, Libya, Malaysia, Nigeria, Oman, Qatar, Russia, Trinidad and Tobago, the United Arab Emirates, and Venezuela.
[121] See Ehrman, Monika (2006) "Competition is a Sin: An Evaluation of the Formation and Effects of a Natural Gas OPEC", 27 Energy Law Journal, p.177-78.

B. The International Energy Agency (IEA)

Like OPEC, the IEA is one of the few international organizations dealing solely with energy. It was founded during the oil crisis of 1973-74, when oil prices were increased from $2.59 to $11.65 per barrel. At the time, OPEC for the first time came to be seen as a powerful cartel of oil-producing countries and responsible for such an increase. Thus, the idea behind the establishment of the IEA was in fact a reaction of the OECD countries to OPEC.[122] The Organization for Economic Co-operation and Development (OECD) is based in Paris and was formed by industrialized countries with market economies. The OECD grew out of the Organization for European Economic Co-operation (OEEC), which was set up 1947 with support from the United States and Canada to co-ordinate the Marshall plan for the reconstruction of Europe after World War II. The OECD took over from the OEEC in 1961 and currently has 30 members, including new members from Eastern Europe and South Korea and Mexico.

The establishment of the IEA by the OECD countries was based on a suggestion by the then Secretary of State of the United States, Henry Kissinger. In December 1973, in a speech before the pilgrimage society in London, he suggested the establishment of a new institutional co-operation based on solidarity. The negotiations on this issue concluded with the signing of the Agreement on an International Energy Program (IEP) on 18 November 1974. The IEP is regarded as an international treaty and is the constituent instrument of the IEA.[123] The IEA currently has 26 members. As with

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[122] Steeg, H. "The International Energy Agency (IEA)—Description and Practical Experiences: a Case Study", in Martha M. Roggenkamp *et al* Energy Law in Europe, Oxford University Press, p.156.

[123] Ibid.

OPEC, it is not a universal international organisation and its membership is limited to OECD countries.

Having this background in mind, it should not come as a surprise that the main objective of the establishment of the IEA has been energy security. What is meant by "energy security" is broad enough to include affordability aspects. In the words of the former Executive Director of the IEA, energy security means diversified supplies of energy being available at affordable prices to help economies to grow.[124] Having in mind that at the time OPEC was considered as the main driving force behind rising oil prices, this broad definition to include "affordability" should not come as a surprise. Thus, the IEA's basic purpose was to develop a system of collective energy security mirroring the collective producer power embodied, and then at its height, with OPEC.[125]

The main objectives of the IEA as mentioned in the Preamble of the IEP Agreement are summarized as follows:

- To maintain and improve systems for coping with oil supply disruptions;
- To promote rational energy policies in a global context through cooperative relations with non-Member countries, industry and international organizations;
- To operate a permanent information system on the international oil market;
- To improve the world's demand and supply structure by developing alternative energy sources and increasing the efficiency of energy use; and

[124] Ibid., p.157.
[125] Ibid.

- To assist in the integration of environment and energy policies.[126]

In the forefront of the creation of the IEA was the establishment of its emergency system based on an oil sharing mechanism. According to the IEP, the policy instruments are oil stocks to sustain consumption equal to at least ninety days of net oil imports and a programme of contingent oil-demand restraint measures. The oil-stocks commitment may also be satisfied by fuel-switching capacity and/or stand-by oil production. For the sharing system to be activated, emergency situations for the whole IEA group should occur, which means that the group must sustain or reasonably expect to sustain a reduction of the daily rate of its oil supplies at least by the equivalent of 7% or 12% of the average daily rate of its final consumption during the base period.[127]

The activation of the system means that surplus countries are required to provide for imports into deficit countries, with the involvement of the IEA-based oil companies who may have to be directed by member states to reorder supplies.[128] It should be noted that this oil-sharing emergency system is only aimed at dealing with physical shortages and is not meant to act as a market intervention mechanism like the commodity-type agreements or exchange-rate interventions.[129] The emergency system was finally activated in September 2005 in the immediate aftermath of Hurricane Katrina in the Gulf of Mexico, which caused serious disruptions.[130]

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[126] International Energy Agency, *IEA: an Overview*, www.iea.org.
[127] Steeg, supra note 122, p.161.
[128] Walde, supra note 78, pp.5152.
[129] Steeg, supra note 122, p.162.
[130] The collective action involved a combination of emergency response measures including the use of emergency stocks, increased indigenous production and demand restraint. In this regard, Nobuo Tanaka, Executive Director of the IEA has pointed out that the emergency system was effective and the markets calmed down. See IEA Press Release (07) 24.

Norway is the only member of the IEA that is not a member of its emergency system. This is due to the country's sensitivity about transferring sovereignty over its energy reserves to an international organisation.[131]

The last point to be made about the IEA is the fact that energy security is now no longer exclusively a matter of oil supply, but also of gas, coal, uranium and electricity supply. Thus, the IEA has gradually expanded the scope of its activities and is now fulfilling a function of centralised research and intelligence quite similar to the role of national energy institutes.[132] In this way, the IEA has become very much a research-based organization and has carried out various studies on energy market liberalization in recent years.[133]

V. Concluding Remarks

This chapter combines two separate lines of enquiry. First, from a factual point of view, it sets out the recent history of structural reform of the energy sector. As discussed throughout this chapter, regulatory reform in the electricity and downstream gas industries took place in the context of the deregulation movement. It was illustrated that the fact that these sectors are network-bound sectors with "natural monopoly" elements has inevitably made the design and implementation of market-based models a challenging task. Obviously, some unusual physical characteristics of electricity make the process of reform even more challenging. Furthermore, it was noted that closely connected with the deregulation movement has been the

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[131] Steeg, supra note 122, p.164.
[132] Walde, supra note 78, p.49.
[133] Furthermore, the IEA is the world leading source of energy statistics and publishes World Energy Outlook, Oil Market Report, and Country Reviews.

"outsourcing" trend. Accordingly, this chapter sets out in extensive detail how these developments have resulted in creating new trading opportunities for energy services. In fact, being well acquainted with the current market realities is the key to understand Part III of this study, namely the EU system of energy regulation and the ongoing energy services negotiations under the GATS.

Second, from a legal point of view, it was necessary to analyze the concept of international energy law as the legal framework within which the energy markets operate. Our discussion was aimed at providing the wider context for the WTO system, the EU regime, and other regional and sectoral arrangements relating to the energy sector. Furthermore, in the interest of completing setting the scene for the rest of study, the function of OPEC as the most influential international energy organization, as well as the evolving role of the International Energy Agency have been discussed.

PART II

Trade in Energy Goods

Chapter 3. Trade in Energy Goods under the GATT and GATT-Based Regimes

I. Introduction

In theory, the fact that the original GATT system was a "general economic institution"[1] means that in the area of international trade in goods[2], there should be no subject-matter limitations on the general applicability of the GATT. In practice, however, this was not the case and two strategic and politically sensitive sectors, namely agriculture and energy, were effectively exempt from the GATT system.[3]

In the case of agricultural trade, this was due to the widespread use of "waivers", which had been granted on the trade disciplines that had been agreed to govern the trade in goods since the early days of the functioning of the GATT.[4] In this regard, it has been remarked that one contributing factor was the fact that the Congress of the United States early in GATT history adopted legislation mandating certain import restrictions on some agricultural goods. In order to be able to implement the legislation without breaching its GATT obligations, in 1955 the U.S. government sought and obtained a GATT waiver.[5] This waiver had no time limit and gave the United States a legal cover for the statutory measures on agricultural imports. It has

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[1] See Jackson, John H. (1997) The World Trading System, p.32.
[2] Trade in services and investment were not covered by the original GATT system and as is well known, investment is still beyond the reach of the WTO system.
[3] To some extent, this was the case for textiles and clothing as well and quantitative restrictions were maintained under the Multifibre Arrangement (MFA). Reform of this regime was another important objective of the Uruguay Round and the Agreement on Textiles and clothing (ATC) contains specific rules regarding the gradual elimination of quantitative restrictions in this sector. See Jackson, supra note 1, p.58. As a result, By 1 January 2005, the sector was fully integrated into normal GATT rules.
[4] Kerr, W. A. and Hobbs, J. E. (2006) "Bilateralism – A Radical Shift in US Trade Policy: What Will It Mean for Agricultural Trade?", 40 Journal of World Trade, p.1051.
[5] Jackson, supra note 1, pp. 57-58.

been argued that this was a major factor that led other governments to refuse to comply with their GATT obligations regarding agriculture.[6]

As a result, long-term abuse of these legal as well as *de facto* waivers became commonplace and led to near-open trade warfare through competing subsidies between the United States and the European Union.[7] Professor Jackson sums up the resulting situation as follows:

> "So ineffective have GATT rules been with respect to trade in agricultural goods that some writers or practitioners have made the error of stating that the GATT does not legally apply to agricultural goods."[8]

Not surprisingly, one of the major objectives of the Uruguay Round was to secure the genuine subjection of agricultural goods trade to GATT rules. Needless to say, this implied, *inter alia*, the elimination of the waivers, which materialized with the conclusion of the Uruguay Round.[9] At the same time, some of the initial objectives, such as to completely phase out export subsidies and other subsidies on agricultural goods within a decade, largely failed. Overall, the results of the agricultural negotiations of the Uruguay Round and the creation of the Agreement on Agriculture have been described as a beginning of rule application in the agricultural sector.[10]

In the case of trade in energy, there was no specific legal basis for the aforementioned exemption. At the same time, it has frequently been stated that the past practice in GATT is exemplified by the unwritten, unacknowledged, but

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[6] Ibid., p.314.
[7] Kerr and Hobbs, supra note 3, loc. cit.
[8] Jackson, supra note 1, p. 57.
[9] Kerr and Hobbs, supra note 3, loc. cit.
[10] Jackson, supra note 1, p.314. In terms of concessions, however, as is evidenced by sector-specific groupings dedicated to agriculture such as G20 and G33, the battle is far from over and Kerr and Hobbs go on to say that agriculture could lead to the foundering of the Doha Round.

nonetheless real "gentlemen's agreement" that has largely kept "petroleum trade"[11] outside of the GATT system.[12] In order to understand the reasons behind this state of affairs it is necessary to briefly examine the world energy economy in the aftermath of the Second World War.

As noted earlier, until the 1980s, the vital importance of energy has naturally meant that the energy sector was too crucial to be left to be governed by the market principles. In fact, this view was a "conventional wisdom" of the post-war years. As a result, state-owned companies were deemed to be so natural that they were made statutory monopolies.[13] Thus, under the paradigm of state-ownership and monopoly, energy was a strictly national matter and there were nationally segregated electricity[14] and coal[15] industries.[16] At the same time, it should be recalled that until the mid-1950s there was little peaceful use of the atom. The nuclear electricity generating industry came after the drafting of the GATT.[17] As regards natural gas, it was considered mainly as a waste product, which unlucky oil drillers found when they were looking for oil.[18] So it was mainly "flared" at the wellheads.

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[11] Technically, the term "petroleum" means crude oil and natural gas. However, in the legal literature petroleum and oil are used interchangeably.

[12] See VanCrasstek, Craig "The Energy Trade Policy of the United States: Security, Export Promotion, and Environmental Protection", in *Trade Agreements, Petroleum and Energy Policies*, UNCTAD/ITCD/TSB/9, 2000, p.111.

[13] Helm, Dieter (2004) Energy, the State, and the Market, p.1.

[14] As is discussed in Chapter 7, most commentators and trade negotiators considered electricity as a service at the time. So it was beyond the reach of the GATT anyway.

[15] Even in late 1980s, only 10 percent of world coal production was traded internationally, see GATT, *Energy Products*, MTN.GNG / NG3 / W / 16, 27 September 1988, p.6.

[16] Walde, T. (2001) International Energy Law: Concepts, Context and Players, Provisional First Draft for Book on International Energy Law and Policy, www.dundee.ac.uk/cemlp/journal/html/vol9/Vol9-21.html, p.1.

[17] Zillman, Donald N. (1994) "Energy Trade and the National Security Exception to the GATT", 12 Journal of Energy and Natural Resources Law, p.118.

[18] Roberts, Paul (2005) The End of Oil: The Decline of the Petroleum Economy and the Rise of A New Energy Order, p.168. The domestic market for natural gas in the United States began to evolve in the 1920s. In Europe, post-war discoveries of natural gas led to its gradual adoption both as a heating fuel and also as a petrochemical feedstock. See Boyle, G. *et al* (2003) Energy Systems and Sustainability, p.235.

Our brief examination of the world energy economy at the time of the drafting of the GATT reveals that "energy trade" effectively was represented by "petroleum trade". It should be noted that during World War II the United States produced 75 percent of the world's oil and the Middle East a minuscule 5 percent. However, by 1947 it was known that the Middle East oil fields were the largest in the world, but they remained relatively underdeveloped.[19] As regards the market structure, it is worth emphasizing that in the post-World War II era the multilateral oil companies, notably the "seven sisters" were the most important international players. Their dominance at every level of the oil industry meant that they controlled the quantity of oil extracted and sold, to whom it was sold and at what price.[20] An UNCTAD study makes the following observations regarding the implications of this market structure for addressing the issue of petroleum trade in the context of the GATT:

> "At the time of the early GATT negotiations, most of the petroleum fields ... were under the control of transnational corporations owned mostly by residents of the United States, the United Kingdom, the Netherlands, and France. Because these countries wanted to avoid new tensions over the control of resources, it seems likely that they decided to exclude from the GATT negotiations the most strategic international commodity at that time. Their concern was that the political and strategic aspects of petroleum would have introduced an undesirable degree of "politicization" into the otherwise "technical" nature of the GATT."[21]

Furthermore, it should not be overlooked that the basis of the GATT is the concept of economic liberalism. This is in opposition to the concept of mercantilism, which

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[19] Copaken, Robert R. (1995) "Oil as a Strategic Commodity" in Siamack Shojai (ed.) The New Global Oil Market: Understanding Energy Issues in the World Economy, p.220. It is worth mentioning, however, that as early as 1948 the United States became a net oil importer.
[20] See "The changing role of the national and international oil company in a geopolitical context", Keynote address delivered by Dr. Hasan M. Qabazard, Director of Research Division at the OPEC Secretariat, to the Peter Ellis Jones Memorial Conference, London, 12 February 2007, available at www.opec.org.
[21] UNCTAD, *Trade Agreements, Petroleum and Energy Policies*, UNCTAD/ITCD/TSB/9, 2000, pp.14-15.

posits that a country gains through expanding exports and restricting imports.[22] The widespread use of protectionist measures, including quotas, during the interwar period (1920 to 1940) was thought to be a major cause of the disasters that led to World War II. The GATT drafters therefore addressed primarily border barriers to "imports", and in particular quotas and tariffs.[23] As a result, the world trading system has an obvious "producer-oriented" approach.[24] Therefore, since the main petroleum-exporting countries were not among the 23 original Contracting Parties, concerns relating to energy trade were not dealt with under the GATT. In any case, due to uneven distribution of energy sources across the world, quotas and tariffs have not imposed significant barriers to energy trade. In other words, in the area of energy trade, the real concern has been "access to supplies" rather than "market access".

Generally speaking, in practice this situation has often resulted in treating energy goods as falling within the GATT exceptions (particularly those relating to the conservation of exhaustible natural resources[25] or national security[26]) rather than the GATT rules.[27] At the same time, inevitably, fundamental changes in the world energy economy during the following decades did not leave the "gentlemen's agreement" intact. Obviously, international trade in energy is not limited to petroleum trade any more and needless to say, other energy products generally have far less strategic importance.

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[22] See MacDougall, David S. (1994) "Trade in Energy and Natural Resources: The Role of the GATT and Developing Countries", 12 Journal of Energy and Natural Resources Law, p.97.
[23] This was done through eliminating quotas (Article XI of the GATT) and negotiating the tariff concessions. See Jackson, supra note 1, Chapter 5.
[24] Jackson, J. (2002) "Sovereignty, subsidiary, and separation of powers: The high-wire balancing act of globalization", in Kennedy and Southwick (eds.) The Political Economy of International Trade Law, pp.30-31.
[25] Article XX (g)
[26] Article XXI
[27] See Owen Saunders, J. (1990) "Energy, Natural Resources and the Canada-United States Free Trade Agreement", 8 Journal of Energy and Natural Resources Law, p.7.

In this regard, mention should also be made of the transfer of the control of oil production from international oil companies to host countries.[28] This coupled with the accession of some of the petroleum-exporting countries to the GATT[29] played a role in the emergence of a new trend towards the application of normal GATT rules in some energy-related cases. In the sense that as discussed later in this Chapter, on a number of occasions, petroleum-exporting countries such as Mexico and Venezuela made use of GATT rules to protect their export interests.[30]

Another relatively recent trend has been the subjection of the energy sector to GATT-based regimes. This trend started with the inclusion of a separate chapter on "Energy"[31] in the Canada-United States Free Trade Agreement in the late 1980s and continued with the inclusion of a chapter on "Energy and Basic Petrochemicals"[32] in the NAFTA agreement in the early 1990s. The culmination of this trend was the Energy Charter Treaty (ECT), which was signed in 1994 and deals exclusively with energy-related issues.

Mention also should be made of the practice of "Natural Resources Protectionism" in the United States and its implications for the regulation of energy trade under the GATT/WTO system. As discussed in greater detail later in this Chapter, this practice, which started in the early 1980s, was an effort to protect mainly the interests of the

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[28] GATT, MTN.GNG / NG3 / W / 16, *Energy Products,* 27 September 1988, p.4.
[29] Indonesia (1950), Nigeria (1960), Kuwait (1963), Mexico (1986), and Venezuela (1990) became Contracting Parties to the GATT.
[30] See Section II of this Chapter. Obviously, this has not been a one-way road. As discussed in Section IV of this Chapter, the current wave of the WTO accession of petroleum-exporting countries has resulted in bringing their energy-related practices under the scrutiny of the GATT/WTO system.
[31] Chapter Nine.
[32] Chapter Six.

U.S. energy industry, which had lost their competitive advantage due to the significant expansion of the petrochemical industries in energy-rich countries.

Overall, although energy goods are in theory no different than any others and should in principle be subject to normal GATT rules, in practice their treatment under the GATT is far from clear. The aforementioned competing trends and their interactions are indeed sources of confusion in analysing the practice of the GATT/WTO system regarding trade in energy goods. Obviously, there is no simple answer to this question. However, discussing each trend in greater detail will provide us with a better understanding of this complicated jigsaw.

II. The Importance of the GATT Exceptions in the Context of Energy Trade

A. The National Security Exception

National security reasons normally explain the deviation from free market and free trade goals.[33] The use of national security-related restrictions on energy trade has been an instrument of the energy policy of the United States since the late 1950s. It has been remarked that the strategically vital nature of energy, and especially oil, has led on several occasions to the imposition of import restrictions by the United States, which have been imposed on a global or country-specific basis.[34]

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[33] See Zillman, supra note 17, p.121.

[34] VanCrasstek, supra note 12, p.118. Referring to the occasional tension between the economic and security dimensions in the context of the United States policy on trade in energy, he mentions that Adam Smith's remarks in his seminal book that ultimately "defence ... is of much more importance than opulence" is the key to understand the U.S. practice. See p. 105.

Historically, government and industry proposals for US energy trade policy have focused primarily on petroleum and have been usually motivated by national security concerns.[35] In most instances, proposals have involved imposing either tariffs or quotas on imported oil in order to protect or revive a flagging domestic energy industry. The best example was the Mandatory Oil Programme of 1959, which imposed quotas on all foreign oil (with exceptions of Canada and Mexico) and was justified on the ground of protecting national security.[36] As a result, the United States bought far less low-priced Middle Eastern oil than it could have purchased in a market free of government control at pre-1973 embargo prices.[37]

The original quota system was changed during the Nixon administration to a system of gradually increasing fees. This system culminated in 1975 in President Ford's attempt to impose tariffs that would rise to $2 and $3 a barrel on imported oil and was ultimately terminated as a result of Congressional opposition. However, new proposals for import fees on crude oil and petroleum products based upon stated concerns over national security continue to be introduced repeatedly in Congress.[38]

Furthermore, particularly during the 1980s and 1990s, politically motivated restrictions in the areas of trade and investment in energy were imposed against Iran,

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[35] A mixture of "economic" and/or "political" considerations can trigger the imposition of import restrictions. It has been remarked that energy imports are perceived to pose a threat to national security whenever (a) they reach a level that makes the United States vulnerable to disruptions in supply, or (b) they originate in states that are actively or potentially hostile to U.S. foreign economic policy interests. See VanCrasstek, Ibid., pp.109-110.

[36] Smith, Ernest E. and Cluchey, David P. (1994) "GATT, NAFTA and the Trade in Energy: A US Perspective", 12 Journal of Energy and National Resources Law, pp.43-44.

[37] Zillman, supra note 17, p.122.

[38] Smith and Cluchey, supra note 36, p.44. It is interesting to note that in a proposed Bill, the concept of " energy security tax" has been used in this context. As a typical articulation of national security concerns for imposing import restrictions on oil, smith and Clunchey quote from Professor Walt W Rostow: "The problem of maintaining US freedom of strategic action is perhaps the most fundamental national security argument for a national energy policy addressed to limiting imports and maintaining domestic production", Ibid., pp.46-47.

Iraq, and Libya for reasons of national security. However, because none of these countries were WTO members the relevant laws and regulations have not been challenged in the WTO.[39] For example, Executive Orders signed in 1995 and 1997 by President Clinton prohibit U.S. energy firms and their subsidiaries from conducting business in Iran. On March 15, 1995, President Clinton Issued Executive Order 12957, which "prohibited American entities from supervising, managing, guaranteeing, or financing projects related to the development of Iranian petroleum resources."[40] In addition, on May 6, 1995, President Clinton issued Executive order 12959 in order to impose comprehensive trade and investment sanctions on Iran, which imposes a country-specific import ban on crude oil.[41] A study by the U.S. International Trade Commission describes the trade sanctions mentioned above as one of the impediments to energy trade.[42]

The concept of national security, as an exception to GATT obligations, has been articulated in Article XXI of the GATT as follows:

> "Nothing in this Agreement shall be construed
> (a) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or
> (b) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
> (i) relating to fissionable materials or the materials from which they are derived;

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[39] See VanCrasstek, supra note 12, p.120. It is worth mentioning that sanctions against Libya and Iraq have been lifted now.
[40] See Connaughton, Anne Q. (2001) "Exporting to Special Destinations and Entities; Terrorist-Supporting and Embargoed Countries; Sanctioned Countries and Entities", 830 Practicing Law Institute, p.351
[41] Additionally, on August 19, 1997, President Clinton issued Executive Order 13059 to clarify the provisions of Executive Order 12959. Moreover, the Iran and Libya Sanctions Act of 1996, imposes sanctions on non-U.S. firms that invest more than $20 million annually in the Iranian crude petroleum and natural gas industries. Due to the fact that investment is not covered under the GATT, this Act has more relevance in the context of the GATS, which regulates investment through mode 3 (commercial presence).
[42] See U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization*, Publication 3582, March 2003, Chapter 4.

(ii) relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;

(iii) taken in time of war or other emergency in international relations; or

(c) to prevent any contracting party from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security."

This provision is in fact a carefully drafted system of exceptions related to the concept of national security, not one general and unitary security exception.[43] It should be noted that Article XXI (b) is the most important and controversial part of the system.[44] By using the terms "it considers necessary", its language clearly suggests the idea that countries themselves determining their own "essential security interests". It is true that the self-judging formulation has been used in Article XXI (a) as well; nevertheless, its scope of application is limited to the disclosure of information, whereas Article XXI (b) deals with the determination of "essential security interests" which is capable of a wide range of subjective interpretations.

On the other hand, it has been argued that a careful reading of Article XXI (b) confirms that the national security exception is not absolute. In fact, instead of granting an absolute right to any contracting party to take any action that it considers necessary for the protection of its essential interests, Article XXI (b) tries to incorporate some objective elements through three subparagraphs. Thus, the right is conditioned by additional requirements.[45] More precisely, subparagraphs (i) and (ii) refer to sensitive types of merchandise like nuclear materials and arms, whereas

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[43] Schloemann, H.L., Ohlhoff, S. (1999) " "Constitutionalization" and Dispute Settlement in the WTO: National Security as an Issue of Competence" 93 American Journal of International Law, p.431.

[44] Especially iii, see Bhala, R. (1998) "National Security and International Trade Law: What the GATT Says, and What the United States Does", 19 University of Pennsylvania Journal of International Economic Law, p.267; Matsushita, Schoenbaum, and Mavroidis (2003) The World Trade Organization: Law, Practice, and Policy, p.222; Jackson, supra note 1, p. 230.

[45] See Schloemann and Ohlhoff, supra note 43, p.442.

subparagraph (iii) refers to war or other emergency in international relations, which are certain types of extreme situations.[46] With regard to the latter condition, it has been argued that, the connection to the term "other emergency in international relations" to "war" suggests that the situation in question must exceed ordinary political tensions between states, if not actually involve some kind of military threat.[47]

In practice, however, no helpful guidance can be drawn from GATT dispute settlement practice relating to Article XXI. Professor Jackson believes that Article XI with its all-embracing wording provides a dangerous loophole to the obligations of GATT.[48] Interestingly, a few years after his critical analysis of Article XXI, the Swedish government took an extreme position that confirmed his concerns. In November 1975 Sweden introduced a quota on certain footwear. In its defence, Sweden cited what commentators refer to as the "spirit of Article XXI", and effectively claimed that maintenance of shoe production facilities qualifies for the security exception because an army must have shoes. Not surprisingly, this position was greeted with widespread scepticism and the quota was terminated by unilateral Swedish action 18 months later.[49]

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[46] Ibid.

[47] Ibid., p.446. Some authors have taken the same position by acknowledging that the phrase has a certain objective content and the term "emergency" requires a certain degree of seriousness as distinguished from routine tensions or disagreements. However, their additional observation is a source of confusion, which effectively dilutes their position: "But clearly "emergency" can refer to an economic, social, or political situation as well." See Matsushita et all, supra note 43, p.223.

[48] See Jackson, J. (1969) World Trade and the Law of the GATT, p.748. At the same time, and based on pragmatic considerations, he does not suggest imposing a higher degree of legal scrutiny: "Whether explicitly provided or not, most states would probably exercise exceptions such as those stated in Article XXI. Nor would a reporting requirement always be very helpful in this instance, since secrecy is considered an essential concomitant to national security."

[49] See Zillman, supra note 17, p.120; Jackson, supra note 1, p.230.

According to Professor Jackson, in addition to possible abuse for justifying politically motivated economic measures[50], Article XXI may also shelter some measures that, although ostensibly imposed for security reasons, may actually be protectionist-oriented. It is important to note that he mentions United States oil quotas in this context, which carry the label "security measure", but are widely considered to be protectionist.[51] The fact that oil-producing members of the GATT did not challenge United States oil quotas and tariffs seems to reinforce the concept of the "gentlemen's agreement" referred to above. It may well be the case that as discussed below, the involvement of oil-producing members of the GATT in the imposition of export quotas has played a role in reinforcing the tacit agreement.

B. The General Exceptions of Article XX

As with the national security exception, the general exceptions under Article XX can apply to any GATT obligation. Another common feature of the security exception and the general exceptions is that they do not need to be approved or even notified.[52] Obviously, the latter feature is against the principle of transparency and in practice has led to the creation of an unnecessary "grey area" in the GATT legal system. Professor Jackson describes this feature as a dangerous aspect of Article XX, which needs to be changed and a reporting requirement should be added to this Article.[53]

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[50] As another example, it is worth mentioning that national security was the major factor in the Regan administration's attempt to impede construction of the natural gas pipeline from the Soviet Union to Western Europe in the early 1980s. Ibid., pp.122-23. Also, in 1985, the U.S. president imposed an embargo on trade between the United States and Nicaragua, which was challenged by Nicaragua in GATT. The U.S. position in the GATT process was to rely on the self-judging nature of Article XXI. However, the Panel recalled that its terms of reference stipulated that it could not examine or judge the validity of the invocation of Article XXI: (b) (iii) by the United States. See L/6053, dated 13 October 1986 (unadopted), paras. 5.1 – 5.3, cited in Jackson, supra note 1, p.232.

[51] Jackson, supra note 48, p.752.

[52] Ibid., pp.537-38.

[53] Ibid., p.744.

In the context of energy trade, the relevance of the general exceptions stems from the fact that a unique feature of the energy sector in general, and oil trade in particular, is that the major causes of trade obstruction have traditionally come from the exporter's side. This is mainly due to the uneven distribution of most of primary energy sources across the world[54], with concentrations in just a few countries.[55] The best example of this situation is the practice of OPEC, which sets production quotas for its members in order to affect oil prices.

As regards politically motivated export restrictions, mention should be made of the measures adopted by the Organization of Arab Petroleum Exporting Countries (OAPEC) in the context of the Arab-Israeli conflict in 1973. With the outbreak of the military conflict between Arab and Israeli forces in early October, the Executive Committee of the Palestine Liberation Organization called for an immediate halt of the pumping of all Arab oil. Consequently, Arab Oil Ministers held a meeting in Kuwait on 17 October and decided that oil production would be reduced by not less than 5 percent of the September 1973 level of output in each country, with a similar reduction to be applied each successive month, until such time as total evacuation of Israeli forces from all Arab territory occupied during the June 1967 war is completed.[56]

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[54] Coal reserves, as noted earlier, are widely distributed between geographic regions.
[55] Desta, M. G. (2003) "The GATT/WTO System and International Trade in Petroleum: an Overview", 21 Journal of Energy and Natural Resources Law, p.386.
[56] See Shihata, Ibrahim F. I. (1974), "Destination Embargo of Arab Oil: Its Legality Under International Law", 68 American Journal of International Law, p.592.

More importantly, as was recommended by the meeting, the embargo of Arab oil to the United States[57] was imposed by Abu Dhabi, Libya, Saudi Arabia, Algeria, Kuwait, Qatar, and Oman. Shortly afterwards, the embargo was extended to cover the Netherlands for its alleged hostile attitude towards Arab rights.[58] The situation of Kuwait, which was a contacting party to the GATT since 1963, is of particular importance for our discussion.[59]

In turning now to the legal aspects of the above mentioned export restrictions, it should be noted that as with import quotas, export quotas are inconsistent with Article XI: 1 of the GATT on the general elimination of quantitative restrictions, which reads as follows:

"No prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other *measures*, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party."[60]

This wording was a step forward from the typical clause in United States bilateral treaties, which usually only required Most-Favoured-Nation treatment in the application of quotas. More importantly for the purpose of our discussion, the fact that the ban on "prohibitions or restrictions" applies to "exports" as well as imports is a departure from previous bilateral agreement practice.[61] It is also important to notice that unlike other GATT provisions, Article XI refers not to laws or regulations, but more broadly to measures.[62] This wording probably stems from the fact that in 1947

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[57] Before the embargo, total U.S. imports of Arab oil was equivalent to 28 percent of aggregate U.S. oil imports, ibid., p.595.
[58] Ibid., pp.594-95.
[59] Egypt was also a contracting party to the GATT at the time. However, its status as a belligerent state means that state practice in time of war should be considered in analysing the resort to measures of economic warfare, which is beyond the scope of the present study.
[60] Emphasis added.
[61] Jackson, supra note 48, pp.314-15.
[62] Van den Bossche, Peter (2005) The Law and Policy of the World Trade Organization, p.445.

most countries considered quotas as an administrative matter and applied them by executive action, whereas tariffs were historically viewed as a prerogative of legislatures.[63]

Generally speaking, export-related measures are far less regulated than import-related measures under the GATT. Professor Jackson points out that since the major thrust of national regulation on international trade is control of imports to protect domestic industry, the major thrust of international regulation is therefore on this type of national controls.[64] Article XI on qualitative restrictions and the Most-Favoured-Nation treatment obligation of Article I impose the most significant obligations on export-related measures under the GATT. At the same time, two significant GATT obligations do not apply to exports. First, there is no explicit provision for bindings or schedule concessions under Article II with respect to exports. Thus, countries can apply export taxes on products consistently with their GATT obligations.[65] Second, the national treatment obligation of the GATT does not apply to exports. As a result, exported products can be taxed or regulated in a manner different from those products that remain in the domestic market.[66]

Despite the fact that the GATT leaves more policy space for its members to impose export-related measures, it hardly needs pointing out that export quotas are inconsistent with Article XI. Traditionally, however, the imposition of export quotas by OPEC members and other oil-exporting countries has been perceived to be

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[63] See Jackson, supra note 48, p.314.
[64] Jackson, ibid., p.497.
[65] See Jackson, ibid., pp.498-99. However, export taxes should not be set at a level so as to amount to an export ban. In that case, the export tax (effectively export ban) will be inconsistent with Article XI, see Matsushita et al, supra note 44, pp.219-220.
[66] Jackson, ibid.

covered by the Article XX(g) of the GATT, which excepts from GATT obligations measures "relating to the conservation of exhaustible natural resources if such measure are made effective in conjunction with restrictions on domestic production or consumption". It is interesting to note that even the OAPEC production cuts of 1973 have been partly justified by invoking Article XX(g).[67]

In this regard, it is worth noting that when Mexico acceded to the GATT in 1986, it insisted that an additional paragraph to be added to the standard Protocol of Provisional Application (PPA), which effectively incorporated GATT Article XX(g). Thus, paragraph 5 of the Mexican PPA reads: "Mexico will exercise its sovereignty over natural resources, in accordance with the Political Constitution of Mexico. Mexico may maintain certain export restrictions related to the conservation of natural resources, particularly in the energy sector, on the basis of its social and development needs if those export restrictions are made effective in conjunction with restrictions on domestic production or consumption".[68]

On the other hand, Venezuela, which acceded to the GATT during the Uruguay Round, did not consider that any modification to its standard PPA was required in order to accommodate issues related to petroleum. In its view, paragraph 5 of the Mexican PPA did not change Mexico's rights and obligations under the GATT, due to the fact that the situation is already covered under GATT Article XX(g).[69] Thus, in view of this perception, Article XX(g) deserves close attention to examine the extent to which it can except quantitative export restrictions from the reach of Article XI.

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[67] Shihata, supra note 56, p.622. Not surprisingly, the national security exception was also mentioned by him as an additional ground to justify the oil cutback. As regards the OAPEC embargo, Shihata mentioned the national security exception as the sole justifying ground.
[68] UNCTAD, supra note 21, p.20.
[69] Ibid.

Article XX of the GATT, entitled "General Exceptions", sets out, in paragraphs (a) to (j), specific grounds of justification for measures which are otherwise inconsistent with provisions of the GATT. This Article allows for, *inter alia,* the protection of some important non-economic societal values such as public morals, public health, and the environment.[70] Article XX(g) is an environmental exception, which has been interpreted by the GATT Panels in the two *Tuna Dolphin* cases.[71] More Importantly, as is discussed below, a consistent theory of interpretation of Article XX(g) has been developed by the WTO Appellate Body in the *Reformulated Gasoline* case and the *Shrimp* case, which is maintained to have effectively overruled much of the reasoning in the *Tuna Dolphin* cases. [72]

The fact that Article XX contains 10 specific exception clauses, which are mainly import-related, might be used to introduce protectionist measures. Realizing the potential for abuse that existed in connection with the exceptions, the delegates at the 1946 London Conference decided to add an introductory clause to Article XX to help

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[70] Van den Bossche, supra not 62, p.598. Some economic societal values are also protected. In particular, paragraph (i) addresses measures involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry. This point will be taken up later in this chapter. Also, paragraph (h) excepts from GATT obligations measures undertaken in pursuance of obligations under any intergovernmental commodity agreement, which potentially includes OPEC. However, OPEC was not submitted to the GATT for approval and its submission to the WTO seems unlikely. Thus, paragraph (h) is not applicable. For a full discussion of the GATT exception for commodity agreements see Jackson, supra note 48, Chapter 27.

[71] *US-Tuna (Mexico)*, GATT Panel Report, *United States – Restrictions on Imports of Tuna (Tuna Dolphin I), 3 September 1991,* unadopted, BISD 39S/155; *US-Tuna (EEC)*, GATT Panel Report, *United States – Restrictions on Imports of Tuna (Tuna Dolphin II)*, 16 June 1994, unadopted, DS29/R

[72] Matsushita et al, supra note 44, p.451. However, a note of caution is required. The GATT Panels and the Appellate Body shared the position that there should exist a "policy" with regard to the conservation of a national resource, and that the measure at issue should be "primarily aimed at" implementing such a conservationist policy, namely they must have a substantial and genuine relationship (see the Appellate Body Report in the Shrimp case, infra, para. 141). The divergence was regarding the interpretation of the phrase "in conjunction with" in Article XX(g). According to the GATT Panels, the phrase "in conjunction with" should also be taken to mean "primarily aimed at" rendering "effective" the implementation of such a conservationist policy (see, for example, *Tuna Dolphin II*, para 5.22), whereas the Appellate Body rejected the "effects test" suggested by the GATT Panels and held that "in conjunction with" means "together with". (See the Appellate Body Report in the *Reformulated Gasoline* case, infra note 76, pp.20-21). Also see note 82.

guard against this abuse. [73] Thus, in examining specific grounds under Article XX attention must also be paid to the chapeau of Article XX, which reads as follows:

"Subject to requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures ..."

In effect, this clause contains a modified form of both the MFN obligation and the national treatment obligation.[74] With regard to the legal effect of the chapeau of Article XX, the Appellate body in the *Shrimp* case observed that the language of the chapeau makes clear that each of the exceptions in paragraphs (a) to (j) is a "limited and conditional exception" from the substantive obligations contained in the other provisions of the GATT.[75] According to the Appellate Body, the chapeau is an expression of the principle of good faith, with is a general principle of law as well as a general principle of international law.[76]

Furthermore, the Appellate Body in the *Reformulated Gasoline* case has clarified the practical applicability of the general exceptions of Article XX and the way the chapeau of Article XX complements individual exceptions. The Appellate Body observed that:

"In order that the justifying protection of Article XX may be extended to it, the measure at issue must not only come under one or another of the particular exceptions – paragraphs (a) to (j) – listed under Article XX; it must also satisfy the requirements imposed by the opening clauses of Article XX. The analysis is, in other words, two-tiered: first, provisional justification by reason of characterization of the measure under Article XX(g); second, further appraisal of the same measure under the introductory clauses of Article XX."[77]

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[73] Jackson, supra note 48, p.741. It was suggested by the United Kingdom.
[74] Ibid., p.743.
[75] Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products,* WT/DS58/AB/R, adopted 6 November 1998, para. 157.
[76] Ibid., para. 158. Also, in line with the above mentioned drafting history of the chapeau of Article XX, the Appellate body specifically referred to the doctrine of *abus de droit,* as one application of the principle of good faith.
[77] Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline,* WT/DS2/AB/R, p.22.

Accordingly, in order to examine the applicability of Article XX(g) to except export quotas imposed by OPEC members the starting point is examining whether the measure in question meets the requirements of paragraph (g) of Article XX. To meet the requirements of paragraph (g), the measure should be a measure "relating to" the "conservation of exhaustible natural resources", and should be "made effective in conjunction with restrictions on domestic production or consumption". Thus, the first step is to ascertain that the subject matter of the measure at issue is covered by the concept of "exhaustible natural resources".

It is not disputed that "petroleum" belongs to the category of exhaustible natural resources. In fact, the Appellate body in the *Shrimp* case defined this term broadly and pointed out that the concept of "natural resources" is not "static" in its content or reference, but is rather "evolutionary". Thus, in line with recent developments of environmental law and frequent references in modern international conventions and declarations, the concept embraces both living and non-living resources. With incidental reference to "petroleum", the Appellate Body observed that living resources are just as "finite" as petroleum, iron ore and other non-living resources.[78]

With regard to the second condition, namely that the measure at issue must be a measure "relating to" the conservation of exhaustible natural resources, helpful guidance can be drawn from GATT practice, which suggests "relating to" means "primary aimed at". Both the Panel and the Appellate Body in the *Reformulated Gasoline* case referred to GATT practice with approval. The Appellate Body stated:

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[78] *Shrimp* Appellate Report, supra note 75, paras. 128 – 130. The Appellate Body also pointed out that "exhaustible" natural resources and "renewable" natural resources are "not" mutually exclusive.

"All the participants and third participants in this appeal accept the propriety and applicability of the view of the *Herring and Salmon report and the Panel Report* that a measure must be "primarily aimed at" the conservation of exhaustible natural resources in order to fall within the scope of Article XX(g). Accordingly, we see no need to examine this point further, save, perhaps, to note that the phrase "primarily aimed at" is not itself treaty language and was not designed as a simple litmus test for inclusion or exclusion from Article XX(g)."[79]

Some commentators have expressed doubts as to whether the "primarily aimed at" interpretation of "relating to" is correct. According to them, certainly these phrases are not synonymous and the result would indeed seem to be an unwarranted amendment of Article XX.[80] This might explain the fact that the Appellate Body felt a note of caution was required in order to avoid a too restrictive interpretation of the term "relating to". In the *Reformulated Gasoline* case, the Appellate Body held that there was a substantial relationship and that the baseline establishment rules for the quality of gasoline were not merely incidentally or inadvertently aimed at the conservation of clean air as an exhaustible natural resource.[81] In the *Shrimp* case, the Appellate Body further clarified its position and held that the means and ends relationship between the measure in question (prohibition of the importation of shrimp) and the legitimate policy of conserving an exhaustible, and in fact, endangered species, was observably a "close and real" one.[82]

In turning now to the examination of the imposition of export quota by OPEC countries, it is important to notice that there is no environmental policy behind the imposition of petroleum quotas. In *Tuna Dolphin II,* the panel held that, "it had to be determined whether the *policy* in respect of which these provisions were invoked fell within the range of policies to conserve exhaustible natural resources".[83] The Panel

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[79] *Reformulated Gasoline* Appellate Report, supra note 77, pp.18-19.
[80] Matsushita et al, supra note 44, p.452.
[81] *Reformulated Gasoline* Appellate Report, supra note 77, p.19.
[82] *Shrimp* Appellate Report, supra note 75, para. 141.
[83] *Tune Dolphin II*, supra note 71, para. 5.12. Emphasis original.

in the *Reformulated Gasoline* case used the same articulation.[84] Furthermore, the Appellate Body in the *Shrimp* case referred to the existence of "the legitimate policy of conserving exhaustible natural resources".[85]

As noted earlier, the practice of OPEC, which sets production quotas for its members, is aimed at maintaining oil prices. Incidentally, this practice might lead to the conservation of an exhaustible natural resource. However, this does not due to the existence of a conservationist policy and obviously, there is no "close and real" relationship between the quota system and an environmental policy designed for implementing conservationist goals. Thus, this practice, which is inconsistent with Article XI, cannot be justified under Article XX(g).[86]

As regards the imposition of the oil cutback by OAPEC countries in the 1973, essentially the same observations can be made. The oil cutback was a politically motivated policy not an environmental policy designed for implementing conservationist goals. Thus, it was not a measure "relating to" the conservation of exhaustible natural resources within the meaning of Article XX(g).[87]

C. An Overview

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[84] *Reformulated Gasoline* Panel Report, WT/DS2/R, para. 6.35.
[85] *Shrimp* Appellate Report, supra note 75, para. 135.
[86] In this regard, Professor Walde briefly observes that OPEC export quotas are to maintain and increase price levels, and not "really" for conservation purposes. See Walde, supra note 16, p.47. As regards the third condition of Article XX(g), which requires the measure must be made effective in conjunction with restrictions on domestic production "or" consumption, due to the fact that export restrictions are normally achieved by means of production cuts, this condition can be met by OPEC members. The Appellate Body has addressed this condition in the context of import restrictions observing that, "if no restrictions on domestically-produced like products are imposed at all, and all limitations are placed upon imported products alone, the measure cannot be accepted as primarily or even substantially designed for implementing conservationist goals. The measure would simply be naked discrimination for protecting locally-produced goods". *Reformulated Gasoline* Appellate Report, supra note 77, p.21.
[87] As noted earlier, however, the practice was also justified by invoking the national security exception, which has already been discussed.

Considering the fact that a number of OPEC members are also members of the GATT/WTO system, some commentators have been surprised to find out that no formal GATT/WTO complaint has ever been lodged against oil-exporting WTO member countries that resort to supply restrictions. In this regard, although it has been acknowledged that political considerations might have played a role, in the final analysis, it has been remarked that, "it seems fairly straightforward that supply restrictive measures taken by petroleum-exporting countries, whether under the auspices of OPEC or unilaterally, could be justified under Article XX(g) as measures relating to the conservation of an exhaustible resource".[88]

As the above discussion illustrates, this argument is unlikely to be persuasive. The key to understand why some controversial practices in the area of energy trade have escaped the legal scrutiny of GATT law and remained unchallenged is the fact that, as is evidenced by our review of GATT practice and as a result of a tacit agreement, energy trade in general, and oil trade in particular, are not meant to be "fully integrated" into the world trading system. In the words of one commentator:

> "Both energy–importing and energy–exporting countries have employed trade restrictions in pursuit of their diplomatic or security objectives, and neither side has opted to use this institution's rules to challenge their trading partner's *major*[89] measures. More formally, this understanding is backed by the general exception that GATT Article XXI provides for measures taken in pursuit of a country's security interests".[90]

The reference to "major measures" by Professor VanCrasstek is of importance. In fact, not challenging the generous use of Article XX(g) and Article XXI exceptions

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[88] Desta, supra note 55, pp.395-397.
[89] Emphasis added.
[90] VanCrasstek, supra note 12,pp.111-12.

when it comes to "major measures" have been coupled over the past two decades with a tendency to challenge less important issues[91] in the energy sector under the GATT system. The latter practice is the subject of the next part of this chapter.

III. The Applicability of GATT Rules in the Context of Energy Trade

As noted earlier, the level of tariff protection afforded to crude oil is generally low. This is particularly the case in developed countries importing markets.[92] At the same time, in the case of some countries such as the United States and Japan tariffs on crude oil are unbound.[93] This practice gives them policy space to increase the level of their tariffs based on their energy policy goals.[94] Other energy-related goods are generally bound.

In any event, the GATT general obligations, most notably the MFN and national treatment obligations, are applicable regardless of tariff concessions. Thus, as the *Superfund* case shows, the fact that tariff rate on crude oil was unbound did not leave the imposition of discriminatory tax by the United States on petroleum unchallenged. This case and the *Reformulated Gasoline* case are briefly discussed below in order to illustrate the applicability of normal GATT rules in the energy sector, which is another relevant trend in the treatment of energy trade under the GATT.

A. The *Superfund* Case

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[91] Namely, normal trade issues such as environmental protectionism.
[92] For more details see GATT document, *Energy Products*, supra note 28, pp.23-25.
[93] See UNCTAD, supra note 21, p.26.
[94] In this regard, VanCrasstek remarks that the United States could impose a "much higher" tariff rate without violating the WTO rights of oil exporters. VanCrasstek, supra note 12, p.117.

The dispute arose as a result of the enactment of the "Superfund Act"[95] in the United States, which was signed into law on 17 October 1986. The Act reauthorized a programme to clean up hazardous waste sites and other related programmes and also provided financial mechanisms to pay for the cost of these programmes. In particular, the Superfund Act increased the tax on petroleum, which had been imposed at the rate of 0.79 cent per barrel for both domestic and imported products. The tax was increased to 8.2 cents per barrel for "crude oil received at a United States refinery" and 11.7 cents per barrel for "petroleum products entered into the United States for consumption, use or warehousing".[96]

Canada, the EEC, and Mexico challenged this tax discrimination stating that the United States imposed an internal tax on imported products in excess of the tax applied to like domestic products and therefore acted inconsistently with Article III: 2 of the GATT. They maintained, accordingly, that this violation nullified or impaired benefits accruing to them under the GATT. [97]

It is worth mentioning that Article XXIII: 1 of the GATT distinguishes between "violation complaints", "non-violation complaints", and "situation complaints". Based on the United States Reciprocal Trade Agreements practice, the focus of this Article is on the unusual notions of "nullification or impairment of any benefit accruing directly or indirectly under this Agreement", and on "the attainment of any objective of the Agreement being impeded", rather than on the traditional legal

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[95] The Superfund Amendments and Reauthorization Act of 1986.
[96] United States – Taxes on Petroleum and Certain Imported Substances, adopted 17 June 1987, BISD 34S/136, paras. 2.1-2.2. The Superfund Act also re-imposed a tax on feedstock chemicals and imposed a new tax on certain imported substances (derivatives of the chemicals subject to the tax), which were also examined by the Panel. The Panel held that they were not inconsistent with the GATT.
[97] Ibid., para. 3.1.1.

concepts of legality of acts.[98] However, GATT practice developed the doctrine of "*prima facie* nullification or impairment", which effectively established a link between legality of acts and the nullification or impairment of benefits.[99]

The relevant part of Article III: 2 of the GATT, in the context of the national treatment obligation, reads as follows: "The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products." Thus, the discriminatory nature of the tax on petroleum was clearly inconsistent with Article III: 2 of the GATT.

The United States admitted that the tax on petroleum was applied to imported products at a rate that was higher the rate applied to "like" domestic products. It argued, however, that the tax differential was so small that its effects were insignificant and thus, could not appreciably influence petroleum buyers' decisions.[100] Accordingly, the United States asked the Panel to find that the tax on petroleum did not have adverse trade effects and consequently did not nullify or impair benefits accruing to Canada, the EEC or Mexico under the GATT.[101]

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[98] Petersmann, E. U. "International Trade Law and the GATT/WTO Dispute Settlement System 1948 –1996: An Introduction", in E. U. Petersmann (ed.) International Trade Law and the GATT/WTO Dispute Settlement System, pp.36-37. Despite these three bases and two causes of action, which in theory accommodate six kinds of complaints under Article XXIII, in practice over 90 percent of the total of more than 250 disputes under Article XXIII have been "violation complaints" over "nullifications impairments of benefits accruing under the GATT", ibid.

[99] For a full discussion of this point, see Jackson, supra note 1, Chapter 4.

[100] *Superfund* Panel Report, supra note 96, para. 3.1.2. According to the United States, the tax difference was US $ 0.0002 per litre, which was insignificant when compared to day-to-day changes in contract prices for petroleum.

[101] Ibid., para. 3.1.3.

Canada, the EEC, and Mexico disagreed with the United States position. They maintained that as a matter of fact, the effects of the tax differential were not insignificant, particularly due to the fact that the United States was importing 4.8 million barrels of crude oil and petroleum products per day at the time. More importantly, they also maintained that the United States argument was not a valid legal defence. In this regard, they drew attention to the fact that the majority of members of the Working Party on Brazilian Internal Taxes held that, "whether or not damage was shown, taxes on imported products in excess of those on like domestic were prohibited by Article III", and that "the provisions of the first sentence of Article III, paragraph 2, were equally applicable whether imports from other contracting parties were substantial, small or non-existent".[102]

The United States further clarified its position by stating that it was not arguing that trade effects were relevant in determining whether or not a measure was consistent with Article III. It was arguing that it was established GATT practice that, even if a measure was considered *prima facie* to constitute a case of nullification or impairment under Article XXIII, the party against whom the action had been brought could "rebut" the allegation of nullification or impairment.[103]

Before turning to the examination of the above arguments by the Panel, it is worth mentioning that a number of oil-producing members of the GATT, including Indonesia, Kuwait, Nigeria, and Norway participated in the proceedings as third

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[102] Ibid., para. 3.1.4. Using a working party composed of nations as a means of dispute settlement was replaced in 1955 by referring disputes to panels of independent experts. See Jackson, supra note 1, pp.115-16.
[103] Ibid., para. 3.1.5.

parties and through their submissions supported the position of the complaining parties.[104]

In addressing the United States' central argument, the Panel noted that according to established GATT practice, described in the Annex to the 1979 Understanding on dispute settlement, "where there is an infringement of the obligations assumed under the General Agreement, the action is considered prima facie to constitute a case of nullification or impairment". Thus, the question is, whether the above-mentioned presumption is an "absolute" or a "rebuttable" presumption and, if rebuttable, whether a demonstration that a measure inconsistent with Article III: 2, first sentence, has no or insignificant effects on trade is a sufficient rebuttal.[105]

The Panel observed further that according to Article XXIII: 2, there are two decisions the CONTRACTING PARTIES may take regarding a claim of nullification or impairment. First, they may make recommendations or give a ruling under matter, which was covered by paragraph 4 of the Annex to the 1979 Understanding on dispute settlement. There was no reference in this paragraph to the impact of the inconsistence measure. Second, they may make decisions to authorize a suspension of concessions or other obligations, which was covered by paragraph 5, containing a reference to a "presumption" that a breach of the rules has an "adverse impact" on other contracting parties, and the possibility of a rebuttal. Thus, the Panel concluded that, "the impact of a measure inconsistent with the General Agreement is

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[104] Ibid., paras 4.1-4.6.
[105] Ibid., para. 5.1.3.

not relevant for a determination of nullification or impairment by the CONTRACTING PARTIES."[106]

Furthermore, after reviewing the relevant case law, the Panel concluded that while the CONTRACTING PARTIES had not explicitly decided whether the presumption that illegal measures cause nullification or impairment could be rebutted, the presumption had in practice operated as an "irrefutable" presumption.[107] The Panel then assumed, *arguendo*, that the presumption could be rebuttable and examined whether a demonstration that the trade effects of the tax differential were insignificant would constitute a proof that the benefits accruing to the complaining parties under Article III: 2, first sentence, had not been nullified or impaired.[108]

In effect, therefore, the question was, what types of benefits Article III: 2 is protecting? In this regard, the Panel noted that Article III: 2 protects competitive conditions for imported products in relation to domestic products and unlike some other provisions in the GATT, it does not refer to "trade effects". Referring to the quoted ruling of the Working Party on the "Brazilian Internal Taxes", the Panel observed that the benefits under Article III: 2 accrue independent of whether there is a negotiated expectation of market access or not. Accordingly, a change in the competitive relationship between imported and domestic products contrary to that provision must be regarded *ipso facto* as a nullification or impairment of benefits accruing under the GATT.[109]

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[106] Ibid., para. 5.1.6.
[107] Ibid., paras. 5.1.6-7.
[108] Ibid., para. 5.1.8.
[109] Ibid., para. 5.1.9.

The Panel therefore held that the tax on petroleum was inconsistent with the national treatment obligation of the United States and consequently constituted a *prima facie* case of nullification and impairment.[110] The United States accepted the ruling, which made it possible for the Panel Report to be adopted. As a result, Congress equalised the tax on imported and domestic oil at 9.7 cents per barrel.[111]

B. The *Reformulated Gasoline* Case

The dispute arose from the following facts. As a result amending the Clean Air Act[112] (CAA) in 1990, Congress directed the Environmental Protection Agency (EPA) to promulgate new regulations on the composition and emissions effects of gasoline in order to improve air quality in most polluted areas of the country. The CAA directed EPA to determine the quality of 1990 gasoline, to which reformulated and conventional gasoline would be compared in the future. These determinations were referred to as "baselines".[113]

Against this background, EPA's Gasoline Role established different baselines for domestic and imported gasoline. Thus, from 1 January 1995, the Gasoline Rule permitted only gasoline of a specified cleanliness (reformulated gasoline) to be sold in areas of high air pollution. In other areas, only gasoline no dirtier than sold in the base year of 1990 (conventional gasoline) can be sold. The Gasoline Rule applied to refiners, blenders and importers of gasoline. However, the Gasoline Rule allowed refiners of domestic gasoline to establish individual refinery baselines, whereas

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[110] Ibid., para. 5.1.12.
[111] Smith and Cluchey, supra note 36, p.45.
[112] The Act, originally enacted in 1963, aims at preventing and controlling air pollution in the United States.
[113] *Reformulated Gasoline* Panel Report, supra note 84, paras. 2.1, 2.5.

importers effectively were not allowed to establish an individual baseline and were covered by a statutory baseline.[114]

Accordingly, Venezuela (23 January 1995) and Brazil (10 April 1995) brought an action against the United States under the WTO dispute settlement system. They claimed, *inter alia,* that the Gasoline Rule was inconsistent with Article III: 1 and 4 of the GATT and violated the MFN obligation of Article I. The United States rejected these claims. It also argued that the Gasoline Rule can be justified under the exceptions contained in Article XX, paragraphs (b), (d), and (g).[115]

The following discussion will be centred on the forth paragraph of Article III of the GATT, to serve as another illustrative example of the application of the national treatment obligation in the context of trade in energy goods. Article III: 4 deals with "internal regulation" and reads in relevant part as follows:

> "The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use."

According to Venezuela and Brazil, imported gasoline was "like" domestic gasoline, but received treatment less favourable because importing gasoline was subject to more demanding quality requirements. The United Stated did not argue that they were not like *per se,* and the Panel, referring to the well established practice on this issue, noted that chemically-identical imported and domestic gasoline by definition have exactly the same physical characteristics, end-uses, tariff classification, and were perfectly substitutable. The Panel held therefore that they were like products.

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[114] See ibid., paras. 2.1-2.13 for a detailed description of the factual aspects of the dispute.
[115] Ibid., para. 6.4. Venezuela also claimed in the alternative that the Gasoline Rule nullified and impaired benefits under the non-violation provisions of Article XXIII: 1(b).

In the context of Article III: 4, the Unites States' main argument was that the requirements of Article III: 4 are met because imported gasoline was treated similarly to gasoline from similarly situated domestic parties, i.e. domestic refiners with limited 1990 operations and blenders. Furthermore, the U.S. argued that "on the whole", the treatment accorded to gasoline imported under a statutory baseline was no less favourable than that accorded to domestic gasoline under individual baselines.

The Panel noted that the distinction in the Gasoline Rule between refiners on the one hand, and importers and blenders on the other, which affected the treatment of imported gasoline, was related to certain differences in the characteristics of refiners, blenders and importers, and the nature of the data held by them. However, Article III: 4 deals with the treatment to be accorded to like products, and its wording does not allow less favourable treatment dependent on the characteristics of the producer and the nature of the data held by it.[116] The Panel further recalled that under Article III: 4 less favourable treatment of particular imported products in some instances could not be balanced by more favourable treatment of other imported products in other instances. Furthermore, the Panel observed that, even from the point of view of imported gasoline as a whole, considering the fact that importers of gasoline had to adapt to an assigned average standard not linked to the particular gasoline imported, treatment was generally less favourable.[117]

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[116] Ibid., paras. 6.9-11.
[117] Ibid., paras. 6.14-15.

In the light of the above considerations, the Panel held that baseline establishment methods of the Gasoline Rule were not consistent with Article III: 4 of the GATT.[118] This was the first case under the WTO to go all the way through the appellate procedure. However, the Appellate body did not address this finding of the Panel, since the Panel's findings on Article III: 4 were not appealed.[119]

IV. The Subjection of Energy Trade to GATT-Based Regimes

As noted earlier, another relatively recent trend in the area of international trade in energy has been the specific inclusion of energy trade in a number of international trade liberalization treaties. This trend started with the inclusion of a specific chapter on energy in the Canada-United states Free Trade Agreement in the late 1980s, followed by the inclusion of the energy chapter in the NAFTA and the creation of the Energy Charter Treaty as the first energy-specific treaty in the 1990s. The importance of this trend lies in setting a much-needed precedent as to the subjection of energy trade to GATT-based and even GATT-plus regimes.

A. The Canada-United States Free Trade Agreement

The Canada United-States Free Trade Agreement (CUSFTA) came into effect in January 1989. According to Article 101, the Agreement establishes a free trade area

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[118] Ibid., para. 8.1. The Panel also held that this inconsistency could not be justified under paragraphs (b), (d), and (g) of Article XX.

[119] The scope of the United States' appeal was limited to the Panel's finding on Article XX(g), which was successful and the Appellate Body held that the Panel erred in law in its conclusion that the baseline establishment methods of the Gasoline Rule did not fall within the scope of Article XX(g). However, it held that the baseline establishment methods still failed to met the requirements of the chapeau of Article XX and accordingly were not justified by Article XX of the GATT. See the *Reformulated Gasoline* Appellate Report, supra note 77.

between Canada and the United States, consistent with Article XXIV of the GATT. In terms of coverage, the 20-chapter Agreement has a broad scope and it coverage extends, *inter alia,* to service, investment, agriculture, government procurement, financial services, and energy.

Part Two of the CUSFTA deals with trade in goods, which includes Chapter 9 on energy. Chapter 4, entitled "Border Measures", deals generally with trade in goods. The more general provisions of Chapter 9 are mainly repeated in Chapter 4 in the context of trade in energy goods. This has been designed to stress that energy goods are essentially like other commodities, and should, by and large, be subject to normal trade disciplines.[120] It has been remarked that the centrality of energy concerns to the Agreement is particularly reflected in the fact that the chapter on energy issues was negotiated first, with its structure then being copied into the general chapter.[121]

The purpose behind creating a separate energy chapter, however, goes well beyond mere affirmation of the applicability of GATT rules. In the context of import and export restrictions, Article 902(1) provides that the Parties "affirm" their respective rights and obligations under the GATT. The Article then reads in paragraph (2) as follows:

> "The Parties understand that the GATT rights and obligations affirmed in paragraph 1 prohibit, in any circumstances in which any other form of quantitative restriction is prohibited, minimum export-price requirements and, ...minimum import-price requirements."

The importance of this effectively restrictive interpretation of Article XI: 1 of the GATT is that it could be taken into account in the interpretation of contractual

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[120] Owen Saunders, supra note 27, pp.7-8. The Agreement includes electricity explicitly in its coverage and in Article 901 (2)(a) classifies it as an energy good.
[121] Owen Saunders, J (1994) "GATT, NAFTA and North American Energy Trade: A Canadian Perspective" 12 Journal of Energy and National Resources Law, p.8.

relationship between the parties in the GATT/WTO system. With regard to its possible wider interpretative impact beyond the relationship between Canada and the United States, it is worth noting that according to paragraph 3(a) of Article 31 of the Vienna Convention on the Law of Treaties, which codifies customary international law on treaty interpretation, "any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions" shall be taken into account together with the context in its interpretation. However, in order for a subsequent agreement to be covered by Article 31: 3(a) it should be agreed upon by "the parties as a whole".[122]

Furthermore, Article 903 prohibits the imposition of discriminatory export taxes, which as noted earlier is not prohibited under the GATT:

> "Neither Party shall maintain or introduce any tax, duty or charge on the export of any energy good to the territory of the other Party, or charge is also maintained or introduced on such energy good when destined for domestic consumption."

This provision would have made impossible two key elements of Canadian energy policy in the 1970s and early 1980s: the oil export charge and the federal export tax on natural gas and gas liquids.[123] More importantly, the Agreement significantly reduces the possibility of the invocation of on the one hand the national security exception and, on the other hand, the general exceptions that might be used to justify

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[122] The commentary of the International Law Commission with regard to the subsequent practice reads as follows: "The text provisionally adopted in 1964 spoke of a practice which "establishes the understanding of all the parties". By omitting the word "all" the Commission did not intend to change the rule. It considered that the phrase "the understanding of the parties" necessarily means "the parties as a whole". It omitted the word "all" merely to avoid any possible misconception that every party must individually have engaged in the practice where it suffices that it should have accepted the practice." See Year Book of International Law Commission, 1966, II, p.222. By the same token, the phrase "any subsequent agreement between the parties" in Article 31: 3(a) means "the parties as a whole". For a similar interpretation see Qureshi, A. H. (2006) Interpreting WTO Agreement: Problems and Perspectives, p.43. Also see *EC – Biotech* Panel Reports, WT/DS291-3/R, 29 September 2006, para. 4.688.

[123] Owen Saunders, supra note 27, p.9.

the imposition of export restrictions. Article 904, entitled "Other Export Measures", stipulates that either party maintaining or introducing a restriction otherwise justified under the provisions of Articles XI: 2(a)[124] and XX(g), (i) and (j) of the GATT with respect to the export of an energy good to the other party will be allowed to do that only if:

a. the restriction does not reduce the proportion of the total exports of a specific energy good to the other party relative to the total supply of that good of the party maintaining restriction;

b. the party does not impose a higher price for exports than domestic prices; and

c. the restriction does not require the disruption of normal channels of supply to the other party or normal proportions among specific energy goods supplied to the other party.[125]

The additional requirements are designed to meet the security of supply concerns of the United States, both in terms of physical supplies and in terms of protecting against using export restrictions as a means of increasing prices. In return, Canadian concerns regarding the imposition of import restrictions by the United States invoking the national security concerns have been met by adding objective elements to the national security exception of the Agreement. In this regard, Article 907, entitled "National Security Measures", provides that:

"Neither Party shall maintain or introduce a measure restricting imports of an energy good from, or exports of an energy good to, the other Party under Article XXI of the GATT or under Article 2003 (National Security) of this Agreement, except to the extent necessary to:
(b) respond to a situation of armed conflict involving the Party taking the measure"

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[124] A specific exception to the general prohibition of quantitative restrictions that allows temporary export prohibitions or restrictions to prevent or relieve critical shortages of essential products.
[125] This restricted version was also copied into the general chapter (Article 409). However, the limited version of the national security exception is exclusively applicable to trade in energy goods.

Accordingly, with the omission of reference to "other emergency in international relations" as a justifying factor, the wording of Article 907 is a significant improvement in eliminating the potential for broad interpretation of this phrase. This, coupled with not using the self-judging wording of Article XXI of the GATT can significantly reduce the potential for abuse. From a Canadian point of view, this improved version of the national security clause would exclude most of the potential objectionable use of the exception by the United States.[126]

B. The North American Free Trade Agreement (NAFTA)

The CUSFTA was the beginning of a larger regional trading bloc. On 17 December 1992, the NAFTA was signed by the heads of government of Canada, Mexico and the United States. It came into effect in January 1994 and effectively covers all of the issues already covered by the CUSFTA and most notably, energy. Accordingly, the United States and Canada suspended the application of the CUSFTA after five years and it was effectively replaced by the NAFTA.[127]

As with Chapter 9 of the CUSFTA, Chapter 6 of the NAFTA, entitled "Energy and Basic Petrochemicals" deals with trade in energy goods, including electricity. It also covers basic petrochemicals. Obviously, for the United States and Canada, the inclusion of an energy chapter in the NAFTA was not a controversial issue. In the context of the CUSFTA, they had already found a formula to reconcile their energy-related concerns. For the United States, as an energy importer, the primary interest was in assuring a reliable supply of energy and for Canada the interest was in

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[126] Owen Saunders, supra note 27, pp.9-10.
[127] See Smith and Cluchey, supra note 36, p.30.

assuring an unimpeded source of energy demand. Thus, the energy chapter of the CUSFTA accommodated both interests by limiting the scope of the general and security exceptions.[128]

On the face of it, the same formula (mutual self-imposed limitations) sounds to be acceptable for Mexico as a major exporter of energy to the United States. However, as discussed in greater detail below, Mexico is to a large extent excluded from the GATT-plus part of energy-related obligations under the NAFTA. It also managed to protect its electricity and gas sectors. Accordingly, the question is, what distinguishes Mexico from Canada? Which considerations were taken into account by the Mexican government in adopting these positions?

The negotiating history of the NAFTA reveals that for domestic political reasons, Mexico did not want to include energy in NAFTA negotiations and it initially proposed an outright exemption of energy and basic petrochemicals from NAFTA negotiations, whereas the United States was insisting on establishing a working group on energy.[129] Among other arguments, the United States referred to Article XXIV of the GATT, which requires that "substantially all the trade" must be liberalized within a free trade area like NAFTA.[130]

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[128] See Owen Saunders, supra note 121, p.8.
[129] Ortiz Mena L. N., Antonio (2006) "Getting to "NO": Defending against demands in NAFTA energy negotiations" in John S. Odell (ed.) Negotiating Trade: Developing Countries in the WTO and NAFTA, p.179. Not surprisingly, NAFTA energy negotiations were largely of a bilateral nature and carried out mainly between the United States and Mexico.
[130] See Maxfield, S. and Shapiro, A. (1998) "Assessing the NAFTA Negotiations: U.S. – Mexican Debate and Compromise on Tariff and Nontariff Issues", in Carol Wise (ed.) The Post-NAFTA Political Economy: Mexico and the Western Hemisphere, p.98.

Considering the fact that as already noted, Mexico insisted on the incorporation of the exhaustible national resources exception (Article XX(g) of the GATT) into its Protocol of Accession when it acceded to the GATT in 1986, its opposition to the regulation of energy trade under the NAFTA is understandable. In fact, since the 1938 nationalization of the oil industry in Mexico, oil has become a symbol of national sovereignty.[131] Article 27 of the Mexican Constitution provides that the nation shall own all natural resources in the subsoil, "the ownership by the Nation is inalienable... In the case of *petroleum and hydrocarbons, neither concessions nor contracts shall be granted,...*".[132]

While Mexico in the end acquiesced to the establishment of a working group on energy, its negotiating strategy was based on strict adherence to five "Nos" in energy-related issues, which can be summarized as follows:

"(i) There will be no foreign investment in the exploration, exploitation and refining of oil in Mexico. These areas are to remain under state control.
(ii) There will be no risk-sharing contracts with payment in oil reserves.
(iii) There will be no energy supply commitments.
(iv) There will be no liberalization of gas imports; all imports must be done through PEMEX.[133]
(v) There will be no foreign gasoline outlets."[134]

From a legal point of view, the Mexican position was based on the Constitutional restrictions and the fact that its Constitution would not be amended to accommodate NAFTA obligations. In reality, however, these objectives were not fully covered by the restrictions imposed by Articles 25, 27, and 28 of the Mexican Constitution. More importantly, there was no constitutional prohibition on making energy supply

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[131] Ortiz Mena L. N., supra note 129, p.187.
[132] Jimenez, J. (2000) "The Great Impact of NAFTA in the Energy Sector: a Mexican Perspective", 18 Journal of Energy & Natural Resources Law, pp.167-68. Emphasis is original.
[133] PEMEX is the Mexican state-owned oil company.
[134] Ortiz Mena L. N. , supra note 129, p.180.

commitments and the decision was made based on political sensitivity of the issue for the Mexican government.[135]

Not surprisingly, the United States was not fully convinced that the Mexican government had no policy space for liberalizing the energy sector and tried hard to engage Mexico in making trade and investment liberalizing commitments in the energy sector. Accordingly, it is generally agreed that this issue was the most sensitive part of the negotiations.[136] In light of the negotiating history of the Agreement, it is not surprising that Chapter 6 starts by mentioning the principle that the parties confirm their "full respect for their Constitutions".[137]

In the area of energy trade, the final result was the exemption of Mexico from most of GATT-plus obligations under the NAFTA. Thus, Annex 605 provides that Article 605 (incorporating Article 904 of the CUSFTA, which limits the use of the general exceptions of Article XX of the GATT) shall not apply as between the other parties and Mexico. Furthermore, Annex 607 provides that Article 607 (containing the modified version of the national security exception) shall impose no obligations and confer no rights on Mexico. So Mexico will be subject to the general national security exception contained in Article 2120 of the NAFTA, which incorporates the security exception of the GATT.

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[135] Ibid., p.183.

[136] See, for example, Maxfield and Shapiro, supra note 130, p.8; Ortiz Mena L. N., supra note 129, pp.185-192. He mentions that energy was one of the issues not settled until the final stretch.

[137] Annex 602. 3 provides that: "The Mexican State reserves to itself the following strategic activities, including investment in such activities and the provision of services in such activities: a) exportation and exploitation of crude oil and natural gas; refining or processing of crude oil and natural gas, and production of artificial gas; basic petrochemicals and their feedstocks and pipelines; b) foreign trade; transportation, storage and distribution, up to and including the first hand sales of the following goods: (i) crude oil, (ii) natural and artificial gas, (iii) goods covered by this Chapter obtained from the refining or processing of crude oil and natural gas, and (iv) basic petrochemicals;...". Maintaining the same position by Mexico would significantly affect making energy-related commitments under the GATS, particularly regarding oil and gas field services.

At the same time, Mexico joined Canada and the United States in agreeing not to impose discriminatory export taxes and duties, as reflected in Article 604, which as noted earlier, is an additional commitment compared to GATT obligations. Furthermore, Mexico made no reservation regarding paragraph 2 of Article 602, which by way of clarification, stipulates that GATT Article XI prohibits minimum or maximum export price or import price requirements.

With regard to electricity, which was protected by Article 27 of the Mexican Constitution, Mexico included in its reservations "the supply of electricity as a public service", including generation, transmission, transformation, distribution and sale.[138] The reservation, however, allows a limited foreign participation in electricity generation through establishing independent power producers. At the same time, these independent producers are not allowed to compete with the CFE[139] to reach its end-use consumers and should sell electricity to the CFE.[140]

It is worth mentioning that Chapter 10 on government procurement created significant new obligations for Mexico, which was not a party to the GATT Procurement Code. The implications were particularly important for energy services. Since the energy sector in neither Canada nor the United States was controlled by state-owned companies such as PEMEX and the CFE, the government procurement obligations of the NAFTA had no significant impact on the energy sectors of these

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[138] See Article 602.3(c).
[139] CFE (Comision Federal de Electricidad) is the Mexican state-owned electricity company.
[140] Jimenez, J., supra note 132, pp.169-70. He mentions that despite its reservations, the Mexican government in recent years has implemented new liberalization programmes in the electricity and gas sectors. He goes on to say: "The reservation as to transportation, distribution, and storage of natural gas became moot with the opening of the sector to national and foreign private investment".

countries.[141] Accordingly, as part of the negotiation to open up PEMEX and the CFE, Mexico sought the right to have a minimum scale of operation and an adequate transitional period.[142] As a result, among other concessions, the NAFTA provided Mexico with a 10-year transitional period.[143]

C. The Energy Charter Treaty

The Energy Charter Treaty (ECT) was signed in 17 December 1994 in Lisbon by a large number of the OECD, East European and Commonwealth of Independent States (CIS) countries. As already noted, it is a unique multilateral treaty in the sense that its scope is limited to the energy sector and among other things, establishes within that sector binding investment and particularly trade disciplines. The ECT is an important component of the trend towards the application of principles of international trade law in the energy sector.

It is necessary to make the point that although the ECT contains both trade and investment rules, they play different roles. The inclusion of investment provisions of the ECT was aimed at filling a normative gap, namely the lack of an international investment treaty. Whereas the importance of trade provisions of the ECT is due to the fact that they extend the application of a set of already existing and well developed trade rules to non-WTO members to achieve their universal application. This is currently relevant for nine members of the ECT that are not yet members of the WTO.

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[141] Owen Saunders, supra note 121, p.25.
[142] Jimenez, J., supra note 132, p.183.
[143] Annex 1001.2a: Transitional Provisions for Mexico.

The ECT was preceded by the European Energy Charter, which was a non-binding declaration containing general principles of international energy law and was adopted on 17 December 1991 at The Hague. The Charter was regarded as a reaction to the collapse of the Soviet Union. In 1990, Dutch Prime Minister Ruud Lubbers called for a "European Energy Charter" to serve as a political and legal foundation for close collaboration between Western Europe and the states emerging in Eastern Europe and Asia from the former Soviet Union. The idea was that energy cooperation could help stimulate economic recovery and transition to market economy in the aforementioned countries. "The East would provide investment security, and this would trigger investment inflows, which in turn would build up the Eastern economies and supply energy to the West."[144]

The idea was welcomed by the European Council, which invited the Commission of the European Communities to study how best to implement such cooperation. Eventually, in February 1991 the Commission proposed the concept of a European Energy Charter and the United States, Canada, Australia and Japan joined the negotiations at a later stage. The negotiations initially resulted in the adoption of the European Energy Charter in 1991 as a non-binding declaration of policy and good will and finally led to the introduction of the Energy Charter Treaty as a binding international treaty, which was signed in December 1994 and came into force in April 1998. The ECT currently has 46 contracting parties. It is worth mentioning that the United States and Canada did not sign the ECT.[145]

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[144] Bamberger, C. *et al* (2001) "The Energy Charter Treaty" in Martha M. Roggenkamp *et al* (eds.) Energy Law in Europe, pp.172-73.

[145] For a full discussion of the negotiating history of the ECT see Brazell, L. (1994) "Draft Energy Charter Treaty: Trade, Competition, Investment and Environment", 12 Journal of Energy and National Resources Law, pp.299-344.

The investment provisions of the ECT are regarded as a cornerstone of the treaty. In fact, the investment provisions of the ECT are the logical culmination of efforts made over the last fifty years to create a multilateral investment rules. Particularly, a distinctive feature of the treaty is that the main investment obligations under Chapter III can be enforced by private parties against non-complying member states by international arbitration.[146]

As regards the trade provisions of the ECT, it is worth noting that basically they guarantee that all Charter member states, whether belonging to the WTO or not, should subscribe to WTO rules for trade in energy. The underlying philosophy of trade liberalization is evidenced by referring to "the objective of progressive liberalization of international trade" and to "the principle of avoidance of discrimination in international trade as enunciated in the General Agreement on Tariffs and Trade and its Related Instruments"[147] in the Preamble of the ECT.

The trade provisions of the ECT can be found in Article 4, for the trade of WTO members among themselves,[148] and in Article 29, for trade with and among WTO accession candidates. The ECT uses the reference approach to integrate most WTO law.[149] However, there are some of WTO trade rules that have not been incorporated

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[146] Bamberger *et al*, supra note 144, p.172.
[147] The Trade Amendment to the ECT, adopted in 1998, which is provisionally applied, has replaced the original reference to the GATT with the phrase "Agreement Established the World Trade Organization".
[148] Article 4 simply states that nothing in the ECT shall derogate, as between particular Contracting Parties which are members of the WTO, from the provisions of the WTO agreement.
[149] Defilla, S. (2003) "Energy Trade under the ECT and Accession to the WTO", 21 Journal of Energy & Natural Resources Law, No. 4, p.428.

in the ECT. Most notably for the purposes of this study, the provisions of the GATS are not incorporated into the ECT.[150]

Unlike the CUSFTA and NAFTA, the ECT is not aimed at creating GATT-plus obligations. In the context of trade, it is mainly concerned with extending the reach of GATT law rather than introducing substantive improvement. In this regard, Article 29 (2) (a) reads as follows:

> "Trade in Energy Materials and Products and Energy-Related Equipment[151] between Contracting Parties at least one of which is not a member of the WTO shall be governed, subject to...the exceptions and rules provided for in Annex W, by the provisions of the WTO Agreement, as applied and practiced with regard to Energy Materials and Products and Energy-Related Equipment by members of the WTO among themselves, as if all Contracting Parties were members of the WTO."

It is important to notice that the ECT has granted observer states to OPEC and most of its members. This, coupled with the fact that the emerging oil-producers are members of the ECT, signifies the importance of this process. Obviously, the ECT as a liberalizing mechanism is mainly concerned with bringing trade in energy under the rule of law. In this regard, it has been remarked that its principal function for the oil and gas industry is to depoliticize commercial transactions. It gives priority to "logic of commerce" over the "logic of politics".[152]

V. Subsidies and the Energy Pricing Debate

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[150] See Annex W, which mentions the GATS among the provisions of the WTO Agreement that shall not be applicable under Article 29 (2) (a).

[151] In terms of scope, the energy goods covered in the ECT were originally "Energy Materials and Products" with specific reference to energy sources such as petroleum, coal, natural gas, natural uranium and uranium enriched in U235, plutonium, and electrical energy. The Trade Amendment added a new category, i.e. "Energy-Related Equipment", which includes a wide range of goods such as drill pipe, line pipe of a kind used for oil and gas pipelines, lifting equipment for repairing and completion of wells. See Annex EQI.

[152] Walde, T. and Konoplyanik, A. (2006) "Energy Charter Treaty and its Role in International Energy", 24 Journal of Energy and National Resources Law, p.554.

As already noted, in the wider context of the WTO system, the practice of "National Resource Protectionism" in the United States over the past two decades and its potential effects for trade in energy should not be overlooked. This is particularly due to the fact that the national resource subsidy debate has resulted in the rapid development of the law of subsidies in a direction that increases its potential relevance to the practice of "dual pricing", which is a common practice in energy-rich countries. This section starts with a discussion of dual pricing practices and the origins of the dual pricing debate, followed by a review of the evolution of the domestic law of the United States on subsidies, and a brief review of the development of the law of subsidies in the WTO system.

A. Dual Pricing

Dual pricing[153] of natural resources, or selling a natural resource domestically at a price considerably below the export price, is normally being utilized by natural resource-rich countries. In the context of the energy sector, the idea behind this practice is to provide raw materials for their domestic processing industries at preferential prices, so that they can have an "energy" or "input" cost advantage.[154]

The negotiating history of the GATT reveals that the inclusion of paragraph (i) of Article XX, which added a new ground to the general exceptions of Article XX, was proposed by New Zealand to address this issue.[155] Paragraph (i) excepts from GATT obligations measures

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[153] It is also referred to as two-tier pricing.
[154] U.S. International Trade Commission, *Potential Effects of Foreign Government's Policies of Pricing Natural Resources,* Publication 1696, May 1985, page ix.
[155] See Jackson, supra note 48, pp.504-505.

"involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; *Provided* that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination;"

The latter part of paragraph (i) was not originally included in the proposal. It was added partly as a result of the point made by the Netherlands that there was a possibility that the world trade of a member might be increased in processed articles. In any case, this exception can be subject of abuse.[156]

It is worth noting, however, that the dual pricing debate has not centred on Article XX(i). The main argument is that this practice is "unfair", because it amounts to an "artificial" comparative advantage in favour of domestic industries. For instance, carbon black is an energy-intensive petrochemical product, which is used primarily as a reinforcing agent in rubber, to be used in tire manufacture. Carbon black feedstock represents about 76 to 78 percent of the total cost to produce carbon black.[157] Needless to say, any producer with a supply of carbon black feedstock at preferential prices will enjoy a significant comparative advantage.

In the early 1980s, the United States started importing certain Mexican energy-intensive products such as carbon black, ammonia, and cement. This triggered the national resource pricing debate. It was alleged by the affected U.S. industries that the imported products were in effect "subsidized" because of the Mexican dual pricing policies. The Mexican controversy, however, should not be viewed in isolation. Mexico was just one of the newly emerging petrochemical-producing

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[156] Ibid., p.506.
[157] U.S. International Trade Commission, supra note 154, pp.38-40.

countries in the early 1980s.[158] In fact, plans for refining and petrochemical capacity made in the late 1970's resulted in the emergence of a new generation of petrochemical-producing countries, which were energy-rich.

Accordingly, the "feedstock" and "energy" price advantage of new comers was a great source of concern for the traditional producers. In the early 1980s North America, Western Europe and Japan accounted for more than 90 percent of the world's petrochemical production. It was predictable that the shift from "energy exports" to "petrochemical exports" in the energy policy of energy-rich countries would mean that the established petrochemical-producing countries would be negatively affected and lose some of their market share.[159]

B. The Evolution of the Domestic Law of the United States on Subsidies

Before turning to the decisions made by the U.S. Department of Commerce a review of the domestic law of the United States on subsidies is necessary. At the time, the subject was governed by the Trade Agreements Act of 1979. Under the Act, domestic subsidies were defined illustratively by reference to the Subsidies Code. Until 1980, the Department of Treasury was responsible for making subsidy determinations. Despite the fact that before the Trade Agreements Act of 1979 the subsidies law did not include a "specificity" test, Treasury effectively was making its

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[158] Others included Saudi Arabia, Kuwait, Indonesia, Canada, U.S.S.R, and China.

[159] U.S. International Trade Commission, *The Probable Impact on the U.S. Petrochemical Industry of the Expanding Petrochemical Industries in the Conventional-Energy-Rich Nations*, Publication 1370, April 1983, pp.i-ii, 1-17. The Commission also referred to the issue of price advantage: "These nations have a competitive advantage in the production of petrochemicals, which are highly energy intensive, because of relatively assured supplies of crude petroleum and natural gas at prices below world levels.", p.15. Petrochemicals are defined as products derived from crude petroleum and natural gas. They may be gases, liquids, or solids. The most important petrochemicals are ethylene, methanol, and ammonia (building-block petrochemicals), and as much as 70-80 percent of their production costs are attributable to energy and feedstock costs, ibid., pp.183-184.

determinations based on such a test by refusing to impose countervailing duties on imports that benefited only from a "generally available" domestic programme.[160]

The Trade Agreements Act of 1979, defines subsidy this way: "The following domestic subsidies, if provided or required by government action to a specific enterprise or industry, or a group of enterprises or industries, whether publicly or privately owned,...". Professor Jackson remarks that there is nothing in the Subsidies Code that so explicitly focuses on a "specificity test", although at Article 11(3) there is reference to "the aim of giving an advantage to certain enterprises".[161] It has been remarked in this regard that many important U.S. exporters at the time had access to natural gas at regulated prices substantially below world prices, which might explain the reason why Congress enacted the specificity test.[162]

Accordingly, applying the specificity test in the Mexican cases[163], the International Trade Administration (ITA) of the Department of Commerce ruled that the programmes were "generally available" to all industries in Mexico and thus they were not countervailable. Moreover, in the *Certain Softwood Products from Canada* case, the ITA clearly adhered to a *de jure* general availability. The petitioner alleged that the Canadian federal and provincial governments subsidized softwood products by selling standing timber (stumpage) at prices well below those charged in the United States. The ITA found no subsidy, but alternatively decided in any case the stumpage programmes were not countervailable, because the use of stumpage was

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[160] Bello, J. H. and Holmer, Alan F. (1984) "Subsidies and Natural Resources: Congress Rejects a Lateral Attack on the Specificity Test", 18 George Washington Journal of International Law and Economics, p.303.
[161] Jackson, supra note 1, p.296.
[162] Bello and Holmer, supra note 160, pp.305-6.
[163] Including the following final determinations by the ITA in 1983: *Ammonia from Mexico, Carbon Black from Mexico, Cement from Mexico.*

limited not by any governmental action, but only by the inherent characteristics of this natural resource and the "current level of technology".[164]

Accordingly, the affected U.S. industries tried to convince Congress to amend the law. The natural resources subsidy proposal that emerged from these efforts,[165] indicated that a natural resource subsidy exists whenever: (1) a government-regulated or owned entity sells natural resource products at prices which are lower than the export price or the fair market value in the exporting country; and (2) the internal price is not one which is fully available to U.S. producers; and (3) the resource product, as measured by the export price or fair market value, is a significant portion of the production costs of the final product. This proposal was narrowly defeated in the 98th Congress.[166]

It is important to note that the Administration opposed the natural resources subsidy proposal from the outset. It was argued that enactment of a natural resources subsidy provision with the aforementioned wording would be inconsistent with U.S. international obligations under the Subsidies Code. More importantly, it was argued that the natural resources subsidy provision could interfere with the efficient allocation of global resources by preventing nations with abundant natural resources from capitalizing on their comparative advantages.[167]

In another relevant development, in the *Cabot* decision in 1985, the United States Court of International Trade announced the ITA's adherence to a *de jure* specificity,

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[164] Ibid., pp.312-13.
[165] H.R. 4784, the Trade Remedies Reform Act of 1984.
[166] U.S. International Trade Commission, supra note 154, pp.ix-x.
[167] For a full discussion of the most important arguments made against the natural resources subsidy provision, see Bello and Holmer, supra note 160, pp.321-27.

i.e. the nominal availability of the benefit at issue, was not acceptable. The Court held that "general benefits" must be distinguished from "generally available benefits" and drew attention to the fact that a generally available benefit may nevertheless accrue to specific recipients.[168] The Court further held that the generally available benefits rule as developed and applied by the ITA was not an acceptable legal standard for determining the countervailability of benefits. According to the Court, the appropriate standard focuses on the *de facto* case by case effect of benefits provided to recipients rather than on the nominal availability of benefits.[169]

The Court therefore held that the case must be remanded to the ITA for further investigation and redetermination. As a result, the ITA modified its approach to determining the countervailability of natural resource pricing programmes. In particular, the ITA announced that it would no longer follow the test first employed in *Softwood Lumber* mentioned above. Thus, applying a *de facto* test, and given the fact that in *Cabot,* there were only two carbon black producers in Mexico, the ITA held that carbon black feedstock had been purchased by too few users to be considered generally available.[170] Furthermore, in a second countervailing duty investigation of imports of softwood lumber products from Canada, the ITA held that the provincial stumpage programmes were countervailable because the provincial governments allocated a disproportionate share of stumpage rights to the lumber industry.[171] Finally, as reflected in its legislative history, the Omnibus Trade Act of 1988 codified *Cabot,* completing the move towards the *de facto* test.[172]

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[168] *Cabot Corporation v. United States,* 620 F. Supp. 722 (1985), at 731.
[169] Ibid., at 732.
[170] Nance, D. S. (1989) "Natural Resource Pricing Policies and the International Trading System", 30 Harvard International Law Journal, p.91.
[171] Ibid., pp.93-4. This controversy was one of the reasons why Canada was interested in the conclusion of the Canada United States Free Trade Agreement, to protect its export interests through

C. The Dual Pricing Debate in the Uruguay Round and Beyond

Launched on September 22, 1986, in Punta del Este, Uruguay, the Uruguay Round was the most complex and ambitious programme of negotiations ever undertaken under the GATT regime.[173] Energy products and energy-related issues as such were not included in the negotiations. However, during the course of the negotiations, certain countries, most notably the United States and Australia, tried to bring the issue to the attention of the Negotiating Group on Natural Resource-Based Products. The United States also addressed the issue in the context of the Negotiating Group on Subsidies and Countervailing Measures.

With regard to the liberalization of trade in natural resource-based products, the Punta del Este Declaration, based on the draft submitted by Colombia and Switzerland, provided that:

> "Negotiations shall aim to achieve the fullest liberalization of trade in natural resource-based products, including in their processed and semi-processed forms. The negotiations shall aim to reduce or eliminate tariff and non-tariff measures, including tariff escalation."

Accordingly, one of the negotiating groups in the Uruguay Round negotiations was the Negotiating Group on Natural Resource-Based Products. In theory, energy products could easily fall within the scope of the NRBP Negotiating Group. In the context of the Uruguay Round, however, "natural resource-based products" (NRBP)

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the provision of some "buffer" against American trade tribunals. The Agreement, however, did not provide enough sufficient protection for Canadian interests. See Owen Saunders, supra note 27, pp.6-7, 13-18. The issue was also the subject of five cases under the WTO system. Finally, on 12 October 2006, the United States and Canada informed the DSB that they had reached a mutually agreed solution in the form of a comprehensive agreement (Softwood Lumber Agreement) between the United States and Canada, dated 12 September 2006.

[172] See ibid., pp.102-105; Jackson, supra note 1, pp.297, 419.

[173] See Stewart, T. P. (ed.) (1993) The GATT Uruguay Round: A Negotiating History, Volume I: Commentary, p.1.

had been defined as forestry and fisheries products and nonferrous metals and minerals, the only products on which it was possible to reach agreement.[174]

In fact, the work done by the Working Party on Trade in Certain Natural Resource Products, established in 1984, was the starting point for the NRBP Negotiating Group. The Working Party's mandate was limited to the three aforementioned categories. At the same time, the Punta del Este Declaration permitted the addition of new topics to the negotiations.[175] Accordingly, during its first meetings, the NRBP Negotiating Group discussed the coverage of the negotiation, both products and measures.[176]

Concerning product coverage, the United States circulated a proposal at the third meeting.[177] Arguing that product coverage should be broad, the United States proposed that the NRBP Group also consider "actions affecting energy-based products" such as petrochemicals, uranium, construction materials, and oil and gas processing. In view of the United States, the free flow of trade in natural resource-based products was impeded by a number of practices, namely dual pricing of natural resources, related export restrictions, subsidies, non-commercial government ownership practices, and tariff and non-tariff measures affecting imports.[178]

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[174] Ibid., p.470. The product coverage was based on the 1982 GATT Ministerial Declaration. The Declaration also considered the problem of dual pricing, particularly applicable to natural resource products (although not in the context of energy trade), and decided to request the Council to make arrangements for studies of dual-pricing practices and rules of origin. Available records, however, do not show any further action taken by the Council on the subject of dual pricing. On April 20, 1983, the GATT Council formally instructed the Secretariat to undertake background studies on problems of trade in fish and fisheries products, forestry products, and nonferrous metals and minerals. See ibid., pp.470-473.

[175] Ibid., p.482.

[176] See News of the Uruguay Round, NUR 001, 16 March 1987, p.2.

[177] Stewart, supra note 173, p.484.

[178] GATT, MTN.GNG / NG3 / W / 2, Submission from the United States, 1 July 1987.

Clearly, the focus of the United States proposal was on measures relating to exporting countries, as is evidenced by the fact that four out of five aforementioned measures were export-related actions. Additionally, it argued that these measures should not be viewed in isolation. The essence of the United States position was that these measures "complement" each other in distorting trade in NRBP and should be treated as part of a larger picture. Therefore, GATT rules were inadequate to tackle the problem, because they were designed to deal with each issue separately.

Particularly, the link between "dual pricing" and "export restrictions" was central. According to the United States, engaging in dual pricing practices would only be possible if accompanied by export restrictions. In this regard, the United States submitted another proposal dealing exclusively with dual pricing. The new definition of the term included the link between dual pricing and export restrictions:

> "The term "dual pricing" is generally taken to refer to any government programs or actions to establish domestic prices for natural resources at some level below the value they would otherwise have if determined by market forces *in a situation where there are no impediments to export.* There need not be two distinct price levels in the country in question. A single domestic price, kept arbitrarily low by government intervention *and restrictions of some sort on exports*, or a range of low price levels all determined by such practices would equally fall under a well-constructed definition of dual pricing."[179]

In terms of product coverage, the original proposal was limited to "energy-based products", whereas the new submission included "energy resources" such as petroleum, natural gas, and coal as well. The United States explained that trade in "energy-based products" was affected by government practices (particularly dual pricing) relating to "energy resources".[180] The United States referred to

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[179] GATT, MTN.GNG / NG3 / W / 13, *Natural Resource-Based Products: Two-Tier Pricing Issue*, Submission from the United States, 8 June 1988, pp.2-3. The italicised parts were not included in the previous definition of dual pricing suggested by the United States.

[180] In a subsequent submission, the United States made it clear that trade in oil and gas *per se* was not at issue: "The oil and gas issue is of particular importance to certain sectors, such as petrochemicals (see NG3/W/20) and refinery products (gasoline, jet fuel, heating oil, etc.), where the cost of

"petrochemicals" and "fertilizers" as products that were most directly affected by dual pricing practices. Given the fact that as already noted, throughout the 1980s the newly emerging petrochemical-producing countries were challenging the established producers, notably the United States, the United States was trying to make use of the Uruguay Round to protect its market share.[181]

According to the United States, dual pricing and other related practices were unique to the natural resource sectors and thus should be addressed in the context of the NRBP Negotiating Group. With regard to negotiating techniques and modalities the United States pointed to three possible approaches. First, to adopt a code approach, namely to develop broad principles and rules that cut across trade practices affecting all natural resource sectors; Second, to develop a set of principles that was in essence an amplification or elaboration of GATT Articles;[182] and third, a request / offer approach.[183] It recommended that, "the Group begin to explore principles to govern trade in natural resource-based products which would give more specific meaning to the Articles of the GATT regarding trade practices in these products."[184] At the same time, the United States noted that the NRBP Group had become a complementary group, so most substantive negotiations were taking place in other groups.

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hydrocarbon raw materials and fuel account for the majority of total production costs". See MTN.GNG / NG3 / W / 23, para. 5.

[181] On the other hand, Australia focused on the issue of controlling government subsidization of the coal industry, which was commonplace in the EC and in particular West Germany.

[182] In this regard the United States referred to the Canada – United States Free Trade Agreement as a model: "In the recently completed trade agreement between Canada and the United States, both countries affirmed that they considered minimum export price requirements as being inconsistent with the obligations of Article XI. The trade-distorting effects of two-tier pricing could be substantially limited by the broad acceptance of this interpretation by other Contracting Parties". See MTN.GNG / NG3 / W / 13, p.5.

[183] GATT, MTN.GNG / NG3 / W / 23, Submission from the United States, 12 July 1989, paras. 12-14.

[184] Ibid., para. 15.

On the other hand, Senegal, on behalf of other African countries, made a statement at the fifth meeting of the NRBP Group, opposing the inclusion of new products.[185] Furthermore, the European Community because of Germany's protectionist attitude to coal did not play an active role in the debate.[186] Finally, at the meeting of March 21, 1990, the EC agreed to the inclusion of energy products.[187] In its submission in June 1990, it was mentioned that the Community would not oppose that the product coverage of the NRBP Group be extended to include energy products.[188] The Same submission also included the essence of the United States argument against dual pricing practices.[189] However, due to the opposition of developing countries, it was not possible to reach agreement on the extension of the product coverage of the NRBP Negotiating Group to include energy products. Moreover, no decision was made regarding dual pricing.[190]

In the context of the Negotiating Group on Subsidies and countervailing measures, the United States made by and large the same arguments and called for the improvement of the Subsidies Code to address "natural resource subsidies", including dual pricing structures, direct subsides, and government ownership practices, which could create an artificial comparative advantage for domestic

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[185] Stewart, supra note 173, pp.485-486.
[186] Paemen, H. and Bensch, A. (1995) From the GATT to the WTO: The European Community in the Uruguay Round, p.82.
[187] Stewart, supra note 173, p.487. The EC also agreed to negotiations on coal subsidies, which took place bilaterally between the EC and Australia.
[188] GATT, MTN.GNG / NG3 / W / 37, Submission by the European Communities, 25 June 1990, p.1.
[189] Ibid., p.2.
[190] "Views differed on the question of dual pricing and export restrictions and other measures affecting exports of raw materials... Most representatives felt, however, that both, export measures and dual-pricing, were of a general nature and should, therefore, be addressed in a generic way. Some delegations considered that recourse to export restrictions and other measures was in conformity with Article XI: 2(a) and Article XX (g) and (j)." See GATT, MTN.GNG / NG3 / 19, Note by the Secretariat, 5 July 1990, para. 7.

producers.[191] In the context of the dual pricing debate, Canada argued that maintaining the general comparative advantage of natural resource producing countries should be recognized. In particular, Canada pointed out that the unilateral right to countervail granted under Article VI of the GATT and the Subsidies Code was not intended to negate a country's general comparative advantage.[192]

Finally, a provision covering dual pricing of government-supplied inputs was included as Article 14(e) in the Cartland IV draft revised Subsidies Code of November 11, 1990:

> (e) When the government is the sole provider or purchaser of the good or service in question, the provision or service of such good or service shall not be considered as conferring a benefit, unless the government discriminates among users or providers of the good or service. Discrimination shall not include differences in treatment between users or providers of such goods or services due to normal commercial considerations.

Draft Article 14(e) was strongly opposed by Mexico, which proposed an amendment limiting the non-discrimination requirement to users or providers of the good or service "established within its territory". Under the amendment, the government would still be free to charge lower prices to domestic processing industries and higher prices to foreign competitors, as long as it did not discriminate among domestic industries. This was precisely what the United States had attempted to prevent in the context of the dual pricing debate.[193] In the end, draft Article 14(e) was deleted in the Dunkel Draft of December 20, 1991.[194]

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[191] GATT, MTN.GNG / NG10 / W /20, Communication of the United States, 15 June 1988, pp.9-10.
[192] GATT, MTN.GNG / NG10 / W /4, Note by the Secretariat, 28 April 1987, p.27. Canada went on to say: It should be recognized that the precedent set by a move unilaterally to broaden, and in the process make more ambiguous, the concept of subsidy would affect all contracting parties.
[193] This amendment did make sense from the point of view of Mexico, given the fact that it was applying preferential energy pricing even within the country and Mexican firms were getting lower oil and electricity prices than foreign competitors established in Mexico. In the context of NAFTA energy negotiation Mexico agreed to end this practice. See Ortiz Mena L. N., supra note 129, p.183.
[194] See Stewart, supra note 173, pp.502-03.

The issue is still hotly debated in the context of the ongoing Doha Round. It should be noted that during the second half of the 1980s the price of a barrel of oil was less than $20, so it is not surprising that with current soaring prices of energy products the economic implications of dual pricing practices are fuelling the dual pricing debate. The United States has been trying to conceptualise dual pricing practices as having the same "effects" as subsidies:

> "While the principle that trade flows should be determined by comparative advantage is broadly accepted, it must also be accepted that preferential natural resource pricing has been and, if not addressed, will continue to be a source of considerable trade distortion and friction. Simply put, there is no difference between the government provision of a natural resource at less than fair market value and the government provision of a cash grant allowing the purchase of a natural resource at less than fair market value... The advantage provided to domestic producers in this situation unfairly magnifies the comparative advantage that would otherwise be determined by market forces and production efficiencies."[195]

The United States pushed the "effects" approach to the point that it went on to argue before a WTO Panel that an "export restraint" is "functionally equivalent" to an entrustment of or direction to a private body to provide goods domestically and thus the practice can constitute a "financial contribution" in the sense of Article 1.1 of the Subsidies and Countervailing Measures Agreement (SCM Agreement).[196] Before turning to the Panel's ruling, it is worth noting that under the SCM Agreement, for a measure to constitute a subsidy, it must: (a) represent a financial contribution or income support by a government;[197] which (b) confers a benefit; (c) to a specific recipient.[198]

The Panel categorically rejected the "effects" approach:

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[195] Communication from the United States to the Negotiating Group on Rules, TN/RL/W/78, 19 March 2003.
[196] *United States – Measures Treating Exports Restraints as Subsidies*, Report of the Panel, WT / DS194 / R, 29 June 2001, para. 8.22.
[197] Or a government may entrust or direct a private body to make a financial contribution, see Article 1.1(a)(1)(iv) of the SCM Agreement.
[198] See Matsushita, M. *et al* (2006) The World Trade Organization: Law, Practice, and Policy, pp. 336 *et seq.* It is worth mentioning that the Agreement has adopted the *de facto* specificity test.

"In forwarding this argument of "functional equivalence" or "conceptual equivalence", the United States focuses primarily on the effects or the results of a government action, rather than on the nature of the action, in order to determine whether that action constitutes a financial contribution.... To hold that the concept of financial contribution is about the effects, rather than the nature, of a government action would be effectively to write it out of the Agreement, leaving the concepts of benefit and specificity as the sole determinants of the scope of the Agreement."[199]

More importantly, the Panel reviewed the negotiating history of the inclusion of the "financial contribution" requirement, which showed that its inclusion was intended precisely to ensure that not all government measures that conferred benefits could be deemed to be subsidies. It also showed that the same "effects" approach, i.e. defining subsidy solely on the basis of the existence of a "benefit" conferred by any government action, was unsuccessfully supported by the United States at the time.[200]

In this regard, an important point to be born in mind is the fact that the legal meaning of the term "subsidy" under the SCM Agreement is different from its meaning in economic theory. Rejecting the United States argument that the meaning of the provisions of the SCM Agreement should not be improperly narrowed down to exclude measures commonly understood to be subsidies, the Panel held that:

"We agree with the statements both of the Panel in Brazil – Aircraft and of that in Canada – Aircraft as to the object and purpose of the SCM Agreement in disciplining certain forms of government action. It does not follow from these statements, however, that every government intervention that might in economic theory be deemed a subsidy with the potential to distort trade is a subsidy within the meaning of the SCM Agreement....The legal meaning of the term "subsidy" must, however, be derived from an analysis of the text and context of Article 1 of the SCM Agreement."[201]

At the same time, recent developments of WTO dispute settlement practice show that the SCM Agreement might be used in the future to challenge dual pricing practices of energy-rich countries. In the context of the softwood lumber controversy, the Appellate Body reversed the Panel's interpretation of Article 14(d) of the SCM

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[199] Ibid., paras. 8.33 and 8.38.
[200] Ibid., paras. 8.66-8.72.
[201] Ibid., para.8.62.

Agreement. Article 14(d), which relates to the calculation of benefit when goods or services are provided by a government, reads as follows:

> "the provision of goods or services or purchase of goods by a government shall not be considered as conferring a benefit unless the provision is made for less than adequate remuneration, or the purchase is made for more than adequate remuneration. The adequacy of remuneration shall be determined in relation to *prevailing market conditions for the good or service in question in the country of provision or purchase*..."[202]

In *US – Softwood Lumber IV*, the Panel agreed with Canada's view that according to Article 14(d), the benchmark for the determination of the benefit should be Canadian prices (i.e. private prices in the country of provision) despite the fact that they might be distorted as a result of government intervention. The Appellate Body, however, reversed the Panel's finding and held that investigating authorities may use a benchmark other than private prices in the country of provision under Article 14(d), if it is first established that private prices in that country "are distorted because of the government's predominant role in providing those goods".[203]

The Appellate Body referred to a situation where the government effectively acts as a "price-setter" and private suppliers are "price-takers".[204] Needless to say, this is commonplace in energy-rich developing countries. At the same time, the Appellate body made it clear that when an investigating authority resorts to a benchmark other than private prices in the country of provision, the benchmark chosen must, nevertheless, relate or refer to, or be connected with, the prevailing market condition in that country.[205] More specifically, the Appellate Body made it clear that differences in comparative advantages between countries should not be affected:

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[202] Emphasis added. It is worth noting that the provision of goods or services by a government as "general infrastructure" is not regarded as financial contribution. See Article 1.1(a)(1)(iii) of the SCM Agreement.
[203] *US – Softwood Lumber IV*, WT/DS257/AB/R, 19 January 2004, para. 90.
[204] Ibid., para. 99.
[205] Ibid., para. 103.

"It is clear, in the abstract, that different factors can result in one country having a comparative advantage over another with respect to the production of certain goods. In any event, any comparative advantage would be reflected in the market conditions prevailing in the country of provision and, therefore, would have to be taken into account and reflected in the adjustments made to any method used for the determination of adequacy of remuneration, ... This is because countervailing measures may be used only for the purpose of offsetting a subsidy bestowed upon a product, provided that it causes injury to the domestic industry producing the like product. They must not be used to offset differences in comparative advantages between countries."[206]

It should be noted that the mere combination of the elements of "financial contribution" and "benefit" does not mean that a practice is countervailable. As already noted, it still needs to satisfy the specificity test. However, in *US – Softwood Lumber IV*, the Panel applied the specificity test in line with the practice of the United States administrative and judicial authorities. It found no basis in the SCM Agreement for Canada's argument that if the "inherent characteristics" of the good provided, and not the intention of the providing government, limit the possible use of the subsidy to a certain industry, the subsidy will not be specific.[207] This situation clearly exists in the petrochemical industries of many energy-rich countries.[208]

D. Dual Pricing in the WTO Accession Negotiations

Many of the countries currently negotiating for acceding to the WTO are petroleum-exporting countries, most notably the Russian Federation, Algeria and the Libyan

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[206] Ibid., para 109.

[207] *US – Softwood Lumber IV*, WT/DS257/R, 29 August 2003, para. 7.116. It is important to notice that some of the leading authorities in the field have criticized the Appellate Body for what they have described as re-writing the contract. They went on to argue that: "The panel's attitude should be commended here. When realizing the shortcomings of the current draft, it signalled the problem to the founding fathers while applying to its mind, an erroneous, test. This is the ultimate frontier of the authority entrusted to WTO adjudicating bodies. In the absence of an *ex aequo et bono*-type of jurisdiction, WTO adjudicating bodies will be well-advised to follow the panel and move away from any form of impermissible judicial activism in the future." Matsushita *et al*, supra note 198, p. 359.

[208] It is important to notice that Article 2.1, paragraph c, also states that "account shall be taken of the extent of diversification of economic activities within the jurisdiction of the granting authority", which can distinguish energy-rich developing countries from an industrialized country like Canada.

Arab Jamahiriya.[209] In particular, the accession of Saudi Arabia in December 2005 was an important development. As regards the remaining major petroleum exporting countries, it is worth mentioning that after the regime change in Iraq, the General Council, on 13 December 2004, established an accession Working Party to examine its membership application.[210] In the case of Iran, the country had expressed interest for accession to the WTO since 1996, but was not able to initiate the process due to the United States policy on blocking the formation of an accession Working Party. However, the Bush administration recently announced a policy shift on Iranian accession.[211] As a result, on 26 May 2005, a Working Party was established.[212]

In view of the above, it is safe to conclude that within a few years the countries represented in the WTO will account for the great majority of global petroleum production and export.[213] What remains to be done, however, is the application of trade rules to the energy sector to a greater extent. Generally speaking, it has been remarked that the energy sector still holds a position in the GATT/WTO system that is somewhat akin to that of agriculture before the Uruguay Round: it is not entirely exempt from multilateral disciplines, but neither is it yet fully within those rules.[214]

In this regard, it is important to notice that when petroleum-exporting countries are negotiating the accession to the WTO, other countries normally try to obtain energy-

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[209] Mention should also be made of the emerging petroleum-exporting countries such as Azerbaijan and Kazakhstan, which are in the process of acceding to the WTO.
[210] Iraq submitted a Memorandum on the Foreign Trade Regime in September 2005, followed by Replies to Questions raised by Members in November 2006. The working party has not yet met.
[211] On 11 March 2005, in an Interview with Reuters News Agency, Secretary of State Condoleezza Rice said that the United States Would be prepared to lift its objection to an Iranian application to join the World Trade Organization; see http://usinfo.state.gov/mena/Archive/2005/Mar/11-759052.html.
[212] Iran has not yet submitted a Memorandum on the Foreign Trade Regime.
[213] See VanGrasstek, C. (2003) "United States Energy Policy: The Consequences of a Pivotal Year", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p. 212.
[214] Ibid., p.211.

related commitments that result in the reduction of energy-related trade barriers. Thus, the current wave of the WTO accessions of petroleum-exporting countries has been contributing to bring the energy sector under more multilateral regulation. Generally speaking, a wide range of energy-related issues have been raised in the WTO accession negotiations of petroleum-exporting countries in recent years. They include (i) governmental controls on production and export of petroleum-based products; (ii) domestic prices and pricing policy; (iii) export tariffs and taxation; (iv) the operations of state trading enterprises monopolistic practices in this sector; (v) "unfair" trade practices (e.g. subsidies and dumping); (vi) investment; and (vii) trade in energy services, including services related to exploration for and the extraction, transportation and processing of petroleum. [215]

For example, Oman agreed to eliminate all export duties upon accession, including duties on petroleum and derivatives.[216] In addition, acceding countries have been asked to accept "interpretations" of various GATT Articles (e.g. Article XVII on State Trading Enterprise) that would not only restrict the scope of their energy policies, but also provide a "precedent" that could be used in other accession negotiations.[217] It is said that taken as a whole, the current accession negotiations could be seen as a negotiation between importers and exporters of energy.[218]

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[215] Gibbs and Mamedov, A. (2001) "Energy-related issues in the WTO accession negotiations", in WTO Accessions and Development Policies, UNCTAD/DITC/TNCD/11, p.302.
[216] Ibid., p.306.
[217] Gibbs, M. (2003) "Energy Services, Energy Policies and the Doha Agenda", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p. 21.

[218] Ibid, p.20.

In the case of dual Pricing practices, some countries presently or recently in the process of accession, notably the Russian Federation and Saudi Arabia, have been urged to accept commitments not to maintain or introduce dual pricing systems. It has been argued that such measures are inconsistent with Article XVII of GATT 94 (in the case of the Russian Federation) or are in "violation" of WTO or "problematic" for market access concessions (in the case of Saudi Arabia)".[219]

In response, Saudi Arabia for instance, mentioned that natural gas (including methane and ethane) was not sold for export due to the high costs of liquefying, transporting and regasifying such gases. Previously, natural gas had been burnt as a waste product, but was later collected and made available to all interested users (whether Saudi or non-Saudi) on a non-discriminatory basis at a regulated price. This decision was taken based on a combination of commercial reasons and environmental concerns. Furthermore, with the general availability debate in mind, it has been pointed out that natural gas is used by many sectors, including power companies, desalination plants, cement manufacturers and petrochemical plants.[220]

In the case of Russia, the EU and the United States insisted on Russia's elimination of dual pricing for energy and in particular natural gas and seemed to regard this as a precondition to Russia's WTO accession. Russia does not consider its energy policy to be inconsistent with WTO law and the controversy over this issue seems to be the

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[219] Gibbs and Mamedov, supra note 215, p.306. These countries have also been requested to eliminate export tariffs and export quotas. In this context, Russia has announced that the system of export quotas to meet state needs, which among other things included petroleum, gas, and petroleum products, is being progressively dismantled. At the same time, at the meeting of the Working Party held on 17-19 July 1995, Russia made it clear that, "it is our understanding that according to Articles XI (2a) and XX (I and j) of GATT 94, a WTO member-country may, if necessary, impose certain quantitative restrictions on its exports (including quotas and licences) on a temporary and non-discriminatory basis." See WT/ACC/RUS/4, 1 November 1995, pp.2-3.

[220] Report of the Working Party on the Accession of the Kingdom of Saudi Arabia to the World Trade Organization, WT/ACC/SAU/61, 1 November 2005, para. 29.

major element blocking the accession process.[221] More specifically, Russian negotiators do not consider the difference in domestic and export energy prices to be inconsistent with WTO rules on subsidies. They have pointed out that the whole economy is benefiting from such a practice and that access by domestic companies to gas at preferential prices is not contingent upon export performance.[222] Commenting on the process of Russia's accession, the Head of the Russian Delegation refers to the "WTO-plus" requests and remarks that acceding countries are being asked to make commitments that go beyond the standard WTO package.[223]

It is also worth mentioning that the dual pricing debate is not limited to the WTO context. In the context of the "energy dialogue" between the EU and the GCC countries[224], it has been remarked that the issue of petrochemical subsidies has been a serious bone of contention in EU-GCC relations ever since the signing of the 1988 cooperation agreement. For instance, in order to tackle the controversy over the pricing of liquefied petroleum gas (LPG) to the petrochemical industries in Saudi Arabia, it has been proposed that the Saudi government should abolish its previous decisions concerning pricing of LPG.[225]

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[221] Selivanova, Julia (2004) "World Trade Organization Rules and Energy Pricing: Russia's Case" 38 Journal of World Trade, p.560.
[222] Ibid., p.594.
[223] Mamvedkov, Maxim (2001) "WTO accession: The Russian perspective", in WTO Accessions and Development Policies, UNCTAD/DITC/TNCD/11, p.71. In this regard, providing an American perspective, Professor VanGrasstek, referring to the issue of "entry fee" for acceding countries remarks that: "On the one hand, there is an identifiable element of unfairness in the accession process. Notwithstanding the juridical equality of states, the acceding countries are required to bear burdens set by the richer, larger and more powerful WTO members. On the other hand, countries would be well advised to look past the unfairness and approach the negotiations with pragmatism." See VanGrasstek, Craig (2001) "Why demands on acceding countries increases over time: A three-dimensional analysis of multilateral trade diplomacy", in WTO Accessions and Development Policies, UNCTAD/DITC/TNCD/11, p.139.
[224] Gulf Cooperation Council (GCC). Created in May 1981, the Council comprises the Persian Gulf states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. All of the GCC countries are now members of the WTO.
[225] EUROGULF: An EU-GCC Dialogue for Energy Stability and Sustainability, Executive Summery and Policy Paper, by the Project director, Professor Giacomo Luciani, 2005, pp.18-19. Professor

VI. Concluding Remarks

As with Chapter 2, this chapter combines two separate lines of enquiry. First, in the context of the regulation of international trade in energy goods, our review of the world trading system revealed that in many ways it was not well-equipped for the regulation of petroleum trade. This is due to the fact that the rules of the rules of the GATT have been predominantly designed to address the issue of "market access", whereas in petroleum (and potentially natural gas) trade the main concern is "access to supplies" and trade barriers are normally export-oriented.

It is worth mentioning that some of these barriers, most notably export quotas, are already prohibited under the current provisions of the GATT. However, it was noted that due to a tacit mutual tolerance, both energy-importing and energy-exporting countries have been able to impose trade restrictions through a liberal (informal) use of the security and general exceptions. Furthermore, our review of bilateral and regional initiatives, notably GATT-plus arrangements, illustrated how the relevant provisions of the GATT could be "amplified" to address energy-specific trade restrictions effectively.

The second line of enquiry was related to the energy pricing debate. During the Uruguay Round, particularly in the context of the negotiations on natural resource-based products the United States tried unsuccessfully to convince other countries to address dual pricing practice. It argued that trade in "energy-based products" was

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Luciani has pointed out that no action has been initiated under the WTO to argue that the production of petrochemicals is subsidized. However, as argued throughout this Chapter, it might well be due to political sensitivity and other considerations surrounding the issue.

affected by government practices (particularly dual pricing) relating to "energy resources". However, the evolution of the law of subsidies during and after the Uruguay Round clearly points to a trend towards conceptualizing dual pricing as subsidy. As previously discussed, in *US – Softwood Lumber IV*, the Appellate Body interpreted the provisions of the SCM Agreement with a degree of "judicial activism" that effectively paves the way for satisfying the requirement of conferring a "benefit" through the provision of energy goods at regulated prices substantially below world prices.

PART III

Trade in Energy Services

Chapter 4. The Liberalization of the Electricity and Natural Gas Sectors in the European Union

I. Introduction: Normative Contribution of Economic Regionalism

This chapter starts with a brief legal analysis of the relationship between regional trade agreements and the multilateral trading system and in particular, the "normative contribution" of economic regionalism in the context of trade regulation at the international level will be examined. This will provide the analytical framework for the remaining part of the chapter, which will focus on the recent developments in European energy law.

The literature on the relationship between regional trade agreements and the multilateral trading system is mostly focused on the issue of "trade creation" and "trade diversion" effects of regional trade agreements and their implications for global economic governance. In this context it is often remarked that globalization is eroding the effectiveness of national governments and international organizations with universal membership. In fact, the issues they have to confront such as global warming and transborder telecommunications are more complex and challenging in which suprastate agencies might be in a better position to deal with, or at least they can have a complementary role.[1] Thus, globalization has played a significant role in the relatively recent proliferation and deepening of regional economic cooperation arrangements. As a result, contemporary governance has become multi-layered and

[1] Scholte, J. A. (2000) Globalization: A Critical Introduction, Palgrave, p.144.

networked. "Regulation occurs through interconnections among multiple sites with different but overlapping spheres of jurisdiction."[2]

Needless to say, the legal side of the relationship between economic regionalism and the multilateral trading system is equally important. In this context, the focus of the legal literature has been on the interpretation and application of Article XXIV of the GATT 1994 and the application of the relevant Articles of the Vienna Convention on the Law of Treaties, which for the most part is regarded as a codifying treaty representing customary international law rules.[3]

However, there is another aspect of the relationship between economic regionalism and the multilateral trading system from a legal perspective that is more relevant to the present study and has attracted relatively little attention. This aspect is related to the rule-making dimension of regional trade agreements and their impact on the creation of a "normative consensus" on how to regulate cross-border economic activities.

It is worth noting in this regard that first and foremost, international law is considered as an "operative system", which means that the structure and process of international law provide a framework for the international system to operate effectively. However, beyond this basic function, international law is also considered as a "normative system", which promotes the creation of a "normative consensus" on international behaviour. In this context, international law promotes particular values

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[2] Scholte, J. A. (2004) *Globalization and Governance: From Statism to Polycentrism*, CSGR Working Paper No. 130/04, February 2004, p.21.

[3] See for example, Matsushita, Schoenbaum and Mavroidis (2003) The world Trade Organization: Law, Practice, and Policy, Chapter 14. Regional Trade Agreements.

and then translates them into rules of behaviour. In the area of public international law, prominent examples of this process are the regulation of the use of force and the protection of human rights.[4]

The same is true in the area of international economic law and rule-making dimension of regional trade agreements should be viewed in this context. They make a normative contribution to the multilateral trading system by helping to forge model approaches, for possible subsequent adoption in a WTO setting.[5] In this way, they promote the idea of free trade and more importantly, translate it into laws that can be drawn upon in designing multilateral rules. For example, the development of the GATS Understanding on Commitments in Financial Services took advantage of insights gained in financial market opening at the regional level. This was particularly the case under the NAFTA, whose chapter 14 addressed in 1993 a range of issues that would feature prominently in negotiations of the WTO Financial Services Agreement in 1997.[6]

With regard to the energy sector, it is worth noting that although a far-reaching regional liberalization in this sensitive sector has not been achieved yet, its rule-making dimension has a lot to offer. In this regard, the European Union has been actively engaged in introducing a model for regulation of energy trade. In the words of one commentator:

"The European Union constitutes at present the most developed laboratory for international regulation of energy. It is not really possible to study international energy law without familiarity with EU

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[4] See Ku, C. and Diehl, P. F. (1998) "International Law as Operating and Normative Systems: An Overview" in Charlotte Ku and Paul F. Diehl (eds.) International law: Classic and Contemporary Readings, Lynne Rienner Publishers, pp.4-5.
[5] See Heydon, K (2003) "Regionalism: a complement, not a substitute" in *Regionalism and the Multilateral Trading System,* OECD, p.16.
[6] Sauve, P. (2003) "Services" in *Regionalism and the Multilateral Trading System,* OECD, pp.40-41.

energy law. ... The EU "acquis" in the sphere of energy defines the agenda for negotiations for global disciplines, and its rules and principles, by now quite specific through jurisprudence of Commission and ECJ on internal trade and competition law and the directives and regulations on energy, serve as models for similar efforts throughout the world. The Energy Charter Treaty, not part of the EU, but largely politically "owned" by the EU, is a diluted, largely soft-law version of EU internal market and energy law. Current thinking in APEC and MERCOSUR can not divorce itself from the EU energy integration experience."[7]

It was necessary to quote from Professor Walde at length in order to do justice to the point he is making. What is happening in the field of international energy law can be described as "globalized localism". This refers to a situation in which some local phenomenon is successfully globalized; examples include the spread of American copyright or antitrust laws.[8] The EU experience in regulation of international energy trade is viewed as a model for introducing international trade law disciplines in the field at the regional and international levels. In this part, the focus of the study will be on the context and content of the EU energy regulation.

In examining the context and content of European energy law, after addressing the development of law and policy relating to the EU energy regulation, the EC Treaty rules underpinning the liberalization of energy trade in the EU will be discussed. As regards the substance of EU law relating to the electricity and gas sectors, the focus will be on analysing the Electricity and Gas Directives. The Implementation deadlines for the Electricity and Gas Directives were 19 February 1999 and 10 August 2000 respectively.[9] These Directives are aimed at the introduction of

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[7] Walde, T. (2001) "International Energy Law: Concepts, Context and Players", www. dundee.ac.uk/cepmlp/journal/html/vol9, pp.8-9.
[8] See Twining, W. (2000) Globalisation and Legal Theory, Butterworths, p.5.
[9] As is discussed later in this chapter, the original Directives were replaced by the Second Directives in 2003. However, the new Directives were introduced to address the shortcomings of the original framework and are effectively the revised version of the original Directives. Accordingly, in order to understand the evolutionary process of electricity and gas regulation in the EU, our discussion begins with the original Directives. We then discuss their shortcomings and the quantitative and qualitative initiatives contained in the new Directives to address them. Finally, we examine the remaining shortcomings of the EU system.

competition to energy markets and constitute the most important part of what is called an "*acquis communautaire*" or EU *acquis* for energy.

II. The EU Model for Liberalizing Energy Trade

A. The Development of Law and Policy Relating to the EU Energy Regulation

Despite the fact that the process of European economic cooperation and integration formally began with the creation of the European Coal and Steel Community more than half a century ago, energy as such has not been seriously dealt with at the Community level until the last two decades. Although the need to establish an integrated energy market can be clearly derived from the 1957 Treaties, the period of 1958-72 is notable for the lack of development of an effective common policy for energy. In the words of two commentators:

> "Emphasis ... had been placed upon the need to harmonise national policies, and to establish a competitive, integrated energy sector. Even with respect to these aims, however, all available evidence ... suggests the period as a whole witnessed a retreat away from rather than progress towards the goal of market integration in the Community's energy policy."[10]

This was despite the fact that as early as 1956, the energy sector was identified in the Spaak Report as a sector requiring urgent action.[11] The response of the Member States to the oil crisis of 1973 was to protect national interests and it prompted the Member States and the Community to reconsider the urgent need for a common energy policy. However, the focus at the time was on the issue of energy security not energy liberalization. In this regard, the Council adopted some directives and decisions: on maintaining emergency stocks at power stations, on restrictions on the

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[10] Hassan, J. and Duncan, A. (1994) "Integrating Energy: the Problems of Developing an Energy Policy in the European Communities" 23 Journal of European Economic History, p. 166.
[11] See Slot, P. J. (1994) "Energy and Competition", 31 Common Market Law Review, pp. 511-12.

use of fuels in power stations, on additional measures on oil supplies, as well as a number of recommendations on the rational use of energy.[12]

However, it was only after the entry into force of the Single European Act in 1987 that a real move towards liberalization in the electricity and gas sectors initiated.[13] The Single European Act amended all three founding Treaties, but the most important of these changes were made on the EEC treaty. Article 8A (now Article 14) established the objective of an "internal market" by the end of 1992. An "internal market" is defined in Article 14 of the EU Treaty as "an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured" in accordance with the Treaty.

The Commission used the internal market programme as the basis for its broad legislative initiative in the electricity and gas sectors.[14] In this context, the European Commission targeted the energy sector with an action plan first announced in a 1988 working document, COM (88) 238 final (2 may 1988). In February 1992, the Commission formally submitted a framework and set of common rules for the completion of the internal market in electricity and gas: Proposal for a Council Directive concerning common rules for the internal market in electricity, OJC 65/04, and natural gas, OJC 65/13. The main feature of the proposal was three "new agents

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[12] See Cross, E. D., Hancher, L. and Jan Slot, P. (2001) "EC Energy Law" in Martha M. Roggenkamp et al Energy Law in Europe, Oxford University Press, p.216.

[13] It is worth mentioning that there were proposals for the inclusion of energy-related provisions in the Single European Act, which were rejected. See Cameron, P. D. (2002) Competition in Energy Markets: Law and Regulation in the European Union, p.53.

[14] Other related initiatives included the proposals for Directives on price transparency and transit of natural gas and electricity. They led to the adoption of the Price Transparency Directive (Directive 90/377/EEC of 29 June 1990 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users), the Electricity Transit Directive (1990), and the Gas Transit Directive (1991). The Transit Directives were repealed by the Second Electricity and Gas Directives – which clearly went beyond the requirements of the Transit Directives – in 2003.

for change": (i) the abolition of special and exclusive rights in order to allow market entry; (ii) the "unbundling" or administrative separation of the functions of production, transmission, distribution, and supply; and (iii) a qualified but compulsory obligation on owners of transmission and distribution grids to offer access to third parties in return for payment of reasonable compensation.[15]

In this regard, the European Commission in its White Paper on "An Energy policy for the European Union", COM (1995) 682, made it clear that "the prime objective will be to liberalise the internal market for electricity and natural gas".[16] It is worth mentioning, however, that the degree of consensus among Member States in relation to the need for introducing competition in the energy sector has not been comparable with some other services sectors such as the telecommunications sector, which was fully liberalized a decade ago. This was evidenced by the fact that from December 1990 to June 1996 the initial Commission's position to allow direct transaction between as many producers and consumers as possible in the electricity sector too, was blocked by the opposition of those countries that believed that a vertically integrated structure for the industry was quite beneficial for the consumers.[17]

Thus, it should not come as a surprise that the Commission's initiative regarding the liberalization of electricity and gas through the introduction of Directives concerning common rules for the electricity and gas industries took about a decade to complete.

The Directives opened the electricity and gas sectors to competition, although very

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[15] cross *et al*, supra note 12, p.217.
[16] Cameron, supra note 13, p.97.
[17] Heimler, A. (2000) "Competition and Regulation in Public Utilities" in *Privatisation, Competition and Regulation,* Proceedings of the Helsinki Meeting, September 1998, OECD, p.181.

gradually and as discussed later in this chapter national governments were left to a great extent free to introduce as much as competition as they like.[18]

At the same time, during that period, the context of European integration changed dramatically. The Treaty on European Union, signed in Maastricht on 7 February 1992, further amended the EEC Treaty. In addition, the Treaty of Amsterdam, signed in 1997 and ratified by all Member States as of 1 May 1999, further amended the Treaty framework.

It should be noted, however, that these developments have only some general relevance to the establishment of an internal market in energy. For example, as a result of the changes made by the Treaty on European Union, the notion of "subsidiarity" was introduced as a principle of general application instead of being restricted to environmental matters as it had appeared in the Single European Act.[19]

Article 3B (now Art 5), defines this notion as follows:

> "In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiary, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and therefore, by reason the scale or effects of the proposed action, be better achieved by the Community."

This principle has had particular importance in the context of the energy sector. This is evidenced by the fact that specific reference to the principle of subsidiarity can be found in the preamble of both the electricity and gas Directives. As mentioned in the preambles, since the objective of the proposed actions, namely the creation of a fully operational internal electricity and gas markets, in which fair competition prevails, cannot be sufficiently achieved by the Member States and can therefore, by reason of

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[18] See ibid.
[19] Cameron, supra note 13, p.51.

the scale and effects of the action, be better achieved at Community level, the Community may adopt measures in accordance with the principle of subsidiary as set out in Article 5 of the Treaty.

It has been remarked that the principle of subsidiarity has both contributed to and constrained the Commission in its attempts relating to energy regulation. In the sense that while it has facilitated the making of proposals to act in this field with respect of the distribution of powers between Member States and Community institutions — it has also made their relations more complex and open-ended by encouraging a reliance on framework Directives as the favoured instrument for change.[20]

In the general context of the liberalization process in public utilities in the EU, it has been remarked that in the different sectors the actions at the Community level have been mainly directed towards the following objectives:

— A clear-cut distinction between the actual running of the companies and regulatory responsibilities;

— An accounting and organisational separation between monopolistic and competitive activities, should they be carried out by the same firm; and

— Transparent and objective conditions for third party access to network facilities.[21]

It is worth noting that EU Directives concerning liberalizing the energy sector have been minimum harmonisation Directives, which means that whilst the Directives have laid down minimum targets to open up the electricity and gas markets, they allow Member States to go further than legally required. The Directives are designed

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[20] Ibid., p.52.
[21] Heimler, supra note 17, p.178.

to ensure the free movement of electricity and gas within the Community. Thus, it is necessary to examine the relevant rules underpinning the liberalization of energy trade in EU law.

B. The Treaty Rules Underpinning the Liberalization of Energy Trade

As mentioned earlier, unlike coal and steel, energy as such had not been brought into community activity until the first oil shock of 1973 and the real move towards energy liberalization initiated after the entry into force of the Single European Act in 1987. However, the necessary legal basis for liberalizing energy market already existed in the substantive law of the then European Community through the recognition of the free movement of goods, persons, services, and capital. Once it was agreed that energy had to cease to be mainly the preserve of the Member States and had to become part of the Internal Market for other goods and services that the Commission envisaged in its White Paper of June 1985, it was predictable what this would imply.

In this regard, a member of the European Commission drew attention to the fact that "to take the opening up of the market first, the key is the abolition of national frontiers and free circulation referred to in the EEC Treaty."[22] In the context of energy liberalization, the focus of the Commission has been on the electricity and gas sectors, which, being carried by networks, have traditionally enjoyed a considerable amount of national protection. In these sectors, due to their network dependency, mere dealing with the question of recognising rights for importing and exporting energy will not be the end of the story. It is also necessary to pay attention to the

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[22] Antonio Cardoso e Cunha, (1991) "The Internal Energy Market", Journal of Energy & National Resource Law, vol. 9, p.291.

importance of monopolies to transmit and to distribute energy and to deal with the obstacles to free trade that might cause by this situation.[23]

Before turning to the substantive law of the European Community Treaty it is worth mentioning that the treaty rules involved in the process of the liberalization of energy trade are not limited to the rules that are discussed below. Obviously, the process is aimed at the creation of healthy competition both between products and between undertakings. It follows that the rules on competition as set out in Articles 81-82 and Article 86 would be applicable to the energy sector as well. Also the applicability of the rules on free movement of capital and the right of establishment should not be overlooked.[24] However, the focus here is on the rules underpinning the liberalization of energy trade. Thus, in the sections below, the EC Treaty rules on free movement of goods and services are explained in detail.

1. Free Movement of Goods

As an introduction to the relevant Treaty provision, mention should be made of Article 23 (1) of the EC Treaty, which provides that:

> "The Community shall be based upon a customs union which shall cover all trade in goods and which shall involve the prohibition between Member States of customs duties on imports and exports and of all charges having equivalent effect, and the adoption of a common customs tariff in their relations with third countries."

It follows that the free movement of goods has an internal and external dimension: goods originating within the EU enjoy the rights of free movement between the Member States, while goods originating outside the EU enjoy free movement only

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[23] See ibid., p.293.
[24] See Cross *et al*, supra note 12, p.222.

once they have paid the common customs tariff.[25] According to the ECJ, goods are products which "can be valued in money and which are capable, as such, of forming the subject of commercial transactions". Among the things that the ECJ has regarded as goods so far, mention can be made of paintings and other works of art, petroleum products, and waste, whether recyclable or not. However, where goods are merely ancillary to the main activity, then other provisions of the Treaty should apply. For example, in the *Schindler* case, it was held that the organization of lotteries did not constitute an activity relating to "goods", even though lotteries necessarily involved the distribution of advertising material and tickets. The Court described the main activity as a "service" subject to the Treaty provisions on services.[26]

The rules on free movement of goods are set forth in Articles 28-31 (ex Arts 30-37) of the EC Treaty. Articles 28-29 prohibit quantitative restrictions on imports and exports and all measures having equivalent effect to quantitative restrictions. It should be noted that the ECJ has interpreted "quantitative restrictions" very widely, so as to cover all measures capable of hindering, directly or indirectly, actually or potentially, free movements of goods between the Member States.[27] It is worth noting, however, that both Articles 28 and 29 are subject to the exhaustive list of derogations found in Article 30, which include matters such as public policy, public security, and health. It is also worth mentioning that the ECJ has adopted a narrow interpretation of the derogation listed in Article 30. Another important point to make is that the Community is provided with the power to harmonize by the EC Treaty and

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[25] Barnard, C. (2004) The Substantive Law of the EU: The Four Freedoms, p.27.
[26] Ibid.
[27] Cross *et al*, supra note 12, p.223.

if the Community measure exhaustively harmonizes the field, Member States can no longer rely on the Article 30 derogation.[28]

It has been remarked that for restrictions on energy, including electricity, the most important exemption in Article 30 is that relating to public security.[29] In the *Campus Oil* case, the oil companies challenged an order of the Irish Government requiring them to purchase about 35 percent of their supplies at pre-determined prices from the only State-owned Irish oil refinery. It was claimed that without these compulsory purchases, the refinery would have to close and the Republic of Ireland would have been totally dependent on imported supplies of petroleum products. The ECJ in principle confirmed the position of the Irish Government and held that "while the requirement was contrary to Article 28 (ex Art 30) it could be excused in such circumstances under Article 30 (ex Art 36) provided that the compulsory purchases were the minimum necessary to ensure the continued operation of the refinery".[30] Article 31 (ex Article 37) is related to state monopolies of a commercial character and will be discussed later in this chapter together with the latest improvements of the regulatory framework.

2. Freedom to Provide Services

The relevant Treaty rules on freedom to provide services are set forth in Articles 49 and 50 (ex Arts 59-60). Article 49 provides that:

"Within the framework of the provisions set out below, restrictions on freedom to provide services within the Community shall be progressively abolished during the transitional period in respect of

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[28] Barnard, supra note 25, p.28.
[29] Cross *et al*, supra note 12, p.225.
[30] Ibid., p.226.

nationals of Member States who are established in a State of the Community other than that of the person for whom the services are intended.
The council may, acting by a qualified majority on a proposal from the Commission, extend the provisions of the Chapter to nationals of a third country who provide services and who are established within the Community."

It follows that Article 49 envisage the situation where the service provider established in State A holding the nationality of one of the Member States provides services in State B and then returns to State A once the activity is completed. Article 49 can be used to challenge rules laid down by both the host State and the home State which obstruct the provision of services. Not surprisingly, most cases concern barriers raised by the host state. For example, in *van Binsbergen* a Dutch national challenged a Dutch rule requiring legal representatives to be established in the Netherlands before they could represent a person before a Dutch court, which was held by the ECJ to be contrary to Article 49.[31] The Court went on to say:

"In particular, a requirement that the person providing the service must be habitually resident within the territory of the state where the service is to be provided may, according to the circumstances, have the result of depriving article 59 of all useful effect, in view of the fact that the precise object of that article is to abolish restrictions on freedom to provide services imposed on persons who are not established in the state where the service is to be provided."[32]

However, in recent years an increasing number of cases have challenged the obstacles to the provision of services created by the home State. For example, in *Ciola* the ECJ held that an Austrian company providing moorings for boats on Lake Constance to boat owners resident in other Member States could rely on Article 49 against the Austrian authorities when they limited the number of moorings available for boat owners resident abroad. Also in *Gourmet* the ECJ held that a national rule preventing undertakings established in State A from offering advertising space in

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[31] Barnard, supra note 25, p.331.

[32] Case 33/74 Johannes Henricus Maria van Bisbergen v. Bestuur van de Bedrijfsvereniging de Mataalnijverheid [1974] ECR 1299, para. 11.

their publications to potential advertisers established in other Member States could be challenged in State A as contrary to Article 49.[33]

In *Alpine Investment* the question at issue was a restrictive measure imposed by the home State. In this case, alpine investments, a company incorporated under Netherlands law and established in the Netherlands specializing in commodities futures[34], challenged the restriction imposed on it by the Netherlands ministry of finance prohibiting it from contacting individuals by telephone without their prior consent in writing in order offer various financial services (a practice known as 'cold calling'). Alpine investment argued before the administrative Court that the prohibition of cold calling was incompatible with Article 59 of the EC Treaty in so far as it concerned potential clients established in Member States other than the Netherlands.

The Administrative Court referred several questions on the interpretation of Article 59 to the ECJ. Among other things, it was asked if Article 59 also covers services which the provider offers by telephone from the Member State of its establishment to potential clients established in another Member State and therefore to be provided from that Member State. The ECJ held that:

"The freedom to provide services would become illusory if national rules were at liberty to restrict offers of services. The prior existence of an identifiable recipient cannot therefore be a condition for application of the provisions on the freedom to provide services."[35]

In the view of the court, this interpretation should not be affected by the fact that the prohibition at issue is imposed by the Member State in which the provider is

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[33] Barnard, loc. cit.
[34] The parties to a commodities futures contract undertake to buy or sell a specific quantity of a commodity of a given quality at a price and date fixed at the time the contract is concluded.
[35] Case C — 384/93 Alpine Investments BV v. Minister van Financien [1995] ECR I — 1141, para. 19.

established and not by the Member State in which the potential recipient is established. Article 59 prohibits restrictions on freedom to provide services within the Community in general, which means it covers not only restrictions laid down by the state of destination, but also those laid down by the state of origin. The Court therefore after referring to its established practice on this issue held that the right freely to provide services may be relied on by an undertaking as against the state in which it is established if the services are provided for persons established in another Member State.[36]

As regards the issue of what activities constitute "services" under the EC Treaty, Article 50 provides that:

"Services shall be considered to be 'services' within the meaning of this Treaty where they are normally provided for remuneration, *insofar as they are not governed by the provisions relating to freedom of movement for goods, capital and persons*[37].
'Services' shall in particular include:
(a) activities of an industrial character;
(b) activities of a commercial character;
(c) activities of craftsmen;
(d) activities of the professions.
Without prejudice to the provisions of the Chapter relating to the right of establishment, the person providing a service may, in order to do so, temporarily pursue his activity in the State where the service is provided, under the same conditions as are imposed by that State on its own nationals."

With regard to the scope of applicability of the EC Treaty provisions on services, it is important to notice that the wording of Article 50 suggests that the services provisions have a "complimentary" status and are subordinate to the provisions relating to freedom of movement for goods, capital and persons. However, in recent years the ECJ has gone a long way towards recognizing a full status for the services provisions. In has been remarked that while the ECJ has often repeated the formula that the services provisions are subordinate to the other freedoms, in reality an

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[36] Ibid., paras. 29-30.
[37] Emphasis added.

increasing number of cases are being decided under Articles 49 and 50; sometimes alongside other Treaty provisions such as Article 28 (free movement of goods) and sometimes instead of other Treaty provisions.[38]

With regard to the scope of the services provisions, it is also worth mentioning that although the text of Articles 49 and 50 is confined to giving rights for service providers only, it does not mean that the recipient cannot enjoy the freedom. In *luisi and Carbone,* the ECJ confirmed that the freedom to receive services from a provider established in another Member State was "necessary corollary" of the freedom to provide services.[39] The case law also confirms that Articles 49 and 50 apply where instead of travelling the provider or the recipient of the services, the service itself moves. For example, in *Alpine Investment,* which mentioned earlier, the company was offering services such as investment advice and the transmission of clients' orders to brokers operating on commodities futures markets and the ECJ held that the services provisions were applicable.

III. The Electricity Directive

A. Background and Aims

On 19 December 1996 Directive 96/92/EC on common rules for the internal market in electricity (the Electricity Directive) was adopted by the European Parliament and the Council. It entered into force two months later on 19 February 1997. Member States, with a few exceptions, had until 19 February 1999 to bring into force laws,

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[38] Barnard, supra note 25, p.330.
[39] Ibid., p.332.

regulations, and administrative provisions necessary to comply with its terms. The general aim of the Electricity Directive is to establish common rules for the generation, transmission, and distribution of electricity. It sets out rules for the organization and functioning of the electricity sector, access to the market, criteria and procedures applicable to calls for tender, the granting of authorizations, and the operation of system.[40]

Its adoption marked the end of almost eight years of difficult negotiations during which a large number of compromises were eventually reached and accepted by the Commission. It is worth mentioning that the underlying principles for the internal energy market are as follows: security of supply, environmental protection, protection of small consumers, transparency and non-discrimination, recognition the differences between national systems, and the need for transitional provisions.[41] The Directive was aimed at setting out a minimum requirement for electricity liberalization across the European Union. Accordingly, it provided for a phased, partial opening of the internal market for electric power.[42] Individual countries could go further and as discussed later in this chapter, full market opening occurred in some of them, notably in the UK that was well ahead of the process.

B. Generation

The aim of provisions on generation is to completely open up the construction of new generating capacity to competition. New generation can be either licensed or

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[40] The Electricity Directive, Art 1.
[41] Cross *et al*, supra note 12, p.301.
[42] The concept of "eligible customers" was related to this situation. Eligible customers were mostly industrial and commercial users of electricity and gas.

approved subject to a tendering procedure (Art 4). Article 5, which covers licensing, gives a non-exhaustive list of criteria which may be applied in making decisions as to approving new market entrants. These criteria must be made public and may relate to: safety and security of the electricity system, installations, and associated equipment; protection of the environment; land-use and siting; use of public ground; energy efficiency; the nature of the primary sources; characteristics particular to the applicant, e.g. technical, economic, and financial capabilities; or public service obligation.

Under the tendering procedure, Member States or any competent body designated by the Member State concerned may plan for the construction of new capacity by drawing up an inventory of new capacity to constructed, including replacement of old capacity. Inventories must take account of the need for interconnection of systems. Commenting on the tendering procedure, it has been said that due to the fact that the Directive does not impose any clear separation of activities of the single buyer and the transmission operation,[43] in effect, the decision as to when to open a tender for new capacity, as well as the amount needed, rests with the major player in the centralized system.[44]

C. Transmission and Distribution

The directive contains rules on the operation of the transmission system. Transmission is defined as the transport of electricity on the high-voltage interconnected system with a view to its delivery to final customers or to

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[43] This point will be discussed in greater detail below.
[44] Cross *et al,* supra note 12, p.304.

distributors.[45] Chapter IV deals with this issue and the focus of its three Articles is the technical issues for operators of the transmission system. Organization of access to the system is dealt with separately in Chapter VII of the Directive.

In accordance with Article 8, Member States must designate or require undertakings which own transmission systems to designate a system operator to be responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system's interconnectors with other systems. The Transmission System Operator (TSO) is responsible for dispatching the generating installations in its area as well as for determining the use of interconnectors with other systems. Criteria for dispatching and use of interconnectors must be objective, published, and applied in a non-discriminatory manner. In other words, the TSO is not allowed to favour those generating facilities belonging to the same company or to shareholders of the company in cases where the TSO is not totally separated from production.[46]

Articles 10 to 12 deal with the operation of distribution systems. Distribution is defined as the transport of electricity on medium-voltage and low-voltage distribution systems with a view to its delivery to customers. In most Member States there is a single TSO and several distribution system operators (DSOs). The Directive requires Member States to designate or require undertakings owning or responsible for distribution systems to designate a system operator. As is the case with the TSOs, the DSO is charged with operating, ensuring the maintenance of, and, if necessary, developing the distribution system in a given area and its interconnectors with other systems. It may be subject to an obligation to supply

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[45] The Electricity Directive, Article 2, Recital 5.
[46] Cameron, supra note 13, p.147.

customers located in a given area. The tariff for such supplies may be regulated to achieve various objectives, such as equal treatment of all customers in the area.

D. System Access

For electricity to be transmitted from generators to eligible customers, network access has to be provided by the system owners and operators. The Directive provides Member States with the right to choose among a Single Buyer model of system access (Article 18), or negotiated or regulated Third Party Access (TPA) (Article 17). It should be noted that the incorporation of the Single Buyer model, as proposed by the French government in 1994, appeared to be a controversial issue. Although the Commission itself expressed severe doubts as to the legality of the concept in its Working Paper of March 1995, further subsequent amendments to the draft directive, particularly with a view to strengthening the regulatory framework within which the Single Buyer regime would operate, paved the way to the eventual incorporation of the model into the Directive.[47] Before analysing the related Articles of the Directive, it is necessary to introduce models of competition in the context of electricity liberalization.

1. Models of Competition in the Context of Electricity Liberalization

A central issue in electricity liberalization is the fact that a key part of the sector, transmission and, over a specified geographic area, distribution is currently a monopoly for the foreseeable future. From an economic point of view, it is cheaper

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[47] Cross *et al*, supra note 12, p.302.

for a single efficient facility to provide these services than for two or more to do that. Accordingly, the question is how to develop a system in such a way that permits competition in use of the unique facility.[48] In the words of Professor Walde,

> "The concept of a right to a competitor's facilities is not natural. An owner of a facility constructed at great cost, with great risk to serve its business will not sympathise at all that a competitor should have "easy access", without going through the trouble of investment, risk and possible failure of a business prospect... The gist of the TPA concept is that the state's responsibility is to sometimes intervene in the order to keep or make it more competitive;"[49]

Thus, in the context of electricity liberalization, in order to develop an effective competition, non-discriminatory access to the grid needs to be secured. Two main options to achieve this aim have been developed so far: the "grid access" model and the "competitive pool" model.

Under the grid access model, the owner of the grid must allow competitors to use it, on non-discriminatory terms and prices. The grid owner must not discriminate in favour of itself. Under the several variants of this model, terms and conditions for access can be determined in different ways: they can be negotiated with market actors negotiating their own terms (negotiated TPA), or they can be regulated with an independent regulator setting the terms (regulated TPA). Negotiated TPA is usually regarded as less effective for the promotion of competition. The vertically integrated company will not, in general, set access terms that permit all more efficient entrants to enter.[50]

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[48] See Chapter 7 for a discussion of the doctrine of essential facilities.
[49] Walde, T. W. (2001) "Access to Energy Networks: A Precondition for Cross-Border Energy and Energy Services Trade", www. Dundee.ac.uk/cepmlp/journal/html/vol9.
[50] See IEA, (1999) Electricity Market Reform: An IEA Handbook, pp.46-47.

The competitive pool model is a combination of grid access rules and a competitive spot market for wholesale electricity. It should be noted that the physical nature of electricity (its non-storability) does not allow for a true electricity spot market, namely a market for immediate electricity delivery. Instead, transactions are scheduled some time in advance of physical delivery (e.g. one day, one hour or five minutes in advance).[51] The competitive pool model requires a vertical separation of generation and transmission and of generation and supply. This is fundamental to the effective operation of this model. The grid access rules ensure that competing generators can reach ultimate customers; whereas the pool is a short term, multilateral market for power exchange. In jurisdictions that have implemented this model, the pool is usually managed by a distinct entity, which has no economic or managerial interest in generation or transmission.[52]

The competitive pool is in fact a market solution that replicates the traditional cost-based "merit order".[53] Under the traditional system, dispatch and scheduling had to be centrally directed through a "command-and-control" mechanism, in order to ensure that generators were dispatched on the basis of least-cost.[54] Accordingly, the so-called "merit order", namely an order for plant dispatch, was a means to minimise total coasts by giving priority to capacity with low variable and high fixed coast such as nuclear. This type of capacity is called base load.[55] Under the competitive pool,

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[51] IEA, (2001) Competition in Electricity Markets, p.79.
[52] IEA, (1999) Electricity Market Reform: An IEA Handbook, p.47.
[53] Helm, D. (2004) Energy, the State, and the Market, p.133.
[54] Ibid., p.131.
[55] IEA, (1999) Electricity Market Reform: An IEA Handbook, p.13. Obviously, as demand rises, intermediate load and peak load will be brought into operation, loc. cit.

the spot market establishes a merit order, except that it is not based on the short term marginal cost of generating units, but on price bids.[56]

These two main types of competition in the power sector show a number of variations in practice. One variation is particularly important: the single buyer model. The single buyer model has two principal components. The first is a competitive bidding mechanism for new capacity: an entity separated from the incumbent utility collects bids for tender for new capacity construction and subsequent supply of power when the need arises and chooses the cheapest one. The second component is the possibility to carry out so-called "triangular" transactions. If a client of the incumbent utility wishes to buy power from a competitor, the "Single Buyer" buys the power from the client at source, or at the "border" of his system at his retail price less the transmission price. He then transmits it for the client, and sells it to him at the retail rate.[57]

The grid access model was chosen by the United States for its wholesale deregulation, and also by several Canadian provinces, and other countries such as Germany, Japan, and the Netherlands. The competitive pool model has been chosen by counties such as Australia, Canada (Alberta), Norway, Sweden, and the United State (California).[58] In the United Kingdom (England and Wales) the Electricity Pool was introduced as part of the liberalization of electricity in 1990 under the provisions of the Electricity Act 1989.[59] A crucial feature of the Electricity Pool was that

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[56] Ibid., p.47.
[57] Ibid., pp.48-49.
[58] Ibid., p.49.
[59] Bartholomew, M. (2005) "The UK Electricity Market – From Pool to Exchange" in Martha M. Roggenkamp and Francois Boisseleau (eds.) The Regulation of Power Exchanges in Europe, p.81.

participation by generators was compulsory.[60] The pool operated for over 10 years until it was replaced by an entirely new trading structure known as the New Electricity Trading Arrangements (NETA).[61] The choice between these models depends on a number of factors, but among the main determinants are existing structure and ownership patterns. In some cases, due to the existence of constitutional limitations, it would be impossible to carry out full vertical separation at least in the short term, and thus to introduce the competitive pool model.[62]

2. System Access under the Electricity Directive

As noted earlier, the Directive provides Member States with the right to choose among a Single Buyer model of system access (Article 18), or negotiated or regulated Third Party Access (TPA) (Article 17). Eligible customers can contract to purchase electricity supply from independent producers inside their territory as well as from producers outside their territory. Trade between different systems, TPA or Single Buyer, will be possible where the customer is eligible in both systems. If a customer is eligible only one system and access is refused, the commission may require the refusing system to give access at the request of the Member State where the eligible customer is located.[63]

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[60] Helm, supra note 53, p.134.
[61] Bartholomew, supra note 59, loc. cit. Under the NETA system, rather than being obliged to trade solely through a centralized pooling system, market participants would be able to enter into physical bilateral contracts to trade on an "over the counter" basis, or on power exchanges and to participate in forward and future markets. See ibid., p.105.
[62] IEA, (1999) Electricity Market Reform: An IEA Handbook, p.49. For instance, we referred to the limitations imposed by the Mexican Constitution in Chapter 3.
[63] Cross *et al*, supra note 12, pp.306-307.

Under the negotiated TPA procedure, producers and consumers of electricity enter into contracts for supplies directly with each other, but must negotiate access to the network with their operators. These negotiations will cover matters such as transport charges and other conditions. The consumers are "supply undertakings", i.e. distributors (where Member States authorize their existence) and "eligible customers". Either the TSO or DSO may refuse access in the event of a lack of necessary capacity. The burden of proof falls on the network operator, which must provide duly substantiated reasons for the refusal.[64] Negotiations are subject to a dispute settlement procedure. According to Article 20, a competent authority must be established for the settlement of disputes relating to the contracts and negotiations in question.

Under the regulated TPA procedure, producers and eligible consumers are still allowed to contract directly with each other. Eligible customers are granted a right of access on the basis of published tariffs. For dispute settlement under this procedure, Member States are obliged by Article 20 to designate a competent body to settle disputes in the same way as they are if they take the negotiated access option.[65]

If a Member State has chosen the Single buyer regime, then it must put in place the Single Buyer access system set out in Article 18. The main characteristics of such an access system are as follows: publication by the Single Buyer of a non-discriminatory tariff for the use of the transmission and distribution system; eligible customers are free to conclude contracts to cover their own needs with producers inside and outside the territory covered by the Single Buyer; Single buyer is obliged

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[64] The Electricity Directive, Art 17 (1) & (5).
[65] Cameron, supra note 13, p.152.

to purchase the electricity contracted by an eligible customer from a producer inside or outside the territory at a price equal to the sale price offered by the Single Buyer to eligible customers minus the price of the published tariff for use of the network. Single buyer is not to be informed of electricity price as it appears in contract between producer and eligible customer. In effect, the Single Buyer has no merchant function; only a transportation function.[66]

IV. The Gas Directive

A. Background and Aims

The Directive establishing common rules for an internal market in natural gas (the Gas Directive) was adopted by the Council in April 1998 and entered into force on 10 August 1998. In fact, the plans to liberalize the Community's gas market initially proceeded in parallel with those for the electricity market. However, given the obstacle to achieving any consensus whatsoever on either the electricity or gas drafts at the time, the Energy Council decided to split the two proposals in November 1994 and priority was given to work on the Electricity Directive. The successful adoption of the Electricity Directive in 1996 paved the way for the adoption of the Gas Directive, which was largely modelled on the provisions of the Electricity Directive, in June 1998.[67] The Member States were given two years to transpose it into national regimes.

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[66] Ibid. Alternatively, based on Article 18 (3) of the Directive, Member States can opt for combining the Single Buyer procedure with the TPA model (either negotiated or regulated), no purchase obligation on the Single Buyer which then acts like a system operator in a TPA model. Ibid., p.153.
[67] Cross *et al*, supra note 12, pp.308-309

Article 1 of the Directives stipulates that it is important to adopt measures to continue the completion of the internal market and the establishment of a competitive natural gas market is regarded as an important element of the completion of the internal energy market. The aim of the Gas Directive is to establish common rules for the transmission, distribution, supply, and storage of national gas. In contrast to the Electricity Directive, the Gas Directive is not concerned with the provision of common rules for production operations; because this had already been done via the Hydrocarbons Licensing Directive, adopted in 1994.[68] Accordingly, the liberalization of the upstream segment of the industry was already regulated at the EU level.

It is essential to make the point that the Gas Directive should be regarded as a framework containing general principles on how to create a competitive natural gas market at the national level. According to paragraph 9 of Article 1, "in accordance with the principle of subsidiarity, these rules are no more than general principles providing for a framework, the detailed implementation of which should be left to Member States…". Thus, as with the Electricity Directive, there exists a considerable margin of discretion for the Member States in the introduction of their model of regulation for a competitive gas market.

B. Transmission and Distribution

Transmission is defined as the transport of natural gas through a high- pressure pipeline network other than an upstream pipeline network with a view to delivery to

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[68] Cameron, supra note 13, p.168. See Directive 94/22/EC of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons.

customers.[69] It is worth noting that unlike the Electricity Directive there is no requirement that transmission and storage functions should be management unbundled from other functions in a vertically or horizontally integrated utility. Article 13, however, requires an accounting unbundling and requires integrated gas companies to keep internal accounts for their gas transmission, distribution, and storage activities as if they were separate businesses. The transmission undertaking must operate its part of the integrated system in a secure, reliable, and efficient manner, with due regard to the environment. It must not discriminate between users or classes of users of the system, particularly in favour of its subsidiaries or shareholders.[70]

The provisions on distribution and supply are set out in Articles 9 to 11 of the Directive, which are almost identical to those applicable to Article 6 to 8 on transmission, storage, and LNG. Distribution is defined in Article 2(5) as the transport of natural gas through local or regional pipeline networks with a view to its delivery to customers. With respect to distribution and supply undertakings, Member States may impose on them public service obligations, i.e. an obligation to deliver to customers located in a given area or of a certain class or both. The tariff for such deliveries may be regulated.[71]

C. System Access

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[69] Gas Directive, Art 2(3). It should be noted that storage and LNG facilities are also covered by the concept of transmission. See Articles 6-8 of the Directive.
[70] Cross *et al*, supra note 12, pp.309-310.
[71] Cameron, supra note 13, pp.169-170.

As with the Electricity Directive, at the core of the Gas Directive are provisions on system access. In contrast to the Electricity Directive, there is no Single Buyer model as such,[72] but Member States can choose between a system of negotiated access (Art 15) or regulated access (Art 16) or both to organize access to their gas systems (both transmission and distribution). A combination of both systems may involve the use of negotiated Third Party Access (TPA) at the transmission level and regulated TPA at distribution level. Such combinations have subsequently been favoured in Denmark and the Netherlands.[73]

In the case of negotiated TPA, natural gas undertakings and eligible customers inside or outside the territory covered by the system must be able to negotiate access to the system so as to conclude supply contracts with each other on the basis of voluntary commercial agreements. Access contracts must be negotiated with the relevant transmission and/or distribution undertakings. However, in contrast to rules for negotiated TPA under the Electricity Directive, there is no requirement to publish indicative tariffs.[74]

Alternatively, in the case of regulated TPA, Article 16 provides that Member States shall give "natural gas producers and eligible customers either inside or outside the territory covered by the interconnected system a right of access to the system, on the basis of published tariffs and/or other terms and obligations for use of that system." The effect of this should be at least equivalent, in terms of access to the system, to the procedures for access set out in Article 15.[75]As with the Electricity Directive, in

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[72] Cross *et al*, supra note 12, p.310.
[73] Cameron, supra note 13, p.171.
[74] Cross *et al*, supra note 12, p.311.
[75] Cameron, supra note 13, p.173.

both cases of system access, transmission and distribution operators can refuse access to the system where this would prevent them carrying out public service obligations or where they do not have capacity.

V. Further Developments

A. Regulatory Improvements

The Community's use of framework legislation for common rules for the internal market in electricity and gas is designed to allow a substantial degree of diversity among the national regulatory regimes in the context of the move towards the harmonization and convergence of European energy law. In 2001, a few years after the adoption of the Directives, the Commission concluded that, "to date, the effects of market opening have been positive, with regard to both the development of the market as such and the impact of market opening on related important policy fields, such as public service objectives, environment and security of supply."[76] At the same time, as shown in Table 1, the Commission noted that the degree of liberalization varied greatly from one Member State to another:

Table 1. EU electricity and gas market opening — 2000[77]

	Electricity	**Gas**
Directive – min.	**30%**	**20%**
Austria	32%	49%
Belgium	35%	59%

[76] Communication from the Commission to the Council and the European Parliament, *Completing the internal energy market*, Brussels, 13.3.2001, COM (2001) 125 final, p.2.
[77] Ibid., pp.4-5. It is worth reminding that Greece and Portugal had longer deadlines.

Denmark	90%	30%
Finland	100%	90%
France	30%	20%
Germany	100%	100%
Greece	30%	0%
Ireland	30%	75%
Italy	35%	96%
Luxembourg	40%	51%
Netherlands	33%	45%
Portugal	30%	0%
Spain	54%	72%
Sweden	100%	47%
United Kingdom	100%	100%
EU – Average	**66%**	**79%**

The fact that in terms of market opening, the vast majority of Member States were going further than the initial target was encouraging. However, the fact that the degree of liberalization varied greatly from one Member State to another was a source of concern. Furthermore, as discussed in more detail below, there were a number of regulatory problems. Thus, at its meeting in Lisbon on 23 and 24 March 2000, the European Council called for rapid work to be undertaken to complete the internal market in both electricity and gas sectors and to speed up liberalization in these sectors. In 2001, the Commission prepared a proposal for a directive amending the electricity and gas Directives.

However, given the scope of the amendments that were being made to the Electricity and Gas Directives, it seemed more appropriate to adopt new Electricity and Gas Directives and to repeal the old ones. The Second Electricity Directive (Directive 2003/ 54/ EC), as well as the Second Gas Directive (Directive 2003/ 55/ EC) were adopted in June 2003 repealing the previous Directives. These two Directives represent a major step towards the completion of the internal market for electricity and gas. With regard to their content, it is worth mentioning that to address the issue of varying degrees of market opening, the Commission came up with a "quantitative" proposal, i.e. full market opening by 1 January 2005.[78] In a compromise with France and Germany[79], the new Directives extended the deadline for full market opening to 1 July 2007.

More importantly, the Commission identified a number of normative shortcomings of the original Directives, which needed to be addressed through "qualitative" proposals, which focused on improving, in structural terms, the electricity and gas markets. The Commission noted in this regard that experience in market opening had clearly demonstrated that certain approaches to market opening were far more likely to bring about the development of effective competition.[80] The main structural changes in the legal framework created by the new Directives are as follows[81]:

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[78] For electricity, it was proposed that Member States make all non-domestic customers free to choose their electricity supplier by 1 January 2003, and that this be extended to all customers (100% market opening) by 1 January 2005. For gas, the deadlines were 1 January 2004 for non-domestic users and 1 January 2005 for full market opening. See ibid., p.35.

[79] See Helm, supra note 53, pp.383-84.

[80] See Explanatory Memorandum, Revision of the Electricity and Gas Directives, supra note 74, p.34.

[81] See Communication from the Commission to the Council and the European Parliament, *Prospects for the internal gas and electricity market*, COM (2006) 841 final, 10 January 2007; Communication from the Commission to the Council and the European Parliament, *Completing the internal energy market*, Brussels, 13.3.2001, COM (2001) 125 final; Helm, supra note 53, pp.372-85.

1. **Third Party Access:** It is generally acknowledged that Third Party Access based on published tariffs (regulated TPA) is more effective than negotiated TPA. Furthermore, the single buyer model was not selected by Member States. Accordingly, the Second Electricity Directive removes the other two alternatives and obliges Member States to introduce a regulated TPA regime. Similarly, the Second Gas Directive mandates regulated third party network access. However, Member States are still allowed to select between regulated or negotiated access to gas storage facilities, line pack and other ancillary services.
2. **Unbundling:** The limited level of unbundling obligations under the original Directives was viewed as an obstacle to creating competitive markets. Accordingly, the Second Electricity Directive requires legal unbundling – in addition to accounting and management unbundling – between network activities, i.e. transmission and distribution, and all other activities. Similarly, the Second Gas Directive strengthens a very weak form of unbundling, namely internal accounting unbundling of transmission, distribution and storage activities (required by Article 13 of the original Directive), with the requirement that transmission and distribution system operators must also be legally unbundled and management unbundled. However, still only accounting unbundling is required for storage and LNG operators.
3. **National Regulators:** In making the case for requiring Member States to establish an independent national regulatory authority, the Commission drew attention to the fact that national (electricity and gas) regulators complement the function of competition authorities. Energy Regulators have the competence to set or approve network tariffs and intervene *ex-ante* in the

market, as opposed to competition authorities, which can only deal with competition problems *ex-post*. These authorities also play a major role in issues relating to cross-border trade. some observers even supported the idea of establishing a regulator at the European level. However, at this stage of market opening, the Commission did not find it necessary to address the issue in the second Directives.

Furthermore, with the aim of facilitating cross-border trade, new rules on cross-border electricity exchanges[82] and also on conditions for access to the natural gas transmission networks[83] were adopted in 2003 and 2005 respectively. The adoption of these rules was aimed at addressing the problem of the existence of individual liberalized markets rather than one integrated market. In its 2005 Annual report, the Commission noted that one of the key issues was the failure to fully integrate national energy supply into a wider European market.[84]

B. Interpretative Improvements

The concept of "Interpretative improvements" is chosen to describe another relevant development, namely the role of the ECJ in strengthening the implementation of the Directives by remedying any emerging loopholes in the new system. In this regard, in Case C-17/03, on 7 June 2005 the ECJ gave its first Interpretative Judgment concerning Articles 7 (5), 16 and 24 of the original Electricity Directive (Directive

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[82] Regulation (EC) No 1228/2003 on conditions for access to the network for cross-border exchanges in electricity.
[83] Regulation (EC) No 1775/2005 on conditions for access to the natural gas transmission network.
[84] See Annual Report on the Implementation of the Gas and Electricity Internal Market, COM (2004) 863 final, 5 January 2005.

96/92/EC).[85] More importantly, the potential relevance of Article 86 (2) of the Treaty was also at issue. This case was referred to the ECJ under Article 234 EC for a preliminary ruling by a Dutch court. The reference was submitted in the context of a dispute between a number of energy companies and the DTE (Controller of system management) relating to the latter's decision to reserve, on a preferential basis, a portion of the capacity of the cross-border system for the importation of electricity into the Netherlands to a company (known as "the SEP" at the time).[86] Under Article 34 of the 1989 Electricity Law, the SEP was given an exclusive right to import electricity.[87] It was also responsible to ensure the reliable and efficient public distribution of electricity.[88] Accordingly, it signed a number of long-term purchase contracts with international suppliers such as EDF.[89] In 1998, a new Electricity Law was designed to transpose the Electricity Directive and repealed the 1989 law with effect from 1 July 1999.[90] Furthermore, the rights of the SEP were assumed by NEA with effect from 1 January 2001.[91]

In practice, the preferential allocation of the capacity to the NEA meant that for a period of 10 years, an annual capacity of half to a quarter (declining over time) of the cross-border transmission capacity was reserved for the NEA. At the same time, the involvement of the provision of "services of general economic interest" meant that a

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[85] The case arouse as a result of the implementation of the original Electricity Directives. Accordingly, all references are to the provisions of the original Directive. For example, Article 24 (Derogations) has been updated and renumbered into Article 26 in the Second Directive. It took the prevalence of the traditional long term power purchase contracts into account and provided Member States with the opportunity to apply for a transition regime, which might be granted to them by the Commission.
[86] Case C-17/03, Reference under Article 234 EC for a preliminary ruling by the College van Beroep voor het bedrijfsleven (Administrative Court for Trade and Industry) (Netherlands), the Judgment of the Court, 7 June 2005, paras. 1-2.
[87] Ibid., paras. 12-14.
[88] Ibid., para. 11.
[89] Ibid., para. 24. The contract with EDF concluded in 1989 for the purchase of 600 MW per annum until 31 March 2002 and of 750 MW per annum from 1 April 2002 to 31 March 2009.
[90] Ibid., para. 15.
[91] Ibid., para. 14.

ruling on the relevance of Article 86 (2) would be inevitable.[92] In fact, the Dutch Court formulated this issue as the first question as follows:

"I.(a) Can Article 86 (2) EC be invoked to justify continuing to grant a company which was formerly entrusted with the operation of services of general economic interest and which entered into certain commitments in connection with such operation a special right to enable it to honour those commitments after the particular task assigned to it has completed?"[93]

The ECJ, however, decided to deal with the interpretation of the provisions of the Electricity Directive (second question of the Dutch Court) first. In particular, it effectively treated the Electricity Directive as a "self-contained regime" for regulating derogations. It should be noted that Article 24 authorizes the possibility of derogating from certain obligations under the Directive such as the non-discrimination obligations contained in Articles 16 and 7 (5) regarding network access. The Court observed that in order to tone down some of the consequences liberalization, the Electricity Directive provides, in Article 24, for the possibility of applying a transitional regime.[94] However, in order to benefit from Article 24, Member States should apply for a transitional regime, in good time, which may be granted to them by the Commission, taking into account, among other things, the size of the system concerned, the level of interconnection of the system and the structure of its electricity industry. The ECJ pointed out that the Netherlands could have had recourse to Article 24 for the purpose of requesting, in good time, a temporary derogation from Articles 7(5) and 16 in favour of the SEP.[95] It went on to argue that:

"The procedure, criteria and limits set out in Article 24 of the Directive would be rendered meaningless if it were to be accepted that a Member State may unilaterally, and without complying with that procedure, apply differing treatment to electricity importers on grounds that are precisely

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[92] Article 86 (2) reads as follows: "Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to the rules contained in this Treaty, in particular to the rules on competition, *insofar as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them*. The development of trade must not be affected to such an extent as would be contrary to the interests of the community." Emphasis added.
[93] Ibid., para. 31.
[94] Ibid., para. 57.
[95] Ibid., para. 60.

capable of justifying, under Article 24 of the Directive, a derogation from Articles 7(5) and 16 thereof."[96]

This Judgment should be viewed against the background of making use of the complaint procedure by the Commission under Article 226 of the EC Treaty[97] against six Member States in the 1990s for maintaining electricity or gas import or export monopolies. In January 1994, the Commission referred to the ECJ actions against six Member States[98] for failure to fulfil an obligation. Interestingly enough, the case against the Netherlands was based on the fact that the SEP was given an exclusive right to import electricity.

In this regard, the Commission argued that this situation was contrary to the requirements of the free movement of goods obligations, and in particular Article 31 (ex Article 37) on State monopolies, by preventing producers in other Member States from selling electricity within the territory of the Netherlands. The ECJ noted that under Article 31 (1), the Member States are progressively to adjust any State monopolies of a commercial character so as to ensure that when the transitional period has ended[99], no discrimination regarding the conditions under which goods are procured and marketed exists. Moreover, Article 31 (2) requires the Member

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[96] Ibid., para. 61.
[97] Article 226 (ex Article 169) reads as follows: "If the Commission considers that a Member State has failed to fulfil an obligation under this Treaty, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations. If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice."
[98] The Commission initially announced that it intended to take action on the basis of the infringement of Article 37 (now 31) of the Treaty against some Member States in August 1991. Subsequently, under the Article 169 (now Article 226), letters were sent the Member States concerned and eventually in January 1994, the Commission brought actions against Denmark, France, Italy, Northern Ireland (the UK), the Netherlands, and Spain. However, the cases against Denmark and Ireland were subsequently withdrawn. For a full discussion of these cases see Cameron, supra note 13, pp.218-230.
[99] The end of the transitional period for the six original Member States was 31 December 1969. For an excellent review of the earlier case-law of the ECJ see Blum, F. and Logue, A. (1998) State Monopolies under EC Law, pp.119-128.

States in particular to refrain from introducing any new measure, which is contrary to the principles laid down in paragraph 1.[100]

The ECJ held that, accordingly, Article 31 (1), without requiring abolishing State monopolies of a commercial character, prescribes in mandatory terms that they must be "adjusted" in such a way as to ensure that when the transitional period has ended the discrimination referred to has ceased to exist.[101] Citing the relevant case law, the Court held that the objective of Article 31 (1) would not be attained if, in a Member State where a commercial monopoly exists, the free movement of goods from other Member States comparable to those with which the national monopoly is concerned were not ensured.[102] Then Court further observed that:

> "Such free movement is impeded by the very existence of exclusive import rights in a Member State since economic operators in other Member States are thereby deprived of the possibility of offering their products to customers of their choice in the Member State concerned. Moreover, in the present case, all imports must be incorporated in the plans drawn up by SEP."[103]

The ECJ accordingly held that SEP's exclusive import rights were contrary to Article 31 of the Treaty.[104] It then examined whether, as contended by the Netherlands, the exclusive rights at issue might be justified under Article 86 (2) of the Treaty.[105] The Commission's main argument was that Article 86 (2) cannot be relied on to justify State measures incompatible with the Treaty rules on the free movement of goods. Rejecting this position, the Court took into account the scope and combined effect of paragraphs 1 and 2 of Article 86 and held that paragraph 2 may be relied upon to

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[100] Commission of the European Communities v Kingdom of the Netherlands, Case C-157/94, Judgement of the Court, [1997] ECR I-5699, para. 13.
[101] Ibid., para. 14.
[102] Ibid., para. 22.
[103] Ibid., para. 23.
[104] Ibid., para. 24.
[105] Ibid., para. 25.

justify the grant of exclusive rights by a Member State to an undertaking entrusted with the operation of "services of general economic interest" contrary to, in particular, Article 31 of the Treaty, "to the extent to which performance of the particular tasks assigned to it can be achieved only through the grant of such rights and provided that the development of trade is not affected to such an extent as would be contrary to the interests of the community."[106]

In turning now to the original case (Case C-17/03), it should be noted that the Advocate General Stix-Hackel supported the application of Article 86 (2) in the present case. He noted that in its judgements on import and export monopolies for electricity and gas, the Court has made it clear that Article 86 (2) can be invoked to justify infringements of Treaty provisions – in those cases Article 31 of the Treaty.[107]

The Advocate General observed, however, that the applicability of Article 86 (2) depends upon the undertaking concerned having been entrusted with the operation of services of general economic interest. He noted that in the present case, the SEP was entrusted with such services before the market was opened up by the first Electricity Directive.[108] He further observed that the aforementioned long-term electricity purchase contracts had been concluded "prior" to liberalization in order to fulfil public interest commitments associated with those services. They accordingly have met the requirement of necessity.[109]

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[106] Ibid., para. 32.
[107] Case C-17/03, Opinion of Advocate General Stix-Hackel, delivered on 28 October 2004, para. 72.
[108] Ibid., para. 74.
[109] Ibid., para. 75. The Advocate General further examined the preferential allocation of importation capacity in question and confirmed it proportionality.

The ECJ, however, as discussed earlier, adopted a more restricted approach with regard to the applicability of Article 86 (2). It acknowledged that the principle of the protection of legitimate expectations is one of the fundamental principles of the Community.[110] The Court observed, however, that it is also settled case-law that if a prudent trader could have foreseen that the adoption of a community measure is likely to affect his interests, he cannot rely on this principle.[111] The Court further observed that the Community institutions did not adopt any measure or assume any form of conduct which could have pointed to the maintenance of the legislative situation in force in 1989 and 1990, under which the international contracts of the SEP were concluded.[112] Not surprisingly, the ECJ referred to its 1997 judgment, which on the face of it was in favour of the applicability of Article 86 (2) in a similar situation. In fact, the influence of the 1997 judgement was clearly noticeable in the Advocate General's opinion. In this regard, the Court held that:

> "In particular, although, in its judgement in Case C-157/94 *Commission v Netherlands* [1997] ECR I-5699, it dismissed the Commission's action for a declaration that, as the law stood prior to the entry into force of the Directive, there had been a breach of Article 37 of the EC Treaty (now, after amendment, Article 31 EC) by Netherlands legislation, *in casu* the 1989 EW, which granted the SEP exclusive rights to import electricity, the Court did not in any way guarantee that the legislative situation at Community level would remain unchanged."[113]

To sum up, by not allowing recourse to Article 86 (2) in situations covered by Article 24 of the Electricity Directive, the ECJ effectively treated the Electricity Directive as a "self-contained regime" within the legal system of the European Union. This restricted interpretation of the scope of applicability of Article 86 (2) may be described as an interpretative improvement complementing the recent regulatory improvements. The ECJ itself acknowledged the relevance of "the objective of the

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[110] Case C-17/03, supra note 86, the Judgement of the Court, para. 73.
[111] Ibid., para. 74.
[112] Ibid., para. 75.
[113] Ibid., para. 76. Moreover, among other things, the Court referred to the fact that the electricity transit Directive was adopted in 1990 at the early stages of an ongoing liberalization process.

Directive" – which is particularly associated with the teleological approach – and pointed out that any other interpretation would risk jeopardising the transition from a monopolistic and compartmentalized market in electricity to one that is open and competitive.[114]

VI. Concluding Remarks

The energy sector has a permanent special status for several reasons, notably due to security of supply considerations. The EU experience provides a framework to understand how a market-based approach can be adopted without compromising security of supply. In fact, the introduction of competition in Europe's electricity and gas markets is an integral part of European energy policy, which also includes the attainment of two other closely related objectives, namely security of supply and sustainability.[115] The three objectives are closely interlinked and complementary.[116]

In particular, the scope for competition in the network-bound markets of gas and electricity is necessarily limited. Our review revealed that although the need to establish an integrated energy market can clearly be derived from the 1957 Treaty of Rome, the real move towards the establishment of an internal market in energy initiated after three decades. In fact, the EU experience in electricity and gas

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[114] Ibid., para. 62. Different approaches to treaty interpretation are briefly discussed in Chapter 6.
[115] See UNCTAD, Intergovernmental Group of Experts on Competition Law and Policy, *Competition at National and International Levels: Energy*, Submission by the Directorate-General for Competition of the European Commission, Geneva, 17-19 July 2007, para. 14.
[116] With reference to their linkage, it has been further remarked that: "Competitive markets provide the necessary signals for investment, which leads to supply security in the most cost efficient manner. Similarly, the creation of a competitive internal market will allow the Union's energy companies to operate in a market of a larger dimension, which will improve their ability to contribute to security of supply. At the same time, market forces oblige European operators to use the most cost effective methods of production, which in the appropriate regulatory environment can benefit sustainability." See ibid., para. 17.

liberalization may be described as a two-stage approach. At a broader level, the application of the general rules of the Treaty came very late to the energy sector.[117] However, once the general free movement rules were applied, it became apparent that without sector-specific regulation to address competition-related issues a "meaningful" liberalization would not happen.

In any case, as noted earlier, the starting point in introducing competition in the energy market is the recognition of the fact that natural monopoly characteristics are often strictly limited to some, not all, of the activities in the supply chain. In fact, structural and regulatory changes within the electricity and gas sectors in a number of the Member States during the last decade of the twentieth century are widely regarded as a source of inspiration for the Community's legislative programme of the 1990s. Referring to this situation, it has been remarked that:

> "In reality, the main regulatory game is played at the national level, and there are complex interactions between Community and national regulatory activities. While the internal market directives have been a stimulus to new legislation, there are at least some indications that the directives were more reactive or imitative, rather than proactive or seminal, in nature. For example, it is clear that the efforts of the British government to regulate for competition in the electricity sector profoundly influenced the debate in the EC, not the other way around."[118]

Although the original Electricity and Gas Directives brought about positive results in terms of efficiency and prices, they were "weak" liberalizing Directives. Accordingly, in most Member States, incumbents (former monopoly suppliers) dominated the newly liberalized markets through a combination of their "market power" in the potentially competitive segments and "monopoly power" in the natural monopoly segments. Clearly, this situation needed to be remedied. Not surprisingly, as discussed in detail above, there have been further developments and the original legal framework underwent significant changes aiming at strengthening its rules and

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[117] See Slot, P. J., supra note 11, pp.511 *et seq.*
[118] Cross *et al*, supra note 12, pp.319-320.

institutions. In fact, due to the extent of the structural improvements, the original Directives were repealed by the Second Electricity and Gas Directives.

In order to address the issue of "monopoly power" in the natural monopoly segments, the new Directives tried to ensure non-discriminatory access to networks by increasing the degree of unbundling (vertical restructuring) of incumbents to "legal unbundling". They also made regulated TPA obligatory as well as requiring Member States to establish "energy regulators". The ECJ, in turn, contributed to the ongoing liberalization process by closing an important loophole. It should be noted that as a result of conducting its annual "benchmarking" reports, the Commission has recently concluded that further regulatory improvements such as fully (ownership) unbundled TSOs, more *ex-ante* powers for energy regulators, and even the establishment of an energy regulator at EU level are worth considering.[119]

In turning now to the issue of "market power", the Commission has pointed out that national markets are characterized by high levels of "concentration" and consequent concerns about wholesale market manipulation. These problems are closely connected to the national scope of markets and the lack of integration. Accordingly, in the view of the Commission, the proposed regulatory improvements would provide strong impetus to market integration and reduce such problems.[120] Furthermore, the fact that in a number of recent energy-related merger cases remedies such as divestiture have been applied demonstrates the increasing importance of the new EC Merger Regulation[121] in addressing the problem.

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[119] See Commission of the European Community, *Prospects for the internal electricity and gas market*, Brussels, 10.1.2007, COM (2006) 841 final, pp.10-14.
[120] Ibid., p.15.
[121] Council Regulation (EC) No 139/2004.

Chapter 5. The Liberalization of Trade in Services in the WTO

I. Introduction

In any branch of international law, the ideal situation is having a universally recognized and precisely codified law.[1] Yet, it is not disputed that the international system is a consensual system and does not recognize acts of a legislative character. This implies that the universality of any international regime is a goal to be achieved. Thus, the process of transformation of the traditional GATT system from a rich man's club to a truly universal regime should be regarded as a significant achievement of the multilateral trading system. Indeed, this process was not unprecedented in the international system. As in the wider context of international law, Professor Schwarzenberger draws attention to the fact that:

> "International law was originally applicable only between Christian nations. It was later extended to non-European States on the assumption that the standards of value underlying the Christian law of nations were accepted by the Near and Far Eastern States at least in a modified form, that is to say, as standards of conduct common to civilised nations."[2]

Furthermore, the new system is comprehensive, in the sense that membership in the WTO necessitates to comply with all the rules included in the legal texts of the

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[1] For a full discussion of this point, see Oppenheim, L. (1908) "The Science of International Law: Its Task and Method", 2 American Journal of International law, pp.313-356.

[2] Schwarzenberger, G. (1962) The Frontiers of International Law, Stevens & Sons Limited, London, p.25. A more critical view comes from Mohammed Bedjaoui, who notes that before the First World War there was an "exclusive club" of States which created what has been called a "European international law" or a "European public law", which had been conceived for the use and benefit of its founders, the States that were called "civilized". He goes on to argue that: "It was therefore international in nothing but name and did not recognize the colonies, the protectorates and the States that were called "uncivilized" as being subjects of international law." See Bedjaoui, M. (ed.) (1991) International Law: Achievements and Prospects, P.5. For a review of anti-colonial international law scholarship see James Thuo Gathii (1998) "International Law and Eurocentricity", 9 European Journal of International Law, pp.184-211.

Uruguay Round Agreements. This approach is called "Single Undertaking", which means that a WTO member has to accept the WTO legal code as a complete package. It should be noted that the WTO's establishment as the first post - Cold War international institution was not coincidental. Indeed, the end of the Cold War resulted in a much-needed trend towards a significant reduction of the degree of politicization of international economic relations. In addition, the intensification of international economic integration due to technological change, usually referred to as globalization, was a source of increasing demand for internationally agreed-upon rules of behaviour in the area of international economic law.[3] In the sense that the increase of the flows of goods, services, capital, technologies and people necessitates the establishment of effective global governance.

Eventually, the international community arrived at a consensus regarding the establishment of the WTO to create the larger legal framework within which international economic law can develop. However, in addition to the institutionalisation of international economic law, there was a need to institutionalise a number of areas such as intellectual property rights and trade in services. The focus of this chapter is on the process of institutionalisation of trade in services under the WTO system, which resulted in creating the General Agreement on Trade in Services (GATS). The GATS also creates a multilateral framework for a continuing process of liberalization. In this chapter, after discussing the origins and negotiating history of the GATS, the content of the agreement will be briefly examined. This should give the reader an insight into what is involved in the general context of services

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[3] See generally Rodrik, D. (1997) "Sense and Nonsense in the Globalization Debate", 107 Foreign Policy, pp.19-22; Sachs, J. (1998) "International Economics: Unlocking the Mysteries of Globalization", 110 Foreign Policy, pp.108-109; Hart, M. (1997) "The WTO and the Political Economy of Globalization", 31 Journal of World Trade, pp.75-78.

liberalization and particularly will provide the background for the next chapter, which takes on the issue of energy services liberalization in the GATS.

II. The Context of the GATS Agreement

The Uruguay Round of trade talks resulted in broadening the scope of the multilateral trading system to cover, among other new subjects, trade in services. The creation of the GATS ranks amongst the chief accomplishments of multilateral trade diplomacy. In fact, the subject of international trade, which is focused on the managed reduction of barriers to trade, whether in goods or services, is at the core of international economic law.[4] However, as discussed in greater detail below, it should not be overlooked that liberalizing trade in services is a much more complex issue. Obviously, the liberalization of trade in goods is to a great extent concerned with reducing tariffs and dealing with other means of overt protectionism. Whereas the liberalization of trade in services mostly deals with the problem of nontariff barriers.

In this regard, it is worth noting that services had long escaped careful consideration in the context of international trade. While a number of international organizations had provided multilateral regulatory disciplines for particular services sectors, there was no comprehensive multilateral framework for international trade in services before the emergence of the GATS agreement.[5]

With regard to the issue of the liberalization of trade and investment in services, it is worth noting that the negotiating history and the relevant literature are no more than

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[4] See Jackson, John H. (1997) The World Trading System, p.25.
[5] This point will be taken up later in this chapter.

two decades old. In fact, the literature can be divided into three parts, i.e. legal, economic and political economy literature. Obviously, the focus of this study will be on the legal aspects of the liberalization of trade in services. However, the context of the GATS agreement cannot be understood without taking account of the economic and political economy considerations for and against services liberalization. Thus, we will start from the wider context of the economic and political economy considerations and then will focus on the origins and the negotiating history of the GATS agreement.

A. Economic Arguments for Services Liberalization

For a review of the literature on the economic arguments for and against the liberalization of international trade in services, it is necessary to be familiar with some key insights about the nature of services by contrast to that of goods. For a long time the bulk of services activities were largely ignored by economists. Early writers on services, notably Adam Smith, tended to treat the sector as unproductive, referring to domestic servants and priests. This view was followed by most of the classical economics. Even in the middle decades of the twentieth century, when the great wave of activity in defining categories of economic activity began, services received little attention and a "service sector", or "tertiary sector" was distinguished as the third of the three great sectors.[6]

The first two sectors were relatively easily defined. The primary sector extracts raw materials from the environment via activities such as mining and agriculture. The

[6] Miles, I. and Boden, M. (2000) "Introduction: Are Service Special?" in Mark Boden and Ian Miles (eds.) Services and the Knowledge-Based Economy, pp.2-3.

secondary sector transforms raw materials into goods, buildings, infrastructure, and physical utilities like water and electricity supplies. This was not the case, however, for the tertiary sector:

"For early commentators, the third great sector could simply be seen as the *residual sector*, and often it was discounted as an unproductive residuum. In any case, it warranted no great definitional effort. Because it counted for very little, it was seen as something which could be treated as homogenous. Consequently, little attention was paid either to defining its common constitutive features, or to examining the variety within it."[7]

Thus, it should not come as a surprise that there exists no definition of services in the international documents. However, some helpful guidance can be drawn from the commonly accepted definition of services proposed by the British economist Professor Hill: "A service may be defined as a change in the condition of a person, or of a good belonging to some economic unit, which is brought about as the result of the activity of some other economic unit."[8] From this definition it follows that services, as contrasted with goods, cannot be produced in isolation and the provision of services requires interaction between service producers and users.[9] In this regard, Professor Hill draws attention to the fact that services are consumed as they are produced in the sense that the change in the condition of the consumer unit must occur simultaneously with the production of that change by the producer.[10] Thus, in a great number of cases, physical proximity of service providers and users is required for the provision of services.[11] It follows that international transactions in services predominantly take place as a consequence of either the movement of the factors of production or the receiver of the service.

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[7] Ibid., p.3.
[8] Hill, T. P. (1977) "On Goods and Services", 23 Review of Income and Wealth, p.318.
[9] Hirsch, S. (1988) "A Service or Not a Service – Defining the Question by Its Terms", 11 The World Economy, p.565.
[10] Hill, supra note 8, p.337.
[11] See e.g. Sampson, G. P. and Snape, R. H. (1985) "Identifying the Issues in Trade in Services", 8 The World Economy, p.172; Nicolaides, P. (1989) "Economic Aspects of Services: Implications for a GATT Agreement", 23 Journal of World Trade, p.126.

It should be noted, however, that international transactions in services may also take place without the movement of factors of production or receiver of the service. As initially noted by Jagdish Bhagwati, it is possible that goods splinter off from services. This "splintering process" is associated with a "disembodiment effect", i.e. services are encapsulated into what we call goods, which in turn, would obviate the necessity of the element of physical proximity.[12] Furthermore, he went on to say "I will propose that the disembodiment effect applies equally to services becoming available over distances without the physical presence of the provider of these services where used, *even though no transition in consequence to goods is involved.*"[13] Indeed, considering the fact that both cases involve cross-border supply of a service, this proposition is persuasive. As the foregoing has made clear, such services, like goods, cross the borders. Thus, for "splintered services" or "separated services"[14] liberalization of trade in services is similar to liberalization of trade in goods. It follows that the whole issue of extending the world trading system to trade in such services is unlikely to raise conceptual debates regarding the application of the theory of comparative advantage.

Nevertheless, as mentioned earlier, for most services physical proximity of service providers and users is essential. The fact that what is the rule in the context of trade in goods is the exception in the context of trade in services, and some other characteristics of services like issues arising from foreign investment, are precisely the issues which provide some ground for scepticism about the application of the

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[12] See Bhagwati, J. N. (1984) "Splintering and Disembodiment of Services and Developing Nations", 7 The World Economy, p.134.
[13] Ibid., emphasis is original.
[14] Sampson and Snape prefer to use this term, due to the fact that such services are separated from both factors of production and receivers.

theory of trade in goods to trade in services. In this regard, about two decades ago, Ronald Shelp, of the American International Group in New York, in a chapter entitled "Economic Theory: a History of Neglect", criticized professional economists and drew attention to the fact that nothing can be found in the relevant literature:

> "Whether the theory of comparative advantage is applicable to international service trade is a striking illustration of the failure of economic theorists to come to grips with services. Where in the economic literature on comparative advantage can a discussion of the service sector be found? Can even one example using a service product to illustrate comparative advantage be recalled?"[15]

In responding to the aforementioned observations, it has been remarked that it is from others than professional economists that the question seems to come. Indeed, for an economist the problem would be to understand why the theory of comparative advantage might not apply to services. It has been argued that comparative advantage theory is a well-defined conceptual framework for the study of international trade and its conceptual apparatus is applicable to services. "No obvious characteristic of that framework limits its applicability to tangible goods rather than intangible services."[16] Indeed, over the past two decades, many of international economists have argued that although as mentioned above services are different from goods, the fundamentals of trade in services are really not different from trade in goods.[17] To put it more simply, it has been argued that the real issue is not that services are different from goods and this difference does not in itself provide any basis for a supposition that the theory of comparative advantage does not apply to services. For

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[15] See Hindley, B. and Smith, A. (1984) "Comparative Advantage and Trade in Services", 7 The World Economy, p.369.
[16] Ibid.
[17] See, among others, Deardorff, A. V. (1985) "Comparative Advantage and International Trade and Investment in Services", in Robert M. Stern (ed.) Trade and Investment in Services: Canada/US Perspectives, Toronto, Ontario Economic Council, pp.39-71.

that, it is necessary to examine whether there are any differences which make the logic of the theory inapplicable to services.[18]

It should be recalled at this point that the theory of comparative advantage was introduced by David Ricardo in his book entitled *principles of political economy and taxation* which was published in 1817. The theory demonstrated the gains from specialisation and trade in goods.[19] In this regard, it has been argued that the typical use of the word "goods" is a matter of tradition not for the purpose of excluding services:

> "Had Ricardo in his classic example specified wine and insurance policies instead of wine and cloth, his demonstration of gains from trade would have still succeeded, it being dependent only on one country being able to produce insurance policies at a lower cost relative to wine than the other country."[20]

Furthermore, it has been remarked that for many services the benefits from liberalization, i.e. rationalization of service activities along the lines of comparative advantage, extend beyond the service industries themselves. In the sense that many services such as transport services, finance, insurance, communication and some professional services play a critical facilitating role in the international trade of products other than themselves, including both goods and other services. Indeed, since international trade by definition crosses national borders, any services that facilitate trade are likely to be needed on both sides of the border. Accordingly, the benefits from liberalization of trade in services would be beyond the service sectors themselves by reducing the real barriers to trade in other sectors.[21]

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[18] Hindley and Smith, supra note 15, p.370.
[19] For a full discussion of this theory and also the theory of absolute advantage see Harrison, Smith and Davies (1994) Introductory Economics, Macmillan, pp.278-301.
[20] Hindley and Smith, supra note 15, p.374.
[21] See Deardorff, A. V. (2000) "International Provision of Trade Services, Trade, and Fragmentation", World Bank Project.

On the other hand, in turning now to the arguments against freer trade in services, it might seem surprising that most of them are not based on conceptual economic analysis. In this regard, mention can be made of, for example, the initial position of many commentators, including Jagdish Bhagwati, as a first academic reaction to American initiative regarding the extension of the world trading system to trade in services. The position, which was also adopted in argumentation by some spokesman for developing countries at the GATT ministerial meeting in November 1982, was based on the fact that immigration restrictions effectively prevent developing countries from exporting their labour intensive services. Indeed, in a real sense, services provided by developing countries are not subject to free trade. Thus, it would be unfair to open up the GATT to trade in services that would provide developed countries with the opportunity to export their technically progressive and capital-intensive service activities.[22]

In this regard, mention may be made of an UNCTAD study addressing the issue at a considerable length. The study concentrates on two main issues: the role of services in the growth and development of domestic economy; and issues relating to services and development at the international level. A general point has been made that so far international debate has been concerned with trade and no account has been taken of development issues. Accordingly, it is necessary to conduct further study with less emphasis on "trade in services" and more on "contribution of services to development". It has been argued that access to developing countries' markets should be balanced by appropriate commitments regarding transfer of technology

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[22] See Bhagwati, supra note 12, p. 141.

and access to foreign markets.[23] Then, concerns have been raised regarding the role of services in the growth and development of domestic economy:

"One argument advanced is that advantages of competition are outweighed by public welfare considerations as in the case of transportation services. Another consideration is the large fixed costs and fluctuating demand in certain services which if not regulated would lead to frequent bankruptcy, to a poor availability in services offered to consumers... A related argument is that some firms may supply only the most lucrative markets..."[24]

Another development oriented study by J. F. Rada entitled "Advanced technologies and development: are conventional ideas about comparative advantage obsolete?" draws attention to the issue of comparative advantage in the context of effects of the rapid developments in information technology on trade in services. It should be noted, however, that the study does not raise the question of applicability of the theory of comparative advantage to services from a theoretical point of view. Instead it argues that as a matter of fact, technological change in information technology is such that developing countries' comparative advantage is being eroded. Accordingly, comparative advantage now depends increasingly on innovation rather than purely physical factor endowment and low labour costs.[25]

B. Political Economy Arguments for Services Liberalization

It should be noted at the outset, that Adam Smith and classical economists used the term "political economy" to mean what today is called the science of economics.[26]

Contemporary political economy, however, has an interdisciplinary character and

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[23] See Ewing, A. F. (1985) "Why Freer Trade in Services is in the Interest of Developing Countries", 19 Journal of World Trade Law, pp.150-151.
[24] Services and the development process, Study by UNCTAD Secretariat – TD/B/1008, August 1984, p.23.
[25] See Ewing, supra note 23, p.152.
[26] Gilpin, R. (1996) "The Nature of Political Economy" in Goddard, Passé-Smith and Conklin (eds.) International Political Economy, Lynne Rienner Publishers, p.10.

political factors are also involved. In fact, contemporary political economy focuses on the mutual interaction of "state" and "market" and without both state and market there could be no political economy. In this regard, it has been remarked that:

"For the state, territorial boundaries are a necessary basis of national autonomy and political unity. For the market, the elimination of all political and other obstacles to the operation of the price mechanism is imperative. The tension between these two fundamentally different ways of ordering human relationships ... constitutes the crucial problem in the study of political economy."[27]

As regards political economy aspects of liberalizing trade in services, attention should be drawn to the fact that generally speaking, multilateral trade agreements to permit free trade in goods and services provide useful mechanisms for governing societies by a broad "encompassing interest" rather than by special interests.[28] Not surprisingly, from a domestic political economy point of view, protectionist interest groups have a tendency to resist free trade.[29] It has been remarked that international trade agreements offer a potential way for breaking domestic deadlocks by mobilizing groups to support reforms that would benefit society at large:

"The traditional raison d'etre of the GATT is that groups that would benefit from better access to export markets are induced to throw their weight behind import liberalization. Analogous reasoning applies in the services context, with the difference that for many countries, export interests in services are weaker than in manufacturing or agriculture because services are more difficult to trade."[30]

In addition to the "Coalition Building" aspect that noted above, "Self-Restraint" aspect of joining to multilateral trade agreements assists governments in overcoming rent-seeking interests at home. Such agreements provide governments with a tenable public explanation for turning down pleas for protection. To put it more simply,

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[27] Ibid., p.11.
[28] See McGinnis, J. O. (2000) "The Political Economy of Global Multilateralism", 1 Chicago Journal of International Law, p.387.
[29] Ibid., p.386.
[30] Hoekman, B. M. and Kostecki, M. M. (2001) The Political Economy of the World Trading System: WTO and Beyond, Oxford University Press, Oxford, p.246.

enlightened government leaders deliberately adhere to multilateral trade agreements to create international obligations in order to strengthen their ability to say no to special interests at home. With reference to the Self-Restraint aspect, it has been argued that the "essential function of the multilateral trade order is to resolve conflicts of interest within, not between, nations".[31]

It is also argued that multilateral trade agreements can be helpful in providing focal points for regulatory reform by supporting the implementation of pro-competitive regulatory regimes.[32] With reference to services, it is further argued that WTO legal rules by encouraging national treatment for the commercially present foreign suppliers of services, can help build market-supporting mechanisms such as a professional judiciary to enforce contracts, administrative transparency in government agencies, and regulatory predictability to domestic policy making. Indeed, particularly in transitional and developing economies, WTO rules play an important role in guiding the reform of political, legal and economic institutions.[33] Moreover, it is essential to make the point that WTO rules can significantly enhance the credibility of a government's economic policy stance. In this regard, in has been remarked that the WTO offers mechanisms for governments to "precommit" to a reform path and to lock-in reforms that have already been achieved.[34] It should be recalled that although in the GATS context, virtually all commitments are of a standstill nature and just bind the status quo, they are legal commitments and there is no room for policy reversal.

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[31] See Charnovitz, S. (2002) "Triangulating the World Trade Organization", 96 American Journal of International Law, pp.43-44.
[32] Hoekman and Kostecki, supra note 30, p.247.
[33] Lanoszka, A. (2001) "The World Trade Organization Accession Process: Negotiating Participation in a Globalizing Economy", 35 Journal of World Trade Law, pp. 577-578.
[34] Hoekman and Kostecki, supra note 30, p.248.

Another important point to make in this context is drawing attention to the fact that FDI is the preferred mode of supply in services trade. In the early 1980s, this issue was among the major concerns of developing countries.[35] Not surprisingly, a study by the UNCTAD secretariat entitled *services and development process* proposed that "trade in services be defined to occur only when the majority of value added was produced by nonresidents".[36] Obviously, this definition excluded virtually all transactions through FDI.[37] Considering the fact that FDI is associated with transfers of ownership, it has been remarked that opposition from affected bureaucracies and from groups with non-economic concerns (such as the impact of "denationalisation" on national culture) may further increase the complexity of liberalization efforts with respect to services.[38] In attempting to cope with these concerns, it has been repeatedly emphasized in the literature that liberalization does not restrict the government's ability to regulate to achieve objectives such as preserving cultural identity.

From an international political economy point of view, it has been remarked that multilateral trade agreements might lead to what might be called "bad multilateralism". It is feared that centralizing power in international bureaucracies "could interfere with markets and provide power to special interests on a global scale, reducing the power of the encompassing interests of various nations to govern themselves".[39] It has been emphasized that in distinguishing bad multilateralism from the desired one attention should be drawn, *inter alia*, to the requirement of mutual

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[35] See Whalley, J. (1989) The Uruguay Round and Beyond, Macmillan, p.24.
[36] Cited in Hoekman and Kostecki, supra note 30, p.249.
[37] Ibid.
[38] Ibid., p.248.
[39] McGinnis, supra note 28, p.384.

gain. Without mutuality of gains, multilateral trade agreements indeed exploit one nation for another's advantage, which is obviously undesirable.[40]

It should be recalled that the Marrakesh Declaration notes the widespread desire for a "fairer and more open multilateral trading system". In this regard, Jagdish Bhagwati emphasizes that the purpose of the GATT and the WTO should be to secure mutual gains from trade. He warns that even pure trade liberalization might not lead to mutual gain and suggests that there should be short-term financial assistance to the losing countries.[41] It is worth noting, however, that although Article XIX of the GATS permits developing countries to offer fewer specific commitments in negotiations, the fact remains that the GATS contains no provisions similar to Part IV of the GATT on special and differential treatment for developing countries or accepting unilateral arrangements like the Generalized System of Preferences.[42]

C. The Negotiating History of the GATS

As mentioned earlier, services had long escaped careful consideration in the context of international trade. This was mainly due to the fact that cross-border supply of services is the exception rather than the rule and international transactions in services predominantly require the movement of the factors of production, either through a temporary stay or permanent establishment. The conceptualisation of these activities as trade was far from ordinary. "Nobody thought this constituted trade, so services were left out of the GATT regime and fell under the auspices of institutions that gave

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[40] Ibid.
[41] See Charnovitz, supra note 31, p.49.
[42] See Hoekman and Kostecki, supra note 30, p.255.

preference to regulatory rather than market-based rules."[43] For instance, Professor Jackson points out that the preparatory work for the ITO Charter and for the GATT reflects an explicit intent by the draftsmen to exclude transportation, telecommunication, insurance, banking and certain other services from the scope of the ITO and GATT. In the case of transportation, one of the reasons for this limitation of the scope was the existence of the International Maritime Consultative Organization (IMCO).[44]

In fact, there was a "conceptual gap" on the tradability of services. Thus, the shift to a trade discourse in relation to services transactions was a significant turning point in the process of creating multilateral principles for liberalizing trade in services:

> "The very act of defining services transactions as "trade" established normative presumptions that "free" trade was the yardstick for good policy against which regulations, redefined as nontariff barriers (NTBs), should be measured and justified only exceptionally. Members believing there to be many justifiable exceptions thus had to defend what their counterparts label "protectionism"".[45]

Within the academic circle, Professor Jackson in the late 1960s pointed out that as economic activity becomes more sophisticated and more technical, services seem to play a greater proportional part in economies. He noted that national policies relating to the regulation of services would increasingly affect international trade. He

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[43] Drake, W. J., Nicolaidis, K. (1992) 'Ideas, interests, and institutionalization : "trade in services" and the Uruguay Round', 46 International Organization, p.44. For example, the International Telecommunication Union (ITU) was and still is responsible for technical regulation of the telecommunications industry. With regard to the interaction between the ITU and the GATS regime it has been remarked that: "The role of the traditional forum for telecommunications matters, the ITU, remains unclear, though it has provided a forum for much discussion on the future regulation of international telecommunications services." See Holmes, P. et al (1996) "International competition policy and telecommunications policy: Lessons from the EU and prospects for the WTO", 20 Telecommunications Policy, p.766.

[44] Jackson, J. (1969) World Trade and The Law of GATT, pp.528-529. He further points out that air transport was regulated by the International Air Transport Association (IATA).

[45] Drake and Nicolaidis, supra note 43, pp.40-41.

therefore predicted that services would undoubtedly receive an increasingly greater attention in the context of the multilateral trading system.[46]

What is called "consciousness raising" about the importance of services and barriers to services trade, occurred in the late 1970s.[47] As has been emphasized repeatedly in the literature, rapid technological change in the telecommunications industry has a dual impact on the economics of trade in services and traditional assumptions regarding non-tradability of services have been called into question. First, international telephony provides the prime example of cross-border delivery of a service. Second, these developments have amounted to increase the tradability of other services through long-distance provision.[48] In addition, it is worth mentioning that the regulatory reform trend in a wide range of countries during the 1970s and 1980s resulted in focusing new attention on the possibilities of international competition in services industries.[49] At the same time, with the expansion of the feasibility and importance of trade in services, the impeding nature of explicit and implicit barriers to trade and the need to deal with them through international agreements became more evident.[50]

Not surprisingly, bilateral and regional agreements to liberalize both trade in goods and services have been prominent in the late 1980s and early 1990s. In fact, the 1985

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[46] Ibid., pp.531-32. He made use of "tourism" to illustrate how national policies such as restrictions on the amount of domestic currency that tourists can carry with them, or the amount of foreign goods that they can bring back duty-free to their home country could affect trade in goods.
[47] Drake and Nicolaidis, supra note 43, p.41.
[48] Hoekman, B., Primo Braga, C. A. (1997) "Protection and Trade in Services", The World Bank, Policy Research Working Paper. Article 1of the Annex on Telecommunications recognizes "specificities of the telecommunications sector and, in particular, its dual role as a distinct sector of economic activity and as the underlying transport means for other economic activities...".
[49] Trebilcock, M. J., Howse, R. (1995) The Regulation of International Trade, Routledge, London, p.215.
[50] Hoekman and Primo Braga, supra note 48, loc. cit.

US-Israel Free Trade Agreement was the first trade agreement to cover systematically international trade in services in the bilateral context.[51] With respect to bilateral agreements, apart from the 1985 US-Israel Free Trade Agreement to which reference was made, the 1988 US-Canada Free Trade Agreement and the Australia-New Zealand Closer Economic Relations Trade Agreement (CER) should be mentioned. As regards regional agreements, which offered "conceptual catalyst" to the process, examples include the NAFTA agreement[52] and the Single European Act initiative, which was indeed to a large extent about achieving liberalization of services.[53] Finally, in 1994, the process of services liberalization was culminated by the introduction of the GATS, which is the first multilateral agreement to establish a body of rules governing international trade and investment in services. At this stage, it is necessary to address a number of points with regard to the negotiating history of the GATS agreement that is to fill out the process of services liberalization.

Indeed, pressure for the regulation of international trade in services first appeared during the Tokyo Round in the mid 1970s, initiated by the US insurance industry which reacted strongly to expropriation of its interests in India at the time.[54] Furthermore, several American-based TNCs complained of "services protectionism" during the congressional debate on the 1974 Trade Act. In attempting to deal with

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[51] Broadman, H. G. (1994) "GATS: The Uruguay Round Accord on International Trade and Investment in Services", 17 The World Economy, p.281. It is worth mentioning that coverage of services in that agreement was embodied in a non-binding, "best effort" US-Israel Declaration on Trade in Services.

[52] Part Five: Investment, Services and Related Matters, which has addressed services trade in the following chapters: Chapter 11: Investment; Chapter 12: Cross-Border Trade in Services; Chapter 13; Telecommunications; Chapter 14: Financial Services; Chapter 16: Temporary Entry for Business Persons.

[53] See Broadman, supra note 51, pp. 281-282; Hoekman and Primo Braga, loc. cit. The introduction of the Single European Act in the mid 1980s was aimed at establishing an "internal market" allowing free movement of goods, persons, *services,* and capital.

[54] Johnson,M. (1998) "Developments in the Services Sector: The GATS", in Qureshi et al (eds.) The Legal and Moral Aspects of International Trade, Routledge, London, p.137.

these concerns, among other things, the Congress authorized the USTR to raise the matter in the Tokyo Round. After raising the issue of services protectionism, there appeared to be considerable conceptual difficulties. In fact, "while the U.S. government could point to restrictions on the provision of services by American individuals and firms located abroad, it lacked a convincing argument that these were trade barriers. Other governments saw them as investment and or regulatory issues that were not part of the GATT mandate."[55] In the end, a few service liberalization commitments were inserted into three of the new codes, i.e. the Government Procurement Code, the Standards Code, and the Subsidies code, but these were not framed in terms of general trade principles and many members did not sign the codes.[56]

After the conclusion of the Tokyo Round in 1979, the United States pursued its "intellectual campaign" aiming at convincing others to launch a new negotiation round and to introduce multilateral rules on new subjects, in particular services. In the words of William Broke, United States Trade Representative in President Regan's Cabinet, the aim was to develop the means "(i) for resisting the grow of new restrictions that could hamper trade in services and (ii) for removing long-standing barriers."[57] The barriers, which hurt investments and reduced trade opportunities, were in many respects resembling non-tariff measures in the context of trade in goods.[58] It was further argued that existing industry-specific international agreements relating to a number of services activities were not able to meet the services liberalization purposes. This was mainly due to the fact that their focus is generally

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[55] Drake and Nicolaidis, supra note 43, p.47.
[56] Ibid.
[57] Brooke, W. E. (1982) "A Simple Plan for Negotiating on Trade in Services", 5 The World Economy, p.235.
[58] Ibid., p.234.

too narrow and in such agreements, regulatory and technical issues generally receive more attention than trade issues.[59]

An important point to be kept in mind in reviewing the relevant literature is the controversy between developed and developing countries. The issue of the extension of the reach of the world trading system to trade in services was the most contentious issue before GATT members.[60] It was feared that liberalized trade in services would mean the swamping of developing countries' fledging service sectors by American and European multinationals. Thus, it was not surprising that the initial response of developing countries toward negotiations on liberalizing services was one of resistance. The most insistent and effective opponents of negotiating on services were Brazil and India. According to a Brazilian delegate, liberalization "could contribute to a new international division of labor where we are granted some advantages in certain manufactures but will be permanently excluded from passing on to a post-industrial or more services-oriented economy as is happening in the developed world."[61]

In fact, the debate on the inclusion of services in the agenda of GATT's eighth round was so contentious that the United States had threatened to abandon the GATT process if services were not put on the table. Not surprisingly, the Heads of State of seven major industrialized countries at the conclusion of Bonn Summit Meeting in May 1985, decided to support United States' position regarding the bringing of trade

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[59] Ibid., p.237.
[60] Schott, J. J., Mazza, J. (1986) "Trade in Services and Developing Countries", 20 Journal of World Trade Law, p.254.
[61] Drake and Nicolaidis, supra note 43, p.57. It is worth mentioning that following government changes in the late 1980s, both India and Brazil dropped opposition to negotiating on services as such. However, they continued to demand the biggest possible trade-offs in other negotiating areas; see Johnson, supra note 54, p.139.

in services under international discipline. United States Trade Representative went on to propose that the United states could convene a non-GATT multilateral trade negotiation for those parties interested in discussing liberalizing international trade in services if developing countries continued to oppose putting services talks on the GATT agenda.

It is of importance to note, however, that although services were ultimately included in the agenda of the Uruguay Round, the unsettled controversy between developed and developing countries led to put in place the GATS agreement as a framework or umbrella agreement with some relatively modest obligations, in order to be non-threatening for developing countries. In fact, as Professor Jackson has pointed out, the GATS did not entirely live up to some of the aspirations expressed at the outset of the negotiation.[62] It has also been remarked that the GATS is a landmark in terms of creating multilateral disciplines in virgin territory; a failure in terms of generating liberalization.[63] In a more pessimistic assessment, Professor Hudec has been generally critical of what he referred to as "political theatre" dimension of international economic law, namely "the tendency of governments to adopt laws and agreements that create the appearance of legal solutions when in reality no solution has been achieved."[64] He draws attention to the fact that the normal way of doing this is to create legal documents embroidered with elegant ambiguities in order to paper

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[62] Jackson, supra note 5, p.306.
[63] Hoekman (1995) "An Assessment of the General Agreement on Trade in Services", in Will Martin and L. Alan Winters (eds.), The Uruguay Round and the Developing Economies, World Bank Discussion Papers 307, P.327.
[64] Hudec, R. E. (1996) "International Economic Law: The Political Theatre Dimension", 17 University of Pennsylvania Journal of International Economic Law, p.9.

over conflicting positions without resolving them. He believes this is particularly true with regard to some of the WTO agreements, including the GATS.[65]

III. The GATS Agreement

The GATS significantly broadened and deepened the coverage of the multilateral rules governing the world trading system. As noted earlier, services are a diverse set of industries, from banking to telecommunications to accounting, and trade in services is generally agreed to be equivalent in value about one-quarter of international trade in goods. Quite clearly, it follows that the GATS resulted in broadening the coverage of the world trading system to a great extent.

More importantly, however, is the extent to which the system has been deepened. As is well known, in services trade there is effectively no border, which distinguishes it from goods trade. Put another way, because services are generally intangible and often nonstorable, barriers to trade in services do not take the form of import tariffs or other measures that are applied at the border. In fact, the restrictions on international trade in services are embedded in countries' domestic laws, regulations and other measures. [66] For the sake of further illustration of this point, the WTO Secretariat draws attention to the fact that "because such a large share of trade in services takes place *inside* national economies, ... its [the GATS] requirements will from the beginning necessarily influence national domestic laws and regulations in a way that has been true of the GATT only in recent years."[67]

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[65] Ibid., p.14.
[66] See Hoekman, supra note 63, pp.331-332; Broadman, supra note 51, p.285.
[67] WTO Secretariat, Trade in Services Division, "AN INTRODUCTION TO THE GATS", October 1999.

In turning now to the institutional framework of the GATS, it is worth mentioning that the constituent elements of the system are as follows: (i) a framework agreement, which in turn is divided to six parts including General Obligations and Disciplines (part II) and Specific Commitments (part III); (ii) the annexes to the agreement, which are an integrated part of it and address horizontal (e.g. movements of natural persons to provide services) and sector-specific (e.g. telecommunication) matters; (iii) schedules of specific commitments that GATS members have made.[68] The GATS also provides for both general and security exceptions.[69] The security exception draws extensively on the security exception contained in the GATT. However, the duty to inform the Council on Trade in Services "to the fullest extent possible" has been added, which brings more transparency to the use of the security exception.

Furthermore, it should be noted that the development of treaty norms has not stopped with the conclusion of the Uruguay Round.[70] The liberalization of trade in services therefore is a continual process, and the framework of GATS rules and disciplines and sectoral issues are still very much under construction. With these preliminary observations in mind, the focus will be on the framework agreement and we will briefly examine those notions and obligations that have been the focus of debate in the legal literature. Thereafter, sector-specific disciplines will be briefly discussed.

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[68] See Sauve, P. (1995) "Assessing the General Agreement on Trade in Services: Half-Full or Half-Empty?", 29 Journal of World Trade, pp.127-128.
[69] Articles XIV and XIV *bis*.
[70] In particular, financial services and telecommunications were further regulated after the conclusion of the Uruguay Round and agreements on financial services and basic telecommunications were subsequently concluded.

A. The Scope of the GATS

According to Article I, the agreement applies to measures by Members affecting trade in services. Adopting a pragmatic approach, the GATS does not offer a definition of the term "service" and focuses on "trade in services" instead. Trade in services includes all forms of service supply, i.e. cross border supply, consumption abroad, the supply of service abroad through a commercial presence and the presence of natural persons. Thus, the GATS differs from the GATT by covering multiple modes of supply, which effectively means that in the context of trade in services "trade" has a broad meaning and covers "investment" as well.[71]

Article XXVIII defines certain terms used in the GATS. For example, measure means any measure by a Member, whether in the form of a law, regulation, rule, procedure, decision, administrative action, or any other form. Furthermore, in the *Bananas* case, the Appellate Body made if clear that the term "affecting" in Article I should be interpreted broadly:

> "In our view, the use of the term "affecting" reflects the intent of the drafters to give a broad reach to the GATS. The ordinary meaning of the word "affecting" implies a measure that has "an effect on", which indicates a broad scope of application. This interpretation is further reinforced by the conclusions of previous panels that the term "affecting" in the context of Article III of the GATT is wider in scope than such terms as "regulating" or "governing"."[72]

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[71] Article 2 of the GATS defines trade in services as the supply of a service: (a) from the territory of one Member into the territory of any other Member; (b) in the territory of one Member to the service consumer of any other Member; (c) by a service supplier of one Member, through commercial presence in the territory any other Member; (d) by a service supplier of one Member, through presence of natural persons of a Member in the territory of any other Member. Furthermore, according to Article XXVIII(d) commercial presence means any type of business or professional establishment, including through (i) the constitution, acquisition or maintenance of a juridical person, or (ii) the creation or maintenance of a branch or a representative office, within the territory of a Member for the purpose of supplying a service.

[72] European Communities – Regime for the Importation, Sale and Distribution of Bananas, WT/DS27/AB/R, para. 220.

In *Canada-Automotive Industry* the Appellate Body further elaborated on how to apply Article I of the GATS. In that case, the Panel held that the determination of whether a measure affects trade in services cannot be done in abstract terms in isolation from examining whether the effect of such a measure is consistent with the Member's obligations and commitments under the GATS.[73] Rejecting the Panel's interpretative approach, the Appellate Body held that the Panel ignored the "fundamental structure and logic" of Article I: 1, requiring that determination of whether a measure is covered by the GATS must be made "before" the consistency of that measure with any substantive obligation of the GATS can be assessed.[74] It further held that "at least two key legal issues must be examined to determine whether a measure is one "affecting trade in services": first, whether there is "trade in services" in the sense of Article I:2; and, second, whether the measure in issue "affects" such trade in services within the meaning of Article I:1."[75]

At the same time, it is worth noting that Article I: 3(b) excludes "services supplied in the exercise of governmental authority" from the coverage of the GATS, namely any service which is supplied neither on a commercial basis, nor in competition with one or more service suppliers.[76] The exact scope of this exclusion is not clear, which has resulted in criticizing the GATS by NGOs for not providing adequate protection for public services. In this regard, it has been remarked that since the GATS does not use the term "public services", the debate has centred on whether public services are

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[73] *Canada – Certain Measures Affecting the Automotive Industry*, Report of the Panel, WT/DS139/R, 11 February 2000, para. 10.234.
[74] *Canada – Certain Measures Affecting the Automotive Industry*, Report of the Appellate Body, WT/DS139/AB/R, 31 May 2000, para. 151.
[75] Ibid., para. 155.
[76] GATS Article I: 3(c). There is a sector-specific exclusion as well, which relates to the greater part of the air transport sector and excludes from the coverage of the GATS measures affecting traffic rights and services directly related to the exercise of traffic rights, see Annex on Air Transport Services.

covered by "services supplied in the exercise of governmental authority".[77] There are no definitional benchmarks and a report commissioned by the Canadian government notes that the possibly only conclusion to be drawn from existing comments, including from individual WTO Members and the WTO Secretariat, is the existence of a range of interpretations.[78]

In this regard, an often-quoted study by the WTO Secretariat has tried to shed some light on the issue by stressing that a government wishing to maintain a given service, e.g. health or education, as a public service or monopoly is entirely free under the GATS to do so.[79] Particularly, in addressing Article VIII of the GATS on monopolies and its relevance for the debate on public services, it goes on to argue:

> "Article VIII of the GATS, which deals with monopolies and exclusive service suppliers, contains disciplines intended to ensure that such a supplier does not abuse its monopoly position or act in a way that would undermine the country's non-discrimination and market access obligations on other services which the monopoly may be in a position to influence. But nothing in Article VIII overrides the basic point that services supplied in the exercise of governmental authority are outside the scope of the Agreement."[80]

Based on this interpretation, it is perfectly possible for governmental services to co-exist in the same jurisdiction. Accordingly, the existence of private health services, for example, in parallel with public services, which is a common practice throughout the world, could not be held to invalidate the status of the latter as "governmental

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[77] Krajewski, M. (2003) National Regulation and Trade Liberalization in Services, p.68.
[78] See Aldung, R. *Public Services and the GATS,* World Trade Organization, Economic Research and Statistics Division, Working Paper ERSD-2005-03, July 2005, pp.8-11.
[79] *Market Access: Unfinished Business*, Post-Uruguay Round Inventory and Issues, Special Studies 6, WTO, 2001, p.124.
[80] Ibid., pp.124-25.

services": this would void the exclusion of governmental services of most of its significance.[81]

B. Market Access Obligation

The first point to be made is with regard to market access obligation. In fact, among other things, a separate article in the GATS regarding market access obligation, distinguishes this agreement from the GATT. It does not follow, however, that this notion has not been considered in the GATT. It should be kept in mind that in the context of trade in goods, the aim of increasing market access opportunities for foreign products is met by reducing tariffs and agreeing to certain disciplines for non-tariff measures at the border affecting imports.[82] Thus, in the GATT context, the notion of market access is limited to border measures.

As regards trade in services, it should be noted that services differ from goods in that international trade in services frequently requires physical proximity of service providers and consumers. Accordingly, market access restrictions for services may involve not only barriers to the cross-border exchange of services, but also policies affecting the physical entry of service producers into markets where consumers are located.[83] Thus, in the GATS context, the notion of market access has a wider sense and is not limited to the border measures.

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[81] Ibid., p.125. In this regard, referring to the current wave of transition from monopoly to competition, Professor Van den Bossche notes that "in a growing number of Members, some of the services that are traditionally considered to be services applied in the exercise of government authority have in recent years been subject to privatisation and may now fall within the scope of the GATS." Van den Bossche, P. (2005) The Law and Policy of the World Trade Organization, p.321.
[82] Hoekman, B. (1992) "Market Access through Multilateral Agreement: From Goods to Services", 15 The World Economy, p.707.
[83] Ibid., p. 708.

With this in mind, attention must be paid to the fact that in the GATS, market access is not a general obligation. In other words, its enhanced importance in the context of services trade and its introduction in a separate article, have not resulted in the creation of a general obligation on market access. In fact, its reach is determined by a positive listing of sectors by each GATS member. More precisely, market access obligation is triggered only when a member schedules a specific commitment. In that case, six types of market access restrictions specified in article XVI are in principle prohibited and the member should not apply any limitations of the following types: (a) on the number of suppliers; (b) on the total value of transactions or assets; (c) on the total number of operations or the total quantity of service output; (d) on the total number of employees permitted in a sector or by a supplier; (e) which restrict or require specific types of legal entity or joint venture; and (f) on foreign equity participation. Nonetheless, it is still possible for members to derogate from these prohibited restrictions. That is why the GATS approach has been described as a "hybrid" of a positive and negative list approach to scheduling specific commitments.[84]

The adopted approach in dealing with market access restrictions has been the focus of criticism in the literature. It has been frequently remarked that a negative list approach, i.e. "list it or lose it", like the one used in the NAFTA context, would have significantly enhanced transparency. In fact, the outcome would be general applicability of market access obligation.[85]

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[84] See Hoekman, supra note 63, p. 336.
[85] See e. g. ibid, pp.346-347; Sauve, supra note 68, pp. 139-140.

C. National Treatment Obligation

According to the WTO Secretariat, some of the similarities between the GATS and the GATT are misleading.[86] This is particularly true in the case of national treatment obligation. In fact, market access and national treatment commitments are both specific commitments and the considerations mentioned earlier with regard to the former should be kept in mind here as well. Thus, based on article XVII, each member is free to decide which service sectors will be in principle subject to the GATS national treatment obligation, unless otherwise specified in its schedule. That is why it has been remarked that unlike the GATT, "the GATS does not enshrine the right to national treatment."[87]

Not surprisingly, here again commentators are critical of the positive list approach.[88] It has been argued that although it is true that even a negative list approach would allow for exemptions, at least the principle would be general, not specific.[89] In addition to market access and national treatment, Part III of the GATS, entitled "Specific Commitments", includes another type of commitments, namely "Additional Commitments". Article XVIII of the GATS defines additional commitments as follows:

"Members may negotiate commitments with respect to measures affecting trade in services not subject to scheduling under Articles XVI or XVII, including those regarding qualifications, standards or licensing matters. Such commitments shall be inscribed in a Member's Schedule."[90]

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[86] WTO Secretariat, Trade in Services Division, "AN INTRODUCTION TO THE GATS", October 1999.
[87] Sauve, supra note 68, p.133.
[88] See Hoekman, supra note 63, p.335; Sauve, supra note 68, p.139.
[89] Hoekman, loc. cit.
[90] Additional commitments have been of particular importance in telecommunications, where "regulatory commitments" are made to complement market access and national treatment commitments. This point will be discussed further in the section on telecommunications.

Furthermore, it has been remarked that the market access obligation overlaps with the national treatment obligation. In fact, the definition of the market access obligation under the GATS consists of both non-discriminatory and discriminatory measures. It follows that in the event of discriminatory application of the prohibited quantitative measures, the result would be the violation of both the market access and national treatment obligations.[91]

D. The Most-Favoured-Nation Clause

In the context of the GATS, the MFN clause is a general obligation and applies to all services, except those listed by each member in a List of MFN Exemption. In fact, the GATS incorporates the concept as one of the basic pillars of the first multilateral agreement for regulation of trade in services. Nevertheless, fundamental differences between trade in goods and trade in services and also the need to arrive at a consensus have resulted in a partial departure in terms of scope and content from the original MFN concept which applies to trade in goods.[92] In this regard, Article II: 1 provides that:

> "With respect to any measure covered by this Agreement, each Member shall accord immediately and unconditionally to services and service suppliers of any other Member, treatment no less favourable than that it accords to like services and service suppliers of any other country."

Article II: 2, however, provides members with the option of being exempt from the MFN obligation. Such exemptions, in turn, are not in principle to be maintained beyond ten years and in any event, they shall be subject to negotiation in subsequent trade liberalizing rounds. It should be noted that most members have submitted lists

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[91] See Hoekman, supra note 63, pp.334-335; Sauve, supra note 68, p.132.
[92] See Abu-Akeel, A. K. (1999) "The MFN as it Applies to Service Trade: New Problems for an Old Concept", 33 Journal of World Trade, p.104.

of measures granted exemption from the MFN clause. Among the 97 members which had submitted schedules at the conclusion of the Uruguay Round, 61 listed Article II exemptions. The GATS also allows some permanent derogations or exceptions to the application of MFN clause. The most important exception concerns economic (Article V) and labour markets (Article V bis) integration agreements.[93]

E. Domestic Regulation

As a result of distinctive characteristics of trade in services, the issue of domestic regulation is one of the key issues in the GATS context. In its Preamble, the agreement recognises "the right of Members to regulate, and to introduce new regulations, on the supply of services within their territories in order to meet national policy objectives". Article VI of the GATS deals with this matter with more precision and particularly obliges Members to make sure that regulatory regimes do not constitute unnecessary barriers to trade and they are based on objective and transparent criteria. According to Professor Jackson, Article VI of the GATS seems to authorise the Services Council of the WTO to bring into force measures of good governance and minimum standards of how governments could go about regulating, almost like an Administrative Procedure Act, but at the international level.[94]

In this regard, it is worth noting that although Article VI is among the General Obligations and Disciplines of the GATS, it applies only in sectors where specific

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[93] See Sapir, A. (1999) "The General Agreement on Trade in Services From 1994 to the Year 2000", 33 Journal of World trade, p. 57.

[94] Jackson, J. H. (2001) "Regulation and Deregulation of International Trade: Introductory Remarks", in Fletcher, I. et al (eds.) Foundations and Perspectives of International Trade Law, Sweet & Maxwell, p.78.

commitments are undertaken. As has been emphasized repeatedly in the literature, this conditional application is a serious shortcoming that would amount to weaken the GATS' impact on trade in professional services.[95] The question is, "why should the obligation for regulatory regimes affecting trade in services to be administered in a "reasonable, objective, and impartial manner" apply only in scheduled sectors?"[96] It is also of importance to know that developed countries have made commitments of some kind for 47 percent of the GATS list, whereas the figure for developing countries' commitments is just 16 percent.[97]

Obviously, in the case of professional services, there is an urgent need for standard setting. For example, it has been emphasized that without multilateral disciplines in the accountancy sector, it is not possible to give operational effect to the specific commitments of some forty-five Members.[98] Not surprisingly, the GATS delegates to Council for Trade in Services the obligation to establish the necessary bodies to develop disciplines for domestic regulation. The Council, implementing the Ministerial Decision on Professional Services, established the Working Party on Professional Services (WPPS), which commenced its work in July 1995. In April 1999, the Council replaced the WPPS with the Working Party on Domestic Regulation (WPDR), indicating that future work will be focused on a horizontal rather than a sectoral basis. [99]

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[95] Hoekman, supra note 63, p.335.
[96] Sauve, loc cit.
[97] Hoekman, supra note 63, p.341.
[98] Sauve, supra note 68, p.137.
[99] Terry, L. S. (2001) "GATS' Applicability to Transnational Lawyering and its Potential Impact on U.S. State Regulation of Lawyers", 34 Vanderbilt Journal of Transnational Law, pp. 1038-39.

Priority was given to the development of disciplines for domestic regulation in the accountancy sector, taking into account the wide coverage of the specific commitments in that sector. On December 14, 1998, the WPPS prepared the Disciplines for the Accountancy Sector. Ten days later, The Council for Trade in Services approved the disciplines, which are to be integrated into the GATS.[100] One important point to be kept in mind is the fact that these disciplines "do not address measures subject to scheduling under Articles XVI and XVII of the GATS, which restrict access to the domestic market or limit the application of national treatment to foreign suppliers."[101]

It hardly needs saying that the idea that the disciplines developed under Article VI:4 must not overlap with other provisions of the GATS , including Articles XVI (Market Access) and XVII (National Treatment), is fully acceptable. Nevertheless, as a practical matter, this distinction is not easy to draw and has been the basis of much discussion and confusion.[102] In attempting to cope with this problem, Chairman of the WPPS drafted an informal explanatory note to accompany the disciplines.

Chairman's note calls attention to the fact that generally speaking, "the disciplines to be developed under Article VI:4 cover domestic regulatory measures which are not regarded as market access limitations as such, and which do not in principle discriminate against foreign suppliers".[103] However, Chairman's note continued by recognizing the fact that for some categories of measures, the distinction is not easy

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[100] Ibid., pp.1029-30.
[101] Disciplines on Domestic Regulation for Trade in the Accountancy Sector, Part I, Objectives, S/WPPS/W/21.
[102] Terry, supra note 99, p.1031.
[103] Chairman's Note on discussion of Articles VI, XVI and XVII (Job No. 6496, (Nov. 25, 1998); attached to S/WPPS/4.

to draw and the determination as to whether an individual measure falls under Article XVII (National Treatment) will require careful consideration. To sum up, the Disciplines are a good starting point and it is of importance to note that the U.S. president in his report to Congress acknowledged that the Disciplines are of general nature and could apply to other professions as well as accounting.[104] In fact, in recent years, the WPDR has been focusing on developing horizontal disciplines that would apply to multiple services.[105] Nevertheless, in its Decision creating the WPDR, the Council for Trade in Services expressly acknowledged the possibility that individual sectors, such as legal services, could be treated in disciplines specific to that service, but delegated to the WPDR the judgement about whether to do so.[106]

F. Sector-Specific Disciplines: The Agreements on Financial Services and Telecommunications

Previous initiatives in the context of services liberalization shows that in some sectors it is not enough to rely on basic principles of international trade law. In fact, complexities associated with some highly regulated sectors — notably financial services and telecommunications — require the adoption of detailed sector-specific disciplines in order to ensure a consistent application of the basic rules among the contracting parties.

This has been the case as early as the first services liberalization initiative. In the Canada-US Free Trade Agreement, sector-specific disciplines exist for financial

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[104] Terry, supra note 99, p.1032.
[105] Ibid.,p.1041.
[106] Ibid., pp.1039-40.

services and telecommunications. More importantly, the NAFTA takes the similar approach and sector-specific disciplines have been designed for financial services and telecommunication. Chapter 14 of NAFTA is devoted to financial services and contains general MFN and National Treatment obligations with respect to financial services as well as a Right of Establishment. Also, Chapter 13 of NAFTA is devoted to telecommunication and contains detailed disciplines specific to this sector. Article 1302 contains a series of technical provisions that define many of the elements of the right of access to the basic network and its limitations.[107] It is worth noting that in the context of the European Union, after the introduction of the Single European Act, the liberalization of trade in services within the EU, which was already stated as an objective in the Treaty of Rome, resulted in sector-specific directives on financial services and telecommunications.[108]

In view of the above, it is not surprising that financial services and telecommunication are given special treatment under the GATS. If the need for sector-specific disciplines is well established at the regional level for these highly regulated sectors, the same logic should apply when it comes to the regulation at the international level. As regards financial services, it should be noted that when the GATS entered into force, the negotiations on a set of disciplines specific to financial services had not been completed. At the time, the GATS contained two Annexes on Financial Services as well as an Understanding on Commitments in Financial Services and a Decision on Financial Services.

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[107] See Trebilcock and Howse, supra note 49, pp. 240-245.
[108] See Eeckhout, P. (1994) The European Internal Market and International Trade: A Legal Analysis, Oxford University Press, Chapters 2 and 4.

Generally speaking, the Annexes on Financial Services did not contain any specific liberalization commitments with respect of trade in financial services. However, there was an agreement that further negotiations should be held.[109] These further negotiations ended in December 1997 with the participation of seventy counties and led to the Agreement on Financial Services, which has been attached to the GATS as the Fifth Protocol. The Fifth Protocol entered into force in March 1999 and provides for the annexation of new financial services schedules to the original commitments on financial services. It is worth mentioning that commitments in the financial services sector concentrated the first three modes of supply and it seems that the presence of natural persons is less important in this sector.[110]

With regard to telecommunications, the situation was similar to financial services, in the sense that when the GATS entered into force, the negotiations on telecommunications had not been completed. The GATS originally contained an Annex on Telecommunications, which is very similar in its substantive provisions to Chapter 13 of NAFTA and establishes a right of access for persons of another Party to Party's public telecommunications transport networks and services on non-discriminatory and reasonable terms.[111] Commitments in telecommunication services first made during the Uruguay Round mostly in value-added services.[112] However, the Ministerial Decision on negotiations of basic telecommunications was adopted in Marrakesh on April 15, 1994. Further negotiations after the conclusion of the

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[109] Trebilcock and Howse, supra note 49, p.241.
[110] Matsushita, M. et al (2003) The World Trade Organization: Law, Practice, and Policy, Oxford University Press, p.253.
[111] Trebilcock and Howse, supra note 49, p.245.
[112] Telecommunications means the transmission and reception of signals by any electromagnetic means (Annex on Telecommunications, Article 3(a)). Value-added services such as online database storage and retrieval or electronic data interchange entail transmissions which include some data processing as well, whereas basic telecommunications services such as international calls and mobile telephony do not entail data processing.

Uruguay Round resulted in the adoption of the Forth Protocol to the GATS in 30 April 1996. This document provided the legal basis for the annexation of new basic telecommunications commitments. Finally, with the conclusion of the extended negotiations on basic telecommunications in February 1997, the Agreement on Basic Telecommunications was concluded.

One of the most important initiatives of these further negotiations was designing the "Reference Paper", which contains definitions and principles on the regulatory framework for the basic telecommunications services. The regulatory principles contained in the Reference Paper are not obligatory. However, once WTO members adopt them by inscribing them in their schedules as additional commitments, they become obligatory for them. In particular, it contains rules that effectively impose obligations[113] on certain private entities to open their "public networks" to competitors from abroad. Moreover, WTO members are supposed to take "appropriate measures" to prevent powerful suppliers of telecommunications services from engaging in "anticompetitive practices". It has been remarked that under the WTO system it is highly unusual to find rules that seek to govern private activities.[114]

It is also observed that the approach used, i.e. the drafting of a common text, but giving government the flexibility to draw selectively from it, could serve as a model for other sectors.[115] This is in recognition of the fact that WTO members are at

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[113] Interconnection obligations.

[114] Bronckers, Marco C.E.J. (2000) "The WTO Reference Paper on Telecommunications: A Model for WTO Competition Law?", in M. Bronckers and R. Quick (eds.) New Directions in International Economic Law, p.371.

[115] Tuthill, Lee (1997) "The GATS and new rules for regulators", 21 Telecommunications Policy, p.786. It is interesting to note that fifty-seven of the 69 participants in the negotiations on basic

different stages of the transition from monopoly to competition in the telecommunications industry. Six regulatory principles contained in the Reference Paper are summarized as follows: (1) competitive safeguards to prevent anti-competitive practices in telecommunications such as engaging in anti-competitive cross-subsidization, using information obtained competitors with anti-competitive results, and not making available to other services suppliers on a timely basis technical information about essential facilities; (2) interconnection with a "major supplier"[116] at any technically feasible point in the network under non-discriminatory and transparent terms and in a timely fashion; (3) the right to impose universal service obligation; (4) public availability of all the licensing criteria where a licence is required; (5) establishment of independent regulatory bodies separate from, and not accountable to, any supplier; and (6) the use of objective, timely, transparent, and non-discriminatory allocation procedures for scarce resources such as frequency, numbers, and the right of way. Needless to say, the fact that the Reference Paper is the only competition-specific initiative in the WTO system so far has provided it with a unique status. However, it is still considered as a work in progress and in the current Doha Round a number of proposals for strengthening the Reference Paper by enhancing the regulatory independence provision and ensuring competitive mechanisms for allocating limited licences have been tabled.[117]

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telecommunications adopted the Reference Paper in full or with minor modifications as additional commitments.

[116] According to the Reference Paper, a "major supplier" is a supplier which has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for basic telecommunications services as a result of: (a) control over essential facilities; or (b) use of its position in the market. In fact, paragraph (a) refers to "monopoly power", whereas paragraph (b) refers to "market power". Due to their network dependency, the same combination should be taken into account for the electricity and gas sectors, as evidenced by the EU experience already discussed in Chapter 4.

[117] For a discussion of the *Mexico – Telecommunications* case and the state of play in the negotiations on telecommunications see Trebilcock, M. J. and Howse, R. (2005) The Regulation of International Trade, Third edition, pp.393-96.

IV. Concluding Remarks

This chapter deals exclusively with the GATS Agreement. In fact, it is an introductory chapter for the next two chapters. What distinguishes the GATS from the GATT is the fact that the GATS is a young agreement. Not surprisingly, the scholarship devoted to the GATS is still rather sparse. In addition, as discussed throughout this chapter, trade problems in the services sector are much more complex and o well beyond border measures. There are, accordingly, important distinctions to be drawn between the GATS and the GATT.

This chapter was aimed at exploring both similarities and differences between the two agreements as well as setting out the history of the "intellectual evolution" that eventually led to the recognition of the concept of "trade in services" and justified the conceptualization of measures related to regulatory protectionism as "trade barriers". Furthermore, sector-specific disciplines in the context of the GATS were discussed with particular emphasis on the telecommunications sector. This is the sector that due to its network dependency, WTO members have recognized the need for the making of additional regulatory commitments in order to complement their market access and national treatment commitments. In particular, it was noted that the basic telecommunications negotiations resulted in the introduction of the "Reference Paper" as the only competition-specific initiative in the context of the WTO system.

Chapter 6. Trade in Energy Services under the GATS

I. Introduction

Energy services, including upstream services[1] and downstream services[2], are required at each step of the energy process from discovery of a potential energy source to its supply to the final consumer.[3] They are recently attracting much attention in current negotiation in the context of the GATS agreement. It should be noted, however, that this was not the case during the Uruguay Round negotiations, which did not consider energy services specifically like telecommunications and financial services. This was due to the fact that as discussed in greater detail below, at the time the energy services were not regarded as separately tradable services. Thus, their liberalization, which means removing or at least reducing barriers to trade, was not a priority for trade negotiators.

In fact, energy services are usually referred to as "emerging services". It is worth noting, however, that in most instances what is at issue is not the emergence of energy services *per se,* but their tradability.[4] In the sense that the relatively recent trend towards privatization and liberalization in the energy sector has contributed to

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[1] See Chapter one (the oil industry, the production segment of the natural gas industry) and Chapter two (oil and gas field services). for a discussion of upstream energy services.
[2] See Chapter one, the natural gas and electricity industries for a full description of downstream energy services in the electricity and gas markets.
[3] See also UNCTAD, "Managing "Request-Offer" Negotiations under the GATS: the Case of Energy Services", Contribution by the UNCTAD secretariat, UNCTAD/DITC/TNCD/2003/5, 23 May 2003, para. 9.
[4] "Also relevant would seem to be a distinction between "new services" and services that were performed in-house, in a vertically integrated structure, and that now are subject to outsourcing. In such a case it could be argued that what is "new" is not the service in itself but its tradability, and that may vary from country to country." See Tacoa-Vielma, J. (2003) "Defining Energy Services for the GATS: An Issue under Discussion", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, pp.75-76.

isolate a wide range of energy services, which are now separately tradable and might be the object of multilateral trade negotiations.[5] Another relevant issue is the distinction between "new services", that is activities that did not exist genuinely in the past, and "new ways" of performing or delivering existing services.[6]

This chapter begins with reviewing the status of the process of liberalizing energy services at the conclusion of the Uruguay Round. Then, the post Uruguay Round negotiations and developments will be considered. It should be noted that the current negotiations on energy services mark the first time that energy issues have been formally negotiated within the GATT/WTO framework of multilateral trade rights and obligations.[7] In the final part of this chapter, some of the classification proposals will be discussed. The discussion starts with the United States and the European Communities contributions on the issue of the classification of energy services under the GATS, which triggered the submission of proposals by other countries on the issue. Thereafter, two well-researched proposals submitted by two energy-exporting developing countries, i.e. Venezuela and Indonesia, will be discussed. The chapter concludes with evaluating the four proposals and a brief review of other proposals on classification of energy services.

II. The Uruguay Round Treatment of Energy Services

A. Classification of Services under the GATS

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[5] See "Energy Services, Background Note by the Secretariat", S/C/W/52, 9 September 1998, Introduction. It is important to note, however, that a completely new set of services is also emerging from the structural reform of the energy sector. These include the operation of power pools, the provision of continuous information on energy prices, energy trading and brokering, and energy management. See UNCTAD, Supra note 3, para. 9.

[6] Tacoa-Vielma, supra note 4, p.75.

[7] See Ricupero, R. (2003) Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, foreword.

In order to examine the Uruguay Round treatment of energy services, it is necessary to note that the WTO "Services Sectoral Classification List" (document MTN.GNS/W/120, 10 July 1991) — which is used as the basis of making liberalization commitments in the context of the GATS — does not include a separate comprehensive entry for energy services. It consists of a list of services sectors based on the United Nations Provisional Central Product Classification (CPC) of 1991. The W/120 divides all services into 12 broadly defined sectors, which are further divided into some 160 sub-sectors. Each of the sub-sectors is annotated with CPC codes in order to provide a clear description of the services covered by them. As regards its legal status, it is worth mentioning that the W/120 is not binding.[8] Accordingly, its use is not mandatory for WTO members. Nevertheless, the W/120 and CPC codes have been used, in whole or part, in 90 percent of the schedules containing Sectoral commitments under the GATS.[9]

The W/120 identifies the following sectors and sub-sectors: **(1) Business Services** (A. Professional Services; B. Computer and Related Services; C. Research and Development Services; D. Real Estate Services; E. Rental/leasing Services without Operators; F. Other Business Services); **(2) Communication Services** (A. Postal Services; B. Courier Services; C. Telecommunication Services; D. Audiovisual Services; E. Other); **(3) Construction and Related Engineering Services; (4) Distribution Services; (5) Environmental Services; (7) Financial Services; (8) Health Related and Social Services; (9) Tourism and Travel Related Services; (10) Recreational, Cultural and Sporting Services; (11) Transport Services** (G.

[8] For a full discussion of this point see the next part of this chapter.
[9] Tacoa-Vielma, supra note 4, p.71.

Pipeline Transport: a. Transportation of Fuels; b. Transportation of other goods); and **(12) Other Services not Included Elsewhere.**

There is just one specific reference to an energy service in 11 (G) (a) "pipeline transportation of fuels", which consists a separate sub-sector of transport services. Other energy services like transport, distribution, construction, consulting, engineering, etc. are covered by respective horizontal categories mentioned above. Several entries under 1 (F) "Other Business Services" cover energy related services, including: (e) technical testing and analysis services; (h) services incidental to mining; (j) services incidental to energy distribution; (m) related scientific and technical consulting services; (n) maintenance and repair of equipment.[10] It is also worth mentioning that The United Nations Provisional Central Product Classification (CPC) also does not list energy services as a separate category.[11]

The fact that there is such an obvious disparity between the way energy services are addressed in W/120 and the way energy markets currently operate is to a great extent due to the fact that the process of structural reform of the energy sector is a recent development in the sector. It should be noted that actual liberalization of the energy sector, particularly the electricity and natural gas sectors, has progressed significantly during the 1990's and mostly after the conclusion of the Uruguay Round negotiations. Thus, what might seem to be ignoring current market realities in drafting W/120 is due to the fact that W/120 is based on the previous paradigm in the energy sector, which was the prevailing paradigm at the time. It was based on the "unified approach" adopted by the industry, which traditionally did not distinguish

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[10] Energy Services, Background Note by the Secretariat, S/C/W/52, 9 September 1998, paragraph 10.
[11] Ibid., paragraph 11.

between the goods and the services aspects of energy trade.[12] In other words, the public and vertical nature of the utilities and their monopoly position had mostly prevented trade in energy services.

Obviously, the process of structural reform of the energy sector is in various stages of development in developed and developing countries, but certain basic elements of current market realities are identifiable.[13] Among other things, the structural reform has resulted in breaking up of integrated energy systems and the externalisation of previously integrated services such as energy transmission and distribution.[14] Thus, separate energy services are now identifiable, especially in the downstream segments of the electricity and natural gas sectors. The following analysis by the delegation of the United States gives an insight into the reason why energy services have not been dealt with separately in W/120:

> "When W/120 was written, much of the energy industry was dominated by state-owned enterprises operating mostly within home markets as vertically integrated companies with monopoly positions. Most service functions were performed "in-house" by oil companies and power generation utilities that controlled the whole production and distribution chain. Services negotiators in the Uruguay Round focused primarily on sectors where discrete services were readily identifiable (not always the case in a vertically integrated sector), trade was already significant, business interest in trade liberalization was strong, and consumer benefits were apparent."[15]

A relevant example will serve as illustration. As noted earlier, it is the cross-reference to the explanatory notes of the provisional CPC that provides a clear description of the services covered by the W/120. Not surprisingly, reflecting the then commercial reality, in the provisional CPC (adopted in 1991) electricity, gas and water were treated purely as goods and no item "distribution of electricity, gas or water" existed as such apart from an item "services incidental to energy distribution".

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[12] Ibid., paragraph 2.
[13] Communication from the United States, Energy Services, S/W/58, 20 October 1998, p.2.
[14] See Energy Services in International Trade: Development Implications, Note by the UNCTAD secretariat, TD/B/COM.1/EM.16/2, 18 June 2001, paragraph 4.
[15] Communication from the United States, Classification of Energy Services, S/CSC/W/27, 18 May 2000, paragraph 7.

However, the statistical committee of the United Nations adopted in its 10-14 February 1997 Session the CPC Rev.1, which reflects the current commercial reality of the utility industries and among other things, a specific item r 69110 "electricity distribution services" has been created and is described as including "transmission, distribution and supply services of electricity and reading and maintenance of the meters with the exclusion of installation of services of the meters". Likewise, in recognition of the emergence of natural gas transportation market, a specific item r 69120 "gas distribution services through mains" has been created.[16]

B. The Legal Status of "Services Sectoral Classification List"

It is not disputed that W/120 should be taken into account in interpreting the GATS when there is a disagreement as to whether a WTO Member has made commitments under the GATS or when the scope of commitment in a sector is disputed. A clear sign of this relevance can be found in Article 22.3(f) of the Dispute Settlement Understanding (DSU), which constitutes the basis of the WTO dispute settlement system.[17] According to Article 22.3(f) of the DSU, for the purpose of suspending concessions, " 'sector' means ...(ii) with respect to services, a principal sector as identified in the current 'Services Sectoral Classification List' which identifies such sectors".

However, in the *Gambling* case[18] the parties expressed diverging views on the issue of the exact legal status of W/120. In this case, Antigua and Barbuda (hereinafter

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[16] See Committee on Specific Commitments, "Detail Analysis of the Modifications Brought About by the Revision of the Central Product Classification", Energy, S/CSC/W/6/Add.1, 4 June 1997.
[17] See Understanding on Rules and Procedures Governing the Settlement of Disputes, Annex 2 to the Agreement Establishing the World Trade Organization.
[18] *United States – Measures Affecting the Cross-border Supply of Gambling and Betting Services,* Report of the Panel, WT/DS285/R, 10 November 2004.

"Antigua") complained that measures applied by central, regional and local authorities in the United States had affected the cross-border supply of gambling and betting services in breach of the United States' commitments under the GATS. More specifically, Antigua requested the Panel to find that the United States' prohibition on the cross-border supply of gambling betting services and its measures restricting international money transfers and payments relating to gambling and betting services were inconsistent with: (a) the United States' Schedule of specific commitments under the GATS; and (b) articles XVI:1, XVI:2, XVII:3, VI:3 and XI:1 of the GATS.[19]

Antigua submitted that, in its Schedule of commitments under the GATS, the United States has made a full commitment for the cross-border supply of services classified under sub-sector 10.D "Other recreational services (except sporting)." In drafting its Schedule, the United States made use of W/120 and sub-sector 10.D of W/120 is headed "Sporting and other recreational services" and list "964" as the corresponding CPC number, which among other things includes "gambling and betting services".[20]

In response, the United States requested the Panel to reject Antigua's claims in their entirety.[21] In this regard, the United States took the position that contrary to Antigua's claim, the United States has not undertaken any GATS commitments on gambling and betting services.[22] In its arguments, the United States rejected Antigua's reliance on the W/120 and its references to the CPC in order to justify its claim that the United States has made commitment for cross-border supply of

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[19] *Gambling* Panel Report, para. 2.1.
[20] Ibid., para. 3.30.
[21] Ibid., para. 2.1.
[22] Ibid., para. 3.31.

gambling services. In particular, the United States argued that W/120 should not be considered as part of the "context" of the GATS within the meaning of Article 31:2(a) or Article 31:2(b) of the Vienna Convention of the Law of Treaties. Nor it can be considered as "subsequent practice" of the parties within the meaning of Article 31:3 of the Vienna Convention. According to the United States, "W/120 is part of the negotiating history of the GATS, which is at best a supplementary means of interpretation pursuant to the customary rules of interpretation of public international law reflected in Article 32 of the Vienna Convention."[23]

Thus, in the *Gambling* case, due to the fact that the parties expressed diverging views as to the exact legal status of W/120 in relation to the GATS agreement, among other things, the Panel examined this issue. However, before turning to the relevant part of the Panel's analysis, it is necessary to briefly examine the Vienna Convention rules on treaty interpretation, which reflect the customary law on the interpretation of treaties and are now regularly applied by the International Court of Justice as custom.[24]

Prior to the adoption of the Vienna Convention on the Law of Treaties in 1969, three main schools of thought on the issue of treaty interpretation were distinguishable: the "intentions of parties" or "founding fathers" school; the "textual" or "ordinary meaning of the words" school; and the "teleological" school. For the "intentions of parties" school, the prime object is to ascertain and give effect to the intentions, or presumed intentions, of the parties. For the "aims and objects" school, it is the

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[23] Ibid., para. 3.41.

[24] See for example, Harris, D.J. (1998) Cases and Materials on international Law, p.814; Brownlie draws attention to the fact that the Vienna Convention is not as a whole declaratory of general international law. He adds, nonetheless, "a good number of articles are essentially declaratory of existing law"; see Brownlie, I. (1998) Principles of Public International Law, p.608.

general purpose of the treaty itself that counts and has an existence of its own, independent of the original intentions of the framers.[25] To the point that it is legitimate to resolve any ambiguity of meaning by importing the substance 'necessary' to give effect to the purposes of the treaty.[26]

The "textual" approach lies between the two aforementioned subjective and objective approaches to treaty interpretation. For this school, the prime object is to establish what the text means according to the ordinary or apparent signification of its terms: the approach is therefore through the study and analysis of the text.[27] This approach was adopted by the Vienna Convention as reflecting the customary international law on the interpretation of treaties. As stated by the International Law Commission in its commentary on Articles 31 and 32, "the jurisprudence of the International Court contains many pronouncements from which it is permissible to conclude that the textual approach to treaty interpretation is regarded by it as established law."[28]

It is worth mentioning in this regard that as early as 1925, the Permanent Court of International Justice examined a services case applying the textual approach. In the Advisory Opinion on the Polish Postal Service in Danzig the Court "observed that the postal service which Poland was entitled to establish in Danzig under treaty was not confined to operation inside the postal building, as 'postal service' must be

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[25] For a full discussion of these schools and other relevant issues see Fitzmaurice, G. (1951) "The Law and Procedure of the international Court of Justice: Treaty Interpretation and Certain Other Treaty Points", The British year Book of International Law, pp.1-28.
[26] Brownlie, supra note 24, p.637.
[27] See Fitzmaurice, loc. cit.
[28] Year Book of International Law Commission, 1966, II, p.220.

interpreted 'in its ordinary sense so as to include the normal functions of a postal service'."[29]

In view of the above, Article 31:1 of the Vienna Convention reads as follows: "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose." Article 31 has adopted the textual approach. However, its wording suggests that the textual approach is not a purely grammatical approach, in the sense that the meaning must emerge in the context of the treaty as a whole and in the light of its objects and purposes.[30]

Article 31:2 defines what is meant by the "context" of a treaty, which reads as follows:

"2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:
(a) any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty;
(b) any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty."

Furthermore, Article 31:3 refers to other relevant documents that shall be taken into account, together with the context. They include any "subsequent agreement" between the parties regarding the interpretation or application of the treaty, and, any "subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation". Also, any relevant rules of international law applicable in the relations between the parties should be taken into account. Finally, Article 31:4 stipulates that a special meaning shall be given to a term if it is established that the parties so intended.

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[29] Brownlie, supra note 24, p.634.
[30] Ibid.

In its commentary, the International Law Commission emphasized that the application of the means of interpretation in Article 31 of the Vienna Convention would be a single combined operation.[31] However, there is a hierarchy between these sources and another set of sources mentioned in Article 32 as "supplementary means of interpretation", which reads as follows:

> "Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31:
> (a) leaves the meaning ambiguous or obscure; or
> (b) leads to a result which is manifestly absurd or unreasonable."

The preparatory work of a treaty is purposely not defined in the Vienna Convention. It was feared that this might only lead to the exclusion of relevant evidence. It includes records of negotiations between the states that participate in the drafting of a treaty and, in some cases, records of the work of independent bodies of experts, such as the International Law Commission.[32]

In turning now to the *Gambling* case, as mentioned earlier, the Panel had to ascertain whether the United States has undertaken specific commitments under the GATS on gambling and betting services. More precisely, given the fact that the GATS stipulates that schedules of specific commitments are an integral part of the GATS agreement, their interpretation is based on treaty interpretation rules stated in Articles 31 and 32 of the Vienna Convention. Thus, in order for the Panel to apply the treaty interpretation rules to the US Schedule of commitments, as a preliminary matter it needed to characterize W/120. Can W/120 be characterized as part of the context of the GATS or a "subsequent practice", as claimed by the Antigua, with the result that

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[31] Ibid., p.633.
[32] Harris, supra note 24, p.818.

it would have a "primary" role as an element of the general rule of interpretation in interpreting the US Schedule of commitments? Or, shall W/120 be characterized as part of the preparatory work of the GATS, as argued by the United States, to be considered accordingly only as a supplementary means of interpretation?

It should be noted that in addition to W/120, the parties expressed diverging views on the legal status of "the 1993 Scheduling Guidelines".[33] This document prepared as an "explanatory note" by the then GATT Secretariat in order to assist in the preparation of offers, requests and national schedules of initial commitments under the GATS. Its stated objective is to explain, in a concise manner, how commitments should be set out in schedules in order to achieve precision and clarity. Thus, the Panel started its analysis by stating the necessary criteria for characterizing the disputed documents as part of the context of the GATS:

> "For W/120 and the 1993 Scheduling Guidelines to be part of the context within the meaning of Article 31:2(a), three conditions should be fulfilled. They must: (i) "relate" to the treaty, i.e. the GATS; (ii) constitute an agreement made between all the parties or an instrument made between some parties and accepted by the others as such; and (iii) be "in connexion" with the conclusion of the GATS."[34]

On the issue of their relation to the GATS, the Panel declared it is unquestionable that W/120 and the 1993 Scheduling Guidelines assisted Members in the preparation of their schedules of specific commitments under the GATS. The panel also characterize the documents as "agreements" or "instruments" within the meaning of Article 31:2(b) of the Vienna Convention:

> "Although both W/120 and the 1993 Scheduling Guidelines were "technically" drafted by the Secretariat - this was arguably the most practical and efficient way to work on such a matter - they can be considered "agreement[s] ... made between all [Members]" or an "instrument[s] ... made by one or more [Members]" but accepted by all of them as such within the meaning of Article 31:2(a) and (b) of the Vienna Convention. In this regard, it may be recalled that the two documents were prepared by the

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[33] WTO Doc. MTN.GNS/W/164, 3 September 1993.
[34] *Gambling* Panel Report, supra note 18, para. 6.77.

- then - GATT Secretariat, at the behest of the Uruguay Round participants. The participants can thus be considered to be the "intellectual" authors of the documents."[35]

As to the third condition, the Panel held that both W/120 and the 1993 Scheduling Guidelines are "in connection" with the GATS, taking in to consideration that both documents were drafted in parallel with the GATS itself, with the stated purpose of being used as "guides" for scheduling specific commitments under the GATS and for the subsequent interpretation of Members' schedules. With particular reference to W/120, the Panel stated that it was used by most WTO Members during the Uruguay Round to establish their schedules, and that W/120 is referred to in Article 22.3(f) of the DSU.[36]

In view of the above, the Panel concluded that both W/120 and the 1993 Scheduling Guidelines were agreed upon by WTO Members not only in the negotiation of their specific commitments, but as interpretative tools in the interpretation and application of Members' scheduled commitments under the GATS. "As such, these documents comprise the "context" of GATS Schedules, within the meaning of Article 31 of the Vienna Convention and the Panel will use them for the purpose of interpreting the GATS, GATS schedules and thus the US Schedule."[37]

However, the Appellate body disagreed with the Panel's characterization of W/120 and the 1993 Scheduling Guidelines as part of GATS context. Among other things, the United States in its appeal, argued that the Panel erred by giving undue weight to the two documents by treating them as "context" within the meaning of Article 31 of the Vienna Convention, instead of considering them as negotiating documents that

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[35] Ibid., para. 6.80.
[36] Ibid., para. 6.81.
[37] Ibid., para. 6.82.

may be used for interpretative purposes under Article 32, only if treaty's meaning would otherwise be left ambiguous or absurd.

More specifically, the Appellate body drew attention to the fact that both W/120 and the 1993 Scheduling Guidelines were drafted by the GATT Secretariat rather than the parties to the negotiation. The Appellate body admitted that on its own, authorship by a delegated body would not preclude specific documents from falling within the scope of Article 31:2. However, it did not find enough evidence to support the characterization suggested by the Panel:

> "We do not accept, as the Panel appears to have done, that, simply by requesting the preparation and circulation of these documents and using them in preparing their offers, the parties in the negotiations have accepted them as agreements or instruments related to the treaty. Indeed, there are indications to the contrary. As the United States pointed out before the Panel, the United States and several other parties to the negotiations clearly stated, at the time W/120 was proposed, that, although Members were encouraged to follow the broad structure of W/120, it was never meant to bind Members to the CPC definitions..."[38]

The Appellate body also declared that the Panel cited no evidence supporting its finding that W/120 and the 1993 Scheduling Guidelines were agreed upon by Members also "as interpretative tools in the interpretation and application of Members' scheduled commitments".[39] Thus, the Appellate body rejected the Panel's characterization of the two documents as part of the context for the interpretation of the United States' GATS Schedule.

In addition to context, Antigua argued that the "subsequent practice" of WTO Members demonstrates that W/120 must be used to interpret the United States' GATS Schedule. The Panel did not examine this argument, given the fact that it characterized W/120 as part of the context. Thus, the Appellate body needed to

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[38] *Gambling* Appellate Report, WT/DS285/AB/R, 7 April 2005, para. 176.
[39] Ibid., para. 177.

examine this argument. In supporting it argument, Antigua argued that such relevant subsequent practice could be found, among other things, in a submission made by the United States regarding the classification of energy services.[40]

In examining Antigua's argument, the Appellate body declared that " in order for "practice" within the meaning of Article 31(3)(b) to be established: (i) there must be a common, consistent, discernible pattern of acts or pronouncements; and (ii) those acts or pronouncements must imply agreement on the interpretation of the relevant provision."[41] The Appellate body found that documents relied on by Antigua do not establish a common, consistent, discernible pattern of acts or pronouncements by Members as a whole.[42]

In the end, the Appellate body observed that both parties agreed that W/120 and the 1993 Scheduling Guidelines constitute "supplementary means of interpretation" within the meaning of Article 32 of the Vienna Convention. The Appellate body also agreed with this characterization and since analysis under Article 31 left the meaning of the relevant language ambiguous, it applied the supplementary means of interpretation.[43]

C. Initial Specific Commitments in Energy Services

In view of the above, in turning now to the GATS specific commitments in energy services, it should not come as a surprise that specific commitments in energy

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[40] Ibid., para. 190.
[41] Ibid., para. 192.
[42] Ibid., para. 194.
[43] Ibid., paras. 195-196. As a result, the Appellate Body concluded that the United States' GATS Schedule did not exclude gambling services by virtue of the exclusion of "sporting". Ibid., para. 208.

services are very limited. Only three Members (Australia, Hungary, and New Zealand) have commitments in pipeline transportation of fuels. Two of these Members refer to the United Nations Provisional Central Product Classification (UNCPC, 713), which defines the entry as "transportation via pipeline of crude or refined petroleum products and of natural gas."[44]

Eight Members (Australia, Dominican Republic, Gambia, Hungary, Nicaragua, Sierra Leone, Slovenia and the United States) have made specific commitments in services incidental to energy distribution. Two of these Members specify that the entry covers only consultancy services incidental to the distribution of energy, which means that the core distribution and transmission services remaining unbound. As regards the other six Members that do not specify the coverage of the entry, it has been argued that if the CPC explanatory is relied upon rather than the literal meaning of the words, those commitments might be read as including the core distribution and transmission activities.[45] It is also worth noting that distribution services commitments do not cover electricity and natural gas, which according to the UNCPC definition are covered by the entry "services incidental to energy distribution".[46]

Thirty-three Members have made commitments in services incidental to mining, the entry which is related to upstream activities for oil and gas. In the UNCPC, services incidental to mining are defined as "services rendered on a fee or contract basis at oil and gas fields, e.g. drilling services, derrick building, repair and dismantling services,

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[44] Energy Services, Background Note by the Secretariat, S/C/W/52, 9 September 1998, paragraph 73.
[45] Ibid., paragraph 74.
[46] Ibid., paragraph 76.

oil and gas well casing cementing services". [47] However, in the UNCPC, mineral prospecting services, oil and gas field exploration and seismic and geological surveying services are excluded from this division and are classified under "Geological and other scientific prospecting services" and "related scientific and technical consulting services".[48] Eleven Members have limited their commitments to advisory or consulting services, but seventeen Members have listed no limitations on market access and national treatment, with the exception of "Unbound except as indicated in the horizontal section" under mode four.[49]

D. Energy Services Commitments Made by New Members of the WTO

Obviously, as with trade in energy goods, the accession process of new members provides the existing members of the WTO the opportunity to obtain energy-related commitments in the context of trade in energy services. However, energy services negotiations in particular involve a range of new and complicated matters. What makes the issue more complicated is the fact that the energy sector currently is in the middle of a transition from state monopoly to privatisation and competition. This situation is comparable with the situation of the telecommunications sector in the 1990s. As in the telecommunication sector at the time, the negotiations on energy services come at a time when more countries are either liberalizing their national monopolies or privatizing altogether.[50] In addition, in most acceding countries, information on various energy-related services sectors and on the diverse measures

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[47] Ibid., paragraph 75.
[48] See Energy Services in International Trade: Development Implications, Note by the UNCTAD secretariat, TD/B/COM.1/EM.16/2, 18 June 2001, paragraph 24.
[49] Energy Services, Background Note by the Secretariat, S/C/W/52, 9 September 1998, paragraph 75.
[50] VanGrasstek, C. (2003) "United States Energy Policy: The Consequences of a Pivotal Year", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p.217.

applicable to services is not always available. This makes it difficult to assess the implications of the assorted types of commitments required.[51]

With this in mind, the aim of the existing WTO members has been twofold: First, to "lock in" the acceding countries' unilateral liberalizing actions in the area of energy services in the form of enforceable commitments under the GATS.[52] Second, to gain new commitments towards more liberalization in energy services. For example, Oman, as an acceding petroleum exporting country, has made commitments to totally liberalize trade and investment in energy-related services based on the existing WTO Services Sectoral Classification List (W/120), which would cover three specific energy-related activities as follows: transportation via pipe line of crude or refined petroleum and petroleum products and of natural gas; services incidental to mining: rendered on a fee or contract basis at oil and gas fields; and transmission and distribution services on a fee or contractual basis of electricity, gaseous fuels and steam and hot water to household, industrial, commercial and other users. As regards other acceding energy producers, mention can be made of Ecuador, which has accepted commitments in services incidental to mining. In addition, China, a country with a large internal market, has made commitments with respect to reduction of state monopoly control on trading and distribution in the petroleum sector.[53]

III. Considering Possible Amendments to the Existing Services Classification in order to Create an Energy Services Sector

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[51] Gibbs, M. and Mamedov, A. (2001) "Energy-related issues in the WTO accession negotiations", in WTO Accessions and Development Policies, UNCTAD/DITC/TNCD/11, pp. 310-311.
[52] See VanGrasstek, loc. cit.
[53] Gibbs and Mamedov, supra note 51, p.311.

A. The Context

As far as services negotiations are concerned, the GATS commits member governments to undertake negotiations on specific issues and to enter into successive rounds of negotiations to progressively liberalize trade in services. Due to the fact that the first round had to start no later than five years from 1995, services negotiations started officially in early 2000, before the official start of the ongoing Doha Round. After the adoption of the Doha Declaration at the Forth Ministerial Conference in Doha in November 2001, paragraph 15 of the Doha Declaration, among other things, endorsed the work already done:

> "The negotiations on trade in services shall be conducted with a view to promoting the economic growth of all trading partners and the development of developing and least-developed countries. We recognize the work already undertaken in the negotiations, initiated in January 2000 under Article XIX of the General Agreement on Trade in Services, and the large number of proposals submitted by Members on a wide range of sectors and several horizontal issues, as well as on the movement of natural persons."

The Doha Round of services negotiations have focused on request-offer process, which has proceeded slowly so far, with the depth and quality of offers to be far from satisfactory. At the same time, there exist parallel negotiations on the so-called "horizontal" and "GATS rules" issues. Horizontal issues include, among other things, the assessment of services liberalization, credit for autonomous liberalization, special and differential treatment for LCDs and most notably, classification of services sub-sectors. GATS rules issues include negotiations on an emergency safeguard mechanism, disciplines for services subsidies and government procurement.

Regarding classification of services, it should be noted that the Committee on Specific Commitments (CSC) has been holding meetings on the issue of possible

amendments to the existing services sectoral classification in the areas of environmental services, energy services, legal services, postal and courier services, and construction services. In the area of energy services, the ongoing negotiations are aimed at providing a more appropriate classification within the GATS for energy services in order to make it easier for member countries to make more liberalization commitments.

As noted earlier, the WTO "Services Sectoral Classification List" (the W/120) — which was adopted in 1991 and is used as the basis of making liberalization commitments in the context of the GATS — does not include a separate comprehensive entry for energy services. On the other hand, the energy market has changed significantly as many countries have privatized and deregulated their energy sector, resulting in the unbundling of services. The new energy paradigm has brought tradability and competitiveness to the energy market, whereas the W/120 is more compatible with the old paradigm, i.e. when energy industry was dominated by state-owned companies operating mostly within home markets with monopoly positions.

In this context, it has been argued that the request for an improved classification of energy services originates from the concern of industry representatives that because energy services are ill defined it is unclear whether specific commitments to accord market access and national treatment apply to their activities.[54] In fact, it is argued that because energy activities are closely interrelated, the only way to achieve a meaningful liberalization in energy services is to amend the W/120 in order to create

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[54] Gibbs, M. (2003) "Energy Services, Energy Policies and the Doha Agenda", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p.6.

a new "energy sector". This point is well illustrated in a contribution from UNCTAD:

> "As the energy sector consists of a chain of interrelated activities, an energy services supplier may need market access in a number of relevant services sectors in order to provide his/her service adequately. As these services are spread throughout the classification system, the access conditions in a given market may be unclear and create unpredictability regarding the possibility of delivering the energy service effectively."[55]

In view of the above, the issue of the definition and classification of energy services in the context of the GATS was first approached in 1998, during the information exchange programme preparatory to the current services negotiations. It is worth noting that while the Committee on Specific Commitments (CSC) has focused on whether there is a need to create a specific sector for energy services, there seems to be a consensus regarding the desirability of such an amendment.

The technical work on classification of the sector began in 1999 and was therefore in progress at the time the European Communities and the United States contributions were submitted. The contributions were regarded as a good starting point for classification of energy services and triggered the submission of subsequent contributions by both developed and developing countries such as Canada, Japan, Norway, Indonesia and Venezuela. It is therefore necessary to discuss the background, aims and contents of the aforementioned contributions respectively. Thereafter, the Venezuelan and Indonesian proposals will be discussed. It is important to notice that what has been at issue is not the coverage of the energy services sector by the GATS as such, but its identity as a separate sector in its own right, as opposed to a group of sub-sectors covered by other services sectors.[56]

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[55] UNCTAD, "Energy Services in International Trade: Development Implications", Note by the UNCTAD secretariat, TD/B/COM.1/EM.16/2, 18 June 2001, paragraph 26.
[56] See Tacoa-Vielma, supra note 4, pp. 76-77.

B. The United States Proposal

1. Background and Aims

The "North-South" feature of energy trade should be kept in mind in understanding the reason why the United States has been focusing on liberalizing energy services in recent years. It is not disputed that while the developing countries mostly supply the crude oil and natural gas, the related energy services, goods and technologies originate almost exclusively in developed countries.[57] In turning now to the United States, it is worth noting that the country is known primarily as an energy importer and consumes about one forth of the world's oil. At the same time, the United States is a leading exporter of energy-related materials, and most notably, energy services. In fact, the data show that while imports of oil and other fuels are large and growing, they are substantially offset by United States exports of goods and services that are related to the production and distribution of energy.[58] Energy-related services are of special interest for the United States. This is an area that where the United States firms are highly competitive.[59]

As with United States financial services providers and telecommunications companies in the 1980s, United States energy companies raised the issue of the necessity of liberalizing foreign markets for energy services trade with the Office of the United States Trade Representative. The companies particularly drew attention to the fact that the energy industry had changed dramatically over the 1990s and that

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[57] See Gibbs, supra note 54, p.9.
[58] VanGrasstek, supra note 50, p.210.
[59] Ibid., p.217.

this had resulted in a substantial growth of a service sector in energy.[60] Thus, it is not surprising that one of the main United States objectives in bilateral, regional, and multilateral trade negotiations is to obtain reductions in barriers to energy-related activities. This point was made clear — with specific reference to the GATS services negotiations — in the recommendations of the National Energy Policy Development Group for a new national energy policy of the United States:

> "The President [should] direct the Secretaries of State, Commerce and Energy to continue supporting American energy firms competing in markets abroad and use our membership in multilateral organizations, such as the Asia-Pacific Economic Cooperation (APEC) forum, the organization for Economic Cooperation and Development (OECD), the World Trade Organization (WTO) Energy Services Negotiation, the Free Trade Area of the Americas (FTAA), and our bilateral relationships to implement a system of clear, open, and transparent rules and procedures governing foreign investment; to level the playing field for U.S. companies overseas; and to reduce barriers to trade and investment."[61]

Thus, The United States initially submitted a paper to make the case for the necessity of liberalization of the energy sector (S/C/W/58, 20 October 1998), followed by the submission of a more detailed paper (S/CSC/W/27) on classification of energy services in May 2000. Finally, in December 2000, the United States submitted a formal proposal for consideration in the energy services negotiations.[62]

The aim of the United States proposal is threefold: First, offering a new classification for energy services, which would lead to amend the W/120 in order to create a new sector for energy services under the GATS, like telecommunications, financial services, computer services and environmental services.[63] Second, using the new classification as a basis for developing a model schedule for the energy services sector. This would enable WTO members to undertake meaningful commitments for

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[60] Ekimoff, L., (2003) "An Overview of the Negotiating Proposals on Energy Services under the GATS Negotiations: United States", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p.105.
[61] National Energy Policy Development Group, *Energy policy* (Washington, D.C. :U.S. Government Printing Office, 2001), pp.8-18, cited in VanGrasstek, supra note 50, p.211.
[62] S/CSS/W/74, 18 December 2000.
[63] Ekimoff, loc. cit.

the energy sector.[64] Third, using the aforementioned comprehensive classification of energy services as the basis for developing a Reference Paper akin to that developed for the telecommunications sector that would address issues specific to the energy services sector, such as access rights to transmission networks and consumer freedom of choice to select power suppliers.[65] It is also worth mentioning that the proposals that the United States has made on energy services are indeed quite similar in their aim and language to the proposals that the United States negotiators made for telecommunication services in the 1990s.[66]

2. Recognition of Energy Services as a Distinct Sector

The United States paper considers the entire chain of activities involved in providing energy consumers with access to efficiently produced, reasonably priced and reliable energy. Energy activities are divided into the following five categories:

1. Activities related to the Exploration, development and production of the energy resource (resource identification, resource development and redevelopment);
2. Activities related to the operation of an energy facility;
3. Activities related to energy networks (e.g. energy transportation, transmission and distribution);
4. Services related to wholesale markets in energy, including trading and brokering;

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[64] Communication from the United States, Classification of Energy Services, S/CSC/W/27, 18 May 2000, paragraph 14.
[65] Ibid., paragraph 22.
[66] VanGrasstek, supra note 50, p.217.

5. Services related to the retail supply of energy, including metering and billing, as well as customer services.[67]

It follows that the United States advocates a broad definition of energy services. In the background paper on energy services prepared by the WTO in 1998, it was mentioned that "it seems generally accepted that the production of primary and secondary energy do not constitute services subject to the GATS, but result in goods, whose trade is subject to the GATT, as the production service is incorporated in the value of the good produced. Transportation and distribution of energy constitute services according to the GATS if they are provided independently".[68] At the time, the United States in its first paper on energy services rejected the idea of the exclusion of services which are directly related to energy production. It was argued that the scope of energy-related services should include the reality of the energy supply system, which would necessarily include some energy production services.[69]

Obviously, each of these five categories includes many different activities. These numerous energy-related activities are closely interrelated and, taken as a whole, can be said to comprise the "energy sector".[70] Some of these activities cut horizontally across existing sectoral classifications. Others may involve activities not yet specified and not within the scope of the current classification.[71] More specifically, the United States negotiators believe that from a commercial point of view, the current W/120 classification offers two fundamental problems:

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[67] Communication from the United States, Classification of Energy Services, S/CSC/W/27, 18 May 2000, paragraph 3.
[68] Energy Services: Background Note by the Secretariat, S/W/52, 9 September 1998, paragraph 9.
[69] Communication from the United States, Energy Services, S/C/W/58, 20 October 1998, p.3.
[70] Communication from the United States, Classification of Energy Services, S/CSC/W/27, 18 May 2000, paragraphs 2-3.
[71] Ekimoff, supra note 60, p.106.

"(a) A number of specific energy services do not appear to be specifically included in the W/120 classification. This means that most countries, that as a practical matter rely on W/120 as a reference point in scheduling market access commitments, have not considered scheduling commitments for these energy-specific services, many of which represent new activities.

(b) A number of other related energy services are to be found in the W/120 classification. However, these services are spread throughout the classification system. As a result, an energy service provider has no guarantee that, even if assured of a market access commitment for a specific energy service, such as supply of energy to customers, he would also enjoy market access to provide related services, such as consultancy services which require specific knowledge of energy."[72]

Thus, according to the United States paper, considering the fact that there has been a significant change in industry structure since the adoption of the W/120, the best way to address the abovementioned problems would be to develop a comprehensive classification of energy services that will, to the extent possible, reflect the current market realities for the energy sector by including the many different activities that constitute the entire chain of energy services.[73] It has been remarked that such an improved classification could serve as a foundation that would contribute to having countries make significant and meaningful market access commitments for energy services. In turn, this first step would provide energy services providers with greater certainty about which energy services are part of a country's commitment.[74] In this context, the United States advocates an energy neutral approach for classification of energy services.

C. The European Communities Proposal

1. Background and Aims

The European Communities, in its communication on energy services of July 1999 (Job No. 4145), provided a first contribution for a list of energy services.

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[72] S/CSC/W/27, paragraph 12.
[73] See ibid., paragraph 13.
[74] See Ekimoff, supra note 60, p.107.

Contributions and discussions on the issue have followed since. Like the United States, the EC argues that due to the fact that at the time of the Uruguay Round negotiations the process of liberalization of energy markets was still at an early stage, negotiators did not pay much attention to energy services, which is reflected in the absence of a specific Energy Chapter in the W/120. This lack of attention also can be explained by the fact that WTO Members did not make many commitments in energy services. However, the lack of a comprehensive approach to the classification of energy services is particularly evident now that, after some experiences of liberalization of energy services throughout the world, the sector is becoming more dynamic and competitive.[75]

The European Communities and their Member States submitted another contribution in March 2001 to the Council for Trade in Services containing their proposal on how to address energy services in the GATS 2000 negotiations. The EC proposal refers to the ongoing energy liberalization process in the EC. In this context, the point is made that because of the specific characteristics of the various energy sources, the opening to competition of the energy sector in the EC has been realised in several steps and with the establishment of precise and clear rules. The latest steps in the energy liberalization process have included the opening up to competition, subject to certain conditions, of the electricity and natural gas markets, which has resulted in significant price reductions for final consumers.[76]

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[75] See Communication from the European Communities and their Member States, GATS 2000: Energy Services, S/CSS/W/60, 23 March 2001, Introduction.

[76] Ibid., paragraph 2.

According to the EC communication, the EC proposal aims at engaging WTO Members which have opened their national markets to competition or which are willing to do so, to engage in negotiations to further reduce the barriers to trade in energy services.[77] This relationship between regulatory reform and liberalizing international trade in energy services is in line with the United States position: "Market access and national treatment may well be meaningless without regulatory reform. At the same time, it does little good for trade liberalization as a practical matter to create a pro-competitive regulatory environment unless market access and national treatment restrictions are eliminated."[78] It should be noted that regulatory reform entails introducing competition into industry segments that had previously been subject to control by privately owned, regulated monopolies, state-owned enterprises or government agencies.[79]

Notably, the EC proposal is aimed at going beyond just creating a new energy sector and suggests the need to create a transparent, objective and pro-competitive regulatory framework for the energy sector. It has been argued that due to the fact that the horizontal rules on competition have not been developed under the GATS, the only way to ensure the existence of a pro-competitive regulatory framework is to negotiate additional disciplines for the energy sector, which is what the present EC proposal seems to suggest. In the context of the GATS, the only case where such a framework has been established is in the area of basic telecommunications through

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[77] Ibid., paragraph 4.
[78] Communication from the United States, Energy Services, S/CSS/W/24, 18 December 2000, paragraph 7.
[79] Melly, C. (2003) "Electric Power and Gas Market Reform and International Trade in Services", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p. 166.

the adoption of the Reference Paper for the sector, which deals with issues like third party access rights to transmission networks.[80]

2. Proposed Classification of Energy Services

Like the United States proposal, the EC proposal supports the idea of creating a new "energy sector" and divides energy activities into the following categories:

1. Services related to exploration and production;
2. Services related to the construction of energy facilities (construction, installation, maintenance and repair);
3. Services related to networks (operation of transportation/transmission and distribution, connection services, ancillary services);
4. Storage services;
5. Services for the supply of energy (wholesale sales of energy products, retail sales of energy products, trading, brokering);
6. Services for final use (energy audit, energy management, metering, billing);
7. Services related to decommissioning;
8. Other energy-related services (installation, maintenance and repair of energy equipment).[81]

The EC proposal clarifies that typical obstacles to trade in energy services are represented by exclusive rights and monopolies, restrictions on legal forms of doing

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[80] See Butkeviciene, J. (2003) "An Overview of the Negotiating Proposals on Energy Services under the GATS Negotiations: European Communities", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, p.95.

[81] Communication from the European Communities and their Member States, GATS 2000: Energy Services, S/CSS/W/60, 23 March 2001, paragraph 6.

business, restrictions on foreign investment, unclear licensing and approval requirements, unspecified economic needs tests, and residency and nationality requirement.[82] At the same time, the proposal recognizes the GATS principle of progressive liberalization. In the sense that first, it refers to the possibility of using the step-wise approach to opening up the markets to domestic and foreign competition; second, it recognizes the need to maintain conditionality regarding market access opening; and third, the proposal is aimed at reducing barriers to trade in energy services rather than removing them outright.[83]

The EC proposal also stresses the importance of avoiding double listing in the services classification, since some energy services are already covered elsewhere in the existing classification (professional, environmental, construction services). Finally, like the United States proposal, the EC proposal is based on the principle of "neutrality" of the energy source in classifying energy services. It has been underlined that the proposed list of energy services applies irrespective of the energy source concerned and includes in particular coal, electricity, gas, heat, oil, renewable and, subject to the specific conditions related to this energy sector, nuclear energy.[84]

D. The Venezuelan Proposal

1. Background and Aims

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[82] Ibid., paragraph 9.
[83] Butkeviciene, supra note 80, p.96.
[84] Communication from the European Communities and their Member States, GATS 2000: Energy Services, S/CSS/W/60, 23 March 2001, paragraph 6.

Venezuela is the second largest energy producer in the Western hemisphere, but it is also the second largest consumer of energy-related services, including engineering services. In 1980, there were only 25 engineering companies in Venezuela that had the capacity to develop medium-size projects.[85] Not surprisingly, the vast majority of oil and gas field services continued to be provided by foreign companies. However, as a result of the implementation of a successful capacity building programme, the situation has been improved significantly. Beginning in 1980, the national oil company, Petroleos de Venezuela (PDVSA), began implementing a policy to support national capacity in integrated engineering services, which involved directing service contracts to local and joint-venture companies. The policy has resulted in increasing the number of domestic participants and the expansion of domestic capability to cover all specialities, provide fully integrated services, and even export services to Argentina, Colombia, Ecuador, and Panama, among others.[86]

Venezuela states in its proposal that the trend towards outsourcing in various production sectors and the liberalization of world services trade have also been reflected in energy services. In a large number of countries, including many developing countries, this has led to the introduction of new legal and regulatory frameworks for energy services. Thus, it is now possible to consider conducting negotiations on trade in energy services.[87]

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[85] See UNCTAD, "Energy Services in International Trade: Development Implications", Note by the UNCTAD secretariat, TD/B/COM.1/EM.16/2, 18 June 2001, p.20.

[86] U.S. International Trade Commission, *Oil and Gas Field Services: Impediments to Trade and Prospects for Liberalization*, Publication 3582, March 2003, Chapter 4, p.8

[87] Communication from Venezuela, Negotiating Proposal on Energy Services, S/CSS/W/69, 29 March 2001, paras. 5-6.

At the same time, Venezuela draws attention to the fact that it would be in the interests of developing countries if these negotiations were approached with a wider focus than a merely trade-based perspective, so that the results could help to enable them to achieve their objectives such as the strengthening of their domestic entrepreneurial capacity and technological development. Accordingly, the negotiations should respect the developing countries' policy space to implement policies aimed at domestic capacity-building and they should be allowed to open fewer sectors, liberalize fewer types of transactions and progressively extend market access in line with their development situation, in accordance with Article XIX of the GATS.[88]

Not surprisingly, the Venezuelan proposal makes it clear that the ownership and rights of access to and use of natural resources should not be addressed in the negotiations on energy services.[89] Furthermore, the members' right to regulate must be respected and the negotiations should not impair the right of governments to determine conditions of access to their markets and to set obligations with regard to public services.[90] In the words of a Venezuelan negotiator:

> "The aim of negotiations under GATS is neither deregulation nor privatization of services sectors. The perspective promoted by Venezuela is that countries should think in terms of "re-regulation", which, in principle, entails regulating in a way that encourages both competition and efficiency."[91]

2. Proposed Classification of Energy Services

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[88] Ibid., paras. 7, 14, 15.
[89] Ibid., para. 16.
[90] Ibid., para. 13.
[91] Borrero, Elbey (2003) "An Overview of the Negotiating Proposals on Energy Services under the GATS Negotiations: Venezuela", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, pp.113-14.

Venezuela shares the position of the US and the EC that the classification included in W/120 does not reflect the current reality of the market in energy services. According to the Venezuelan proposal, the availability of a classification with greater disaggregation for energy services, taking into account the current market, regulatory and technological situations, is something that would enable the WTO Members to make significant specific commitments. Accordingly, a clear, precise and unambiguous classification of energy services is required.[92]

In October 2001, Venezuela presented as an addendum to its main proposal, a Classification List of Energy Services. Immediately thereafter, Venezuela participated with seven other WTO Members who presented negotiating proposal in relation to energy services, in an informal group[93] for consultations with the view of producing a shared classification. However, the participants were not able to achieve "total consensus", which was the reason why Venezuela decided to present its preferred classification entitled the "List of Commercial Reality of Energy Services and Energy Related Services" (CRL) as a Second Addendum to its negotiating proposal.[94]

The CRL is intended to cover "all" services traded in relation to "all sources of energy". It is subdivided to "upstream" and "downstream" services. Upstream services are defined as all the activities required to find and produce the resources,

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[92] Communication from Venezuela, Negotiating Proposal on Energy Services, S/CSS/W/69, 29 March 2001, paras. 22-25.
[93] Friends of Energy Group.
[94] See Communication from Venezuela, Negotiating Proposal on Energy Services, S/CSS/W/69/Add.2, 4 June 2003, paras. 1-4. At the same time, Chile, the EC, Japan and the US came up with a joint scheduling guide (Proposed Guide for Scheduling Commitments on Energy Services in the WTO).

i.e. oil, gas, coal, radioactive minerals, dam sites and the like. Whereas downstream services are the activities necessary to transform, transport and distribute the energy after the resource has been made available. Venezuela argues that with the support of the CRL, scheduling specific commitments may be done with precision.[95] The CRL divides the energy activities into the following main categories:

UPSTREAM

Services for Discovering and Developing Energy Resources

1. Geological Exploration

2. Drilling and Completion of Oil and Gas Wells

3. Oil and Gas Production Related Services

DOWNSTREAM

Services for Design, Construction, Operation and Maintenance of Energy Facilities, Including Networks

4. Design and Construction of Facilities to Produce, Transform, and Supply Energy

5. Operation and Management of Energy Facilities (Excluding Networks)[96]

6. Operation and Management of Energy Networks

7. Maintenance of energy Equipment and Facilities, Including Networks

8. Environmental Related Services for the Energy Industry

Services for the Commercialization of Energy

9. Wholesale Supply of Energy

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[95] Ibid., paras. 6-9. According to Venezuela, the CRL accommodates the need to schedule differentiated market access and national treatment conditions according to development objectives of developing country Members.

[96] Under this heading, Venezuela has put, among other services, "Liquefaction and regasification of natural gas for transportation" and "Coal and crude oil refining, reforming and purification services". However, it acknowledges that some Members may consider these activities as manufacturing.

10. Retail Supply of Energy

Other Energy Services

11. Energy Consulting Services

E. The Indonesian Proposal

1. Background and Aims

The Indonesian proposal is one of the most recent classification proposals. The original proposal was submitted in November 2003 and its first and second revisions were submitted in 2006. As a result, the energy services negotiations during 2006 mainly revolved around the exchanges between the Indonesian delegation and other delegations regarding the first and second revisions of this proposal.

Like Venezuela, Indonesia is a major energy-producing developing country and a member of OPEC. It has an abundance of energy resources and reserves, including oil, gas, and coal, as well as geothermal and renewable energies. In recent years, the Indonesian government had been restructuring the energy sector by issuing three new laws, namely the Oil and Gas Law of 2001, the Electricity Law of 2002, and the Geothermal Law of 2003. The spirit of the new laws anticipated liberalization and introducing competitive energy markets. As regards the international trade implications of this new competitive environment, the representative of Indonesia stated that:

> "To achieve greater participation in the energy business, Indonesia needed to combine the export of energy sources with the enhancement of professional capacity, human resource training and technological progress in the services segment of the energy industry. It was his delegation's view that

these developments, while creating export opportunities for local firms in the energy service and related sectors, would also enhance overall economic grow and diversification."[97]

Like Venezuela, Indonesia draws attention to the fact that negotiations on energy services should accord developing countries appropriate flexibility to open fewer sectors, liberalize fewer types of transactions and to progressively extend their market access in line with their development situation, in accordance with Article XIX of the GATS.[98] It also shares the view that the negotiations should respect national policy objectives and the member's "right to regulate" on the supply of energy services within their territories.[99]

2. Proposed Classification of Energy Services

Indonesia believes that the development of a detailed classification energy services offers a comprehensive and essential instrument for the WTO members in negotiating specific commitments in energy services. The Indonesian proposal has classified energy services in five main categories. Under each main classification, a breakdown of services is presented with CPC Provisional Codes.[100] The purpose of the proposal is to suggest that the proposed classification list, as amended, be used as a "supplement" to the classification of energy services in the W/120.[101]

The main categories included in the Indonesian proposal are as follows:

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[97] Committee on Specific Commitments, Report of the Meeting Held on 4 December 2003, S/CSC/M/31, paras. 12-13.
[98] Ibid., para. 14.
[99] Communication from Indonesia, Proposal on Classification of Energy Services, S/CSC/W/42, 27 November 2003, para. 5.
[100] Ibid., paras. 7-9.
[101] See Committee on Specific Commitments, Report of the Meeting Held on 4 December 2003, S/CSC/M/31, paras. 10.

(a) The "upstream services" comprise "non-renewable energy"[102] and "renewable Energy"[103]

(b) The "downstream services" related to energy transformation, transportation and distribution services.

(c) The "energy commercialization services" consists of the wholesale supply of energy, retail supply of energy and commission agent service.

(d) The "professional services" include expertise supply services, human resources training and development services.

(e) The "other energy services" cover any activity not listed in the previous services.[104]

F. Evaluating the Four Proposals

It should be noted at the outset that the four proposals discussed above are among the more articulate and well-received classification proposals submitted by both developed and developing countries.[105] Generally speaking, it is possible to identify the following common elements in the negotiating proposals: (a) Improved market access in the energy services sector can have beneficial effects for all countries; (b) Negotiations on liberalization of energy services should not address the issue of ownership of natural resources; (c) The energy sector will continue to be regulated to

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[102] The proposal refers to oil, gas, coal, geothermal and other mineral. It is important to notice that geothermal energy has not been regarded as a renewable energy source.
[103] The proposal refers to wind, solar, wave, tidal, current Hydroelectric, and biomass. Some of the subdivisions are as follows: Survey and Exploration, Hydrological Services, Resource Potential Services, On land Site Preparation, Design, Construction and Installation of Production Equipment.
[104] Some of the subdivisions are as follows: Risk Analysis, Efficiency Services (Implementation of Energy Conservation Methods, Recycling of Waste Product, Energy Management), Data and Information Services.
[105] Other classification proposals relating to the energy services sector have been submitted by Chile, Cuba, Japan, and Norway. Also, Canada's proposal on oil and gas services was briefly discussed in Chapter 2.

ensure the achievement of public goals; (d) Countries are in different phases of regulatory development; therefore, their commitments will reflect the existing levels of market reform.[106]

The proposed classifications reveal the existence of a shared understanding as to the current commercial reality of the energy services sector. In this regard, the representative of Venezuela stated that the similarity between the different proposals was interesting.[107] More specifically, He said that his delegation's proposal did not contradict the Indonesian proposal.[108] However, there are some unresolved issues with regard to characterization of some activities as a "good" or a "service". This issue will be taken up in the next chapter, which also addresses the relationship between the GATT and the GATS.

There are a few energy-related activities that do not have an appropriate entry in W/120 or even the CPC. For instance, mention may be made of wholesale trade services and retailing services of electricity, town gas, steam and hot water. Thus, a potentially relevant issue is: "Where should wholesale trade services and retailing services of electricity, town gas, steam and hot water be understood to be covered? Should commitments for these activities be added after existing commitments for wholesale trade (4.B) and retailing (4.C)?" [109]

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[106] UNCTAD, "Managing "Request-Offer" Negotiations under the GATS: the Case of Energy Services", Contribution by the UNCTAD secretariat, UNCTAD/DITC/TNCD/2003/5, 23 May 2003, p.7.

[107] See Committee on Specific Commitments, Report of the Meeting Held on 4 December 2003, S/CSC/M/31, para. 27.

[108] See Committee on Specific Commitments, Report of the meeting held on 25 November 2004, S/CSC/M/35, para. 15. It should be noted that the Indonesian proposal covers renewable energy services as well and adds more detail to the Venezuelan proposal.

[109] See "Energy Services", Information Note by the Secretariat, Council for trade in Services, JOB(05)/204, 21 September 2005, paras. 17-19.

Furthermore, as discussed earlier, the United States' proposal goes beyond the classification debate and calls for the development of a reference paper in line with the Reference Paper to the GATS Agreement on Basic Telecommunications Services. The European Community's proposal effectively supports the same idea by inviting WTO Members to establish an appropriately transparent, objective and pro-competitive regulatory framework for the energy services sector.[110] In contrast, the Venezuelan and Indonesian Proposals do not go beyond the classification debate. In fact, commenting on the US proposal, many delegations noted that in the Committee on Specific Commitments the work on energy should focus on classifications issues, while other issues referred to in the US proposal, including "reference paper", could be addressed in other contexts and at a later stage.[111]

To sum up, the existence of a shared understanding as to the current commercial reality of the energy services sector seems to suggest that the ongoing negotiations will result in an improved classification of energy services. However, it might not necessarily be in the form of a formal revision of the sectoral classification list (W/120). In fact, in terms of the classification debate, the process shows remarkable similarities with telecommunications. In the context of the telecommunications sector, the negotiations in the Negotiating Group on Basic Telecommunications resulted in the introduction of the Draft Model Schedule, which lists the services sub-sectors considered as the basic telecommunications services, reflecting the then emerging commercial reality of the telecommunications sector.

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[110] Norway is another developed country that supports the idea: "A reference paper in line with the one established for telecommunication services could be developed." See Communication from Norway, The Negotiations on Trade in Services, S/CSS/W/59, 21 March 2001, para. 55.

[111] See for example, Committee on Specific Commitments, Report of the Meeting Held on 23 and 24 May 2000, S/CSC/M/15, 29 June 2000, para. 25.

The Draft Model Schedule was specifically intended "to assist participants in the drafting of their offers and final schedules". It contains a list of basic telecommunications sub-sectors based on the W/120 with cross-reference to the United Nations CPC. Furthermore, a Note by the Chairman of the Negotiating Group, entitled "Notes for Scheduling Basic Telecommunications Services"[112] was adopted and attached to the final Report of the Negotiating Group, which was adopted on 15 February 1997. The Note specifies that its purpose is "to assist delegations in ensuring the transparency of their commitments and to promote a better understanding of the meaning of commitments".

The Draft Model Schedule is intended to be a guideline for scheduling and the Chairman's Note acknowledges that it is not intended to have any binding legal status. Yet, the fact that these documents provide a better understanding of the meaning of commitments gives them an important "interpretative value". In the *Mexico – Telecommunications* case, the Panel made the following observations as to their interpretative status:

> "Consequently, even if the Draft Model Schedule and the Note by the Chairman cannot be seen as part of the "context" under paragraph 2 of Article 31, nor be "taken into account" under Article 31 – *a legal question that we leave open* – we find that these documents are, with respect to the GATS Protocol on Telecommunications (to which Mexico's Schedule was attached) an important part of the "circumstances of its conclusion" within the meaning of Article 32 of the Vienna Convention. Under the terms of Article 32, we may therefore use the Draft Model Schedule and the Note by the Chairman to confirm the ordinary meaning... of Mexico's GATS commitments on telecommunications services."[113]

In the general context of the GATS, a clear understanding of the meaning of commitments in any given sector is of crucial importance. This is due to the "objective nature" of GATS commitments. The fact that schedules of specific

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[112] Note by the Chairman, S/GBT/W/2/Rev.1.
[113] *Mexico – Measures Affecting Telecommunications Services,* Report of the Panel, WT/DS204/R, 2 April 2004, para. 7.67. Emphasis added.

commitments are an "integral part" of the GATS[114] means that although making specific commitment is a "unilateral act", its implications are not subjective.[115] Indeed, by inscribing specific commitments under the GATS in any given sector, WTO members consent to join a "legal institution". For instance, as noted earlier in this Chapter, in the *Gambling* case, the United States made it clear that it had no intention of undertaking any GATS commitments on gambling and betting services. This however, was not the objective reality of the United States' Schedule as ascertained by the Panel and reaffirmed by the Appellate Body.

Accordingly, in sectors like the energy services sector that the content of this "legal institution" is still in the making, the exact scope of GATS commitments is inevitably still in motion and particularly developing countries might not know exactly what they are getting themselves into. Furthermore, it is likely that the improved energy services commitments in the future contain "regulatory commitments" in the form of additional commitments as well, which makes their implications more complicated. This was clearly the case in the *Mexico – Telecommunications* case, where Mexico inscribed the entire text of the Reference Paper into its Schedule as additional commitments, without being fully aware of its far-reaching regulatory implications.

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[114] Article XX (3) of the GATS.
[115] This is in sharp contrast with the "subjective nature" of the acceptance of the compulsory jurisdiction of the International Court of Justice by making optional clause declarations under Article 36 (2) of the Statute of the International Court of Justice

Chapter 7. International Trade in Electricity and Gas and Access to Energy Networks

I. Introduction

There is a major distinction between trade in electricity and gas and trade in other energy sources such as oil and coal. Our review of the characteristics of the electricity and gas industries showed that they are network-dependent. Network-bound sectors, such as telecommunications, railways, electricity and gas, create additional regulatory challenges for national, regional and international regulators. On the one hand, these sectors crucially depend on a fixed network that represents a natural monopoly or a *de facto* monopoly. On the other hand, in order to have a competitive market, access to such networks and interconnection between them is essential for new entrants to the market. As evidenced by the EU experience, this situation has led to a call for a special regulatory regime.[1] Likewise, in the WTO system, the introduction of the Reference Paper for the telecommunications sector has been based on the same considerations.

As discussed in Chapter 6, in the context of the ongoing negotiations on energy services, some of the negotiating proposals stressed the need for designing another sector-specific set of regulatory principles for the energy sector. With particular reference to international trade in electricity and gas[2], it has been remarked that

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[1] See Slot, P. J. and Skudder, A. (2001) "Common Features of Community Law Regulation in the Network-Bound Sectors", 38 Common Market Law Review, p.87.

[2] Although the term "international" trade is usually used, it should be noted that the nature of electricity and gas trade (with the exception of LNG trade) is "regional".

network dependence means that mere lifting import barriers are not enough and "pro-active" measures have to be taken to open up networks to imported energy.[3]

At the same time, the fact that the GATS is to a great extent a "specific" agreement[4] makes the promotion of international trade in electricity and gas a more challenging task. However, recent clarifications regarding the relationship between the GATT and the GATS would seem to have implications for more scrutiny of energy-related activities within the WTO system. Thus, this chapter begins with examining the relationship between the GATT and the GATS in light of recent WTO case law. Analysing the implications of the case law for trade in electricity and gas and access to energy networks will be the focus of the next part of the chapter. Finally, this chapter concludes by making the case for sector-specific regulation for trade in electricity and gas.

II. The Relationship between the GATT and the GATS

Generally speaking, the expansion of international law into new subject matters since the end of the Second World War has long been recognised as the most important development of the international system. In the late 1960s, discussing the changing structure of international law, Professor Friedmann in his remarks drew attention to the fact that:

> "The most significant development of the post-war period is not the addition of new states, or even the conflicts between developed and developing countries, but the expansion of international law into many fields formerly excluded from it. In short, the Law of Nations is passing from the phase of an exclusive international law of co-existence – which has characterised it from its birth in the early seventeenth century to the mid-twentieth century – to a phase where the nations of the world have to

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[3] Walde, T. W. and Gunst, A. J. (2002) "International Energy Trade and Access to Energy Networks", 36 Journal of World Trade, p.191.

[4] The market access and national treatment obligations are not general obligations.

develop new forms of co-operation and organisation in addition to the traditional rules of co-existence."[5]

The increasing scope of international law means that areas that were previously unaddressed by international law are now being addressed.[6] In addition, it should be noted that the expansion of international law has not been limited to the creation of new rules of conduct. The increase of international regulations has been accompanied with the proliferation of regimes and institutions.[7] Among other things, mention may be made of the creation of the WTO and NAFTA as two recent institutional developments. It follows that the current system of international law does not consist of one homogenous legal order, but mostly of different partial systems. In the sense that the system of international law is full of universal, regional or even bilateral systems, subsystems and sub-subsystems of different levels of legal integration.[8]

At the same time, it is essential to make the point that international law by its very nature - as contrasted with national law – is a law of co-ordination. In the sense that international law is a law between states not above them and this remains true in spite of the appearance of various international organizations. In the words of one commentator, "the notion of a community of sovereign independent States supplies the key to understanding the statement that international law is a law of co-ordination, not of subordination."[9] Thus, the horizontal nature of international law

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[5] Friedmann, W. (1969) "General Course in Public International Law", 127 RCADI, p.64.
[6] International Law Commission, Report of the Study Group on Fragmentation of International law, UN Doc. A/CN.4/L.628, 1 August 2002, para. 7.
[7] Ibid.
[8] See Hafner, G. "Risks Ensuing from Fragmentation of International Law", *official records of the General Assembly, Fifty-fifth session, Supplement No. 10 (A/55/10),* annex, p.321.
[9] Rosenne, S. (2001) "The Perplexities of Modern International Law", 291 RCADI, p.40.

suggests that in principle, there is no hierarchy of rules or systems in international law.[10]

Accordingly, on the one hand, the expansion of international law through the proliferation of rules and regimes has increased the risk of generating frictions and contradictions between various legal regulations and creates the risk that States even have to comply with mutually exclusive obligations.[11] On the other hand, the "decentralized" nature of international law suggests that from a systemic point of view, it is not well equipped to deal with situations of parallel and competitive regulations. It is worth mentioning that "parallel regulations" exist as a result of the simultaneous regulation on the universal or regional level relating to the same subject matter, whereas "competitive regulations" exist where conflict of norms arises between regimes regulating different subject matters, notably trade matters and protection of environment.[12]

Against the background of the lack of centralized institutions in the international system, international law scholars have been trying to offer their analysis on how best to deal with situations of contradictions between various legal regulations in an "unorganised system". In this regard, Professor Jenks in his seminal contribution to the topic in 1953 noted that the problem of the conflict of treaties, which stems from

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[10] See, for example, Report of the Study Group on Fragmentation of International law, supra note 6, para. 15. Also, an exception to the rule can be found in Article 103 of the Charter of the United Nations, which provides that in the event of any conflict between the obligations of Members of the United Nations under the Charter and their obligations under any other international agreement, their obligations under the Charter shall prevail. It is important to note that Article 103 establishes a hierarchical order based on the source of obligations (the Charter), not their content. At the same time, the emergence of the concept of peremptory norms of general international law *(jus cogens)* by the Vienna Convention on the Law of Treaties is another exception to the rule that establishes a hierarchical order based on the content of the norms.

[11] Hafner, supra note 8, pp.321-322.

[12] Ibid., pp.327-328.

the inherent imperfection of the international legislative process, arose at a much earlier date and is discussed in some detail by Grotius, Pufendorf, and Vattel. However, he mentioned that the problem had come into increased prominence due to the proliferation of different international legislative procedures after the Second World War.[13]

When Jenks wrote his treatise on "The Conflict of Law-making Treaties", he was mainly concern about inter-systemic conflicts, namely situations where parallel systems of instruments (international, North Atlantic, Inter-American, and West European) dealing with the same subjects, binding for a number of the same parties, and not necessarily consistent with each other.[14] In other words, the situations where conflicts might occur between different partial international systems, not within the same international system, which is why his chosen title is the conflict of law-making treaties, on the analogy of the conflict of laws:

> "Conflicts of law-making treaties, in so far as they result from the co-existence of different international legislative procedures, are indeed as inseparable from the co-existence of such procedures as conflict of laws have proved to be inseparable from the co-existence of different systems of municipal law, and some of the problems which they involve may present a closer analogy with the problem of the *conflict of laws* than with the problem of *conflicting obligations* within the same legal system."[15]

Accordingly, if the function of the rules of private international law is to localize international transactions in one national legal system,[16] the function of the rules of public international law on the conflict of law-making treaties would be to determine

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[13] Jenks, W. C. (1953) "The Conflict of Law-making Treaties", The British Year Book of International Law, pp.402-403.
[14] Ibid., p.414.
[15] Ibid., p.403, emphasis added.
[16] See, for example, Cutler, A. C. (2003) Private Power and Global Authority: Transnational Merchant Law in the Global Political Economy, p.39.

which part of the system of international law should be applicable in any given situation.

Furthermore, Jenks placed a second limitation on the topic by offering a restrictive definition of the concept of "conflict". In this regard, he argued for the distinction between "divergence" and "conflict". Jenks refers to the occurrence of situations where two law-making treaties with a number of common parties may deal with the same subject from different points of view or one of the treaties may embody obligations more far-reaching than, but not inconsistent with, those of the other.[17] However, he argues that for the purpose of applying conflict resolution rules, a conflict "arises only where a party to the two treaties cannot simultaneously comply with its obligations under both treaties".[18] Based on this restrictive definition, he maintains that a conflict is not necessarily involved when one treaty eliminates exceptions provided for in another treaty or, conversely, relaxes the requirements of another treaty. Jenks admits, however, that every divergence does involve a departure from uniformity of international legislation.[19]

Over the last decade, WTO case law has revealed the practical importance and new dimensions of the topic. Not surprisingly, the legal literature has been growing on the issue.[20] As mentioned earlier, Jenks was mostly concerned about the issue of inter-

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[17] Jenks, supra note 13, pp.425-426.
[18] Ibid., p.426.
[19] Ibid., p.427. It is worth mentioning that Professor Pauwelyn argues for the adoption of a wider notion of conflict to include both situations, for a full discussion of this point see Pauwelyn, J. (2003) Conflict of Norms in Public International Law: How WTO Law Relates to other Rules of International Law, Cambridge University Press, pp.164-200. As is discussed later in this chapter, WTO panels and the Appellate Body seem to be heavily influenced by the strict notion advocated by Jenks.
[20] See, for example, Marceau (2001) "Conflicts of Norms and Conflicts of Jurisdiction: The relationship between the WTO Agreement and MEAs and other Treaties", 35 Journal of World Trade, p.1081; Pauwelyn, supra note 19; Vranes (2006) "The Definition of 'Norm Conflict' in International Law and Legal Theory", 17 European Journal of International Law, no. 2, p.395.

systemic conflicts, which is still an increasingly important issue when it comes to analysing the interaction between the WTO system and multilateral environmental agreements (MEAs). It is worth pointing out that while no dispute settlement body of the WTO has addressed the issue, various panels have found unilateral trade measures taken for environmental purposes to be contrary to WTO obligations.[21]

However, the topic has now found another increasingly important dimension, which is related to intra-systemic conflicts. WTO case law shows that on a number of occasions conflicting views on the relationship between different treaties within the WTO system have resulted in the development and clarification of international law rules on the topic by different panels and the Appellate Body. However, in the general context of energy liberalization in the WTO system, the analysis of WTO case law will be limited to the issue of the relationship between the GATT and the GATS. In this regard, the *Periodicals* case and the *Bananas* case will be examined respectively.

A. The *Periodicals* Case

1. Factual Aspects

In the *Periodicals* case, the Panel was established to consider a complaint by the United States against Canada concerning three measures: Tariff Code 9958, which prohibited the importation into Canada of certain periodicals; Part V.I of the Excise

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[21] See Shelton, D. (2003) "International Law and 'Relative Normativity' ", in International Law, edited by Malcolm D. Evans, p.164. In this regard, mention may be made of the *EC– Hormones* case, the *Shrimp* case, and the *Reformulated Gasoline* case.

Tax Act, which imposed an excise tax on certain "split-run" periodicals; and the application of certain preferential postal rates to certain Canadian periodicals including through actions of Canada Post Corporation and the Department of Canadian Heritage. Before turning to the legal arguments, it seems necessary to introduce the measures involved in more detail.

1.1. Tariff Code 9958 – Import Prohibition

Tariff Code 9958, enacted in 1965, among other goods, effectively prohibits the importation of what is known as "split-run" periodicals. The prohibition applies if an issue of a periodical imported into Canada is a special edition, including a split-run or regional edition, that contains an advertisement that is primarily directed to a market in Canada and that does not appear in identical form in all editions of that issue of the periodical that were distributed in the periodical's country of origin.[22] Moreover, the import prohibition "also applies where an issue of a periodical imported into Canada is an edition in which more than five per cent of the advertising content consists of advertisements directed to the Canadian market."[23]

1.2. Part V.I of the Excise Tax Act

In 1995, the Excise Tax Act was amended and "Part V.I – Tax on Split-run Periodicals" was added to the Act. "The amendment calls for the imposition, levy and collection, in respect of each split-run edition of a periodical, a tax equal to 80 per cent of the value of all the advertisements contained in the split-run edition. The

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[22] *Periodicals* Panel Report: *Canada – Certain Measures Concerning Periodicals*, WT/DS31/R, 14 March 1997, para. 2.2.
[23] Ibid., para. 2.4.

tax is levied on a per issue basis."[24] The act stipulates that depending on the circumstances, the person responsible for paying the tax is the publisher, a person connected with the publisher, the distributor, the printer or the wholesaler of the split-run edition.[25] A brief analysis of the motivation and background to the enactment of the amendment is necessary before examining the arguments of the parties.

It should be noted at the outset, that the Canadian government since the early 1900s has pursued the policy of supporting the Canadian magazine industry through protecting them against foreign competition. More recently, Canada sought to protect its industry by targeting "split-run" or "regional" editions of periodicals. It is worth mentioning that a publisher produces a "split-run" edition of a single issue of a magazine by separating the editorial content (articles, photographs, artwork, etc.) and the advertising content of the magazine. The publisher then produces two or more separate regional editions of the magazine, which share the same editorial content with different advertising content.[26]

In 1965, Canada enacted Tariff Code 9958, which prohibited the importation of split-run editions as well as any other magazine containing a more than a de minimis (five per cent) amount of advertising directed at the Canadian public.[27] However, technological advances over the following decades made it practical for foreign-based publishers to transmit editorial material electronically across the border into Canada and to publish, thus avoiding the application of Tariff Code 9958. "To plug

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[24] Ibid., para 2.6.
[25] ibid., para 2.9.
[26] Ibid., para 3.23.
[27] Ibid., paras. 2.4, 3.24.

this perceived loophole – and ensure that split-run editions could not compete in the domestic marketplace – Canada enacted a punitive excise tax on split-run editions in December 1995."[28]

1.3. Funded and Commercial Postal Rates

Funded and commercial postal rates were discounted postal rates applied by the Canada Post Corporation in order to afford protection to Canadian publications. According to the Canada Post publication entitled Publications Mail Postal Rates, three categories of postal rates were applicable: the "funded" publications rates; the commercial "Canadian" and commercial "International" publications rates. "Funded" rates are rates that are subsidized by the Canadian Government and commercial rates are for publications ineligible for "funded" rates. Commercial rates too are intended to benefit Canadian and foreign publications by reducing mailing costs. However, commercial "Canadian" rates available to Canadian publications are lower than commercial "international" rates apply to foreign publications mailed in Canada.[29]

2. Arguments of the Parties

Before turning to the parties' arguments on the relationship between the GATT and the GATS, the context of main arguments of the parties should be considered. The United States asked the Panel to find that: (a) Tariff Code 9958 is inconsistent with Article XI of GATT 1994 (general elimination of quantitative restrictions); (b) Part V.I of the Excise Tax Act is inconsistent with Article III: 2 of GATT 1994 (national

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[28] Ibid., para 3.24.
[29] Ibid., paras. 2.11-2.17.

treatment on internal taxation), or in the alternative, Article III: 4 (national treatment on regulation); and (c) The application by Canada Post of lower postal rates to domestically-produced periodicals under "funded" and "commercial" rate systems is inconsistent with Article III: 4 of GATT 1994.[30]

An important point to make at this stage is that the United States based its claims solely on the GATT, with no reference to the GATS. However, Canada's arguments in response to Section (b) of the United States Claims revealed diverging views of the parties on the relationship between GATT 94 and the GATS. In particular, the United States claimed that Part V.I of the Excise Tax Act is inconsistent with Article III: 2 of GATT 94 because it creates an artificial distinction between "split-run" magazines and all other types of magazines and applies the 80 per cent tax solely to split-runs. Accordingly, it applies a higher tax to certain types of imported magazines than to "like" domestic magazines.[31]

Canada requested the Panel to dismiss the US claims on the grounds that Article III of GATT does not apply to Part V.I of the Excise Tax Act, or in the alternative, even if the Panel decides that Article III of GATT applies to these provisions, they do not violate Article III of GATT 94. In this regard, Canada argued that the dispute concerns the provision of advertising services to Canadian advertisers and that Part V.I of the Excise Tax Act was a measure pertaining to advertising services. More precisely, the starting point of Canada's argument was "characterizing" Part V.I of the Excise Tax Act as a measure regulating trade in services not goods. Accordingly, Canada argued that due to the fact that multilateral trade disciplines on advertising

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[30] Ibid., para. 3.1.
[31] Ibid., para 3.32.

services fall within GATS and not GATT 94, Part V.I of the Excise Act Should not be examined under the GATT.[32] On the other hand, due to the fact that Canada has not undertaken any commitments in respect of the provisions of advertising services under the GATS, there is no basis for challenging the Excise Tax Act under the GATS. Additionally, Canada drew attention to the fact that the United States had raised no GATS claim. Canada therefore argued that the examination of Part V.I of the Excise Tax Act in light of GATS was not covered by the terms of reference of the Panel.[33]

In justifying the characterization of Part V.I of the Excise Tax Act as a measure regulating trade in advertising services, Canada relied on "the magazine's dual nature in that it is both a consumer good and an advertising service with two distinct revenue streams. The two separate revenue streams are circulation revenue, which is derived from the sale of a good, and advertising revenue, which is derived from the sale of a service. The two consumers are readers and advertisers."[34] Thus, the periodical publication industry in fact combines two commercial activities which are economically linked, the production of periodicals and the sale of advertising services.[35] With regard to the characterization of the Excise Tax Act, Canada particularly argued that the fact that the result of the provision of the service (advertising) is physically incorporated in the production of a good (periodical) is not in itself a key factor in the characterization of the measure which relates to such a

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[32] Ibid., para. 3.33.
[33] Ibid., para. 3.34.
[34] Ibid., para. 3.33.
[35] Ibid., para. 3.53.

services. A periodical is the accessory of the advertising service and should be regarded as a vehicle for the provision of the service.[36]

At the same time, the characterizing of the Excise Tax Act as a measure regulating advertising services needed to be accompanied with a normative claim as to the relationship between the GATT and the GATS. In fact, it was taken for granted in Canada's argument that the same measure can be either subject to the GATT or the GATS, but not both of them. There was no explicit reference to this position in Canada's initial arguments. However, the fact that Canada made no reservation regarding the discriminatory nature of the Excise Tax Act and instead tried to distinguish between the GATT and the GATS based on general applicability of national treatment obligation under the GATT and its specific applicability under the GATS indicates that according to Canada the same measure should not be scrutinized under both agreements. In line with this understanding, Canada finished its first round of arguments in the following manner:

> "In the guise of a GATT goods argument, the United States now attempts to persuade the Panel to allow it to have access to a service sector to which, in full accordance with the terms of international trade law, it is presently not entitled. Should the Panel agree that a Member can obtain benefits under a covered agreement that have been expressly precluded under another covered agreement, the Panel risks introducing uncertainty into the relationship between GATS and GATT disciplines."[37]

It is also worth noting that Canada's argument in effect results in affecting the scope of GATT based on making GATS commitments by the same WTO member in the relevant services sector, whereas the idea behind the creation of a new framework for trade in services was "completing" the world trading system; namely "adding" new commitments to already existing commitments.

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[36] Ibid., para. 3.54.
[37] Ibid., para. 3.35.

The United States responded that nothing in GATS purports to reduce or eliminate the obligations that GATT has imposed since 1947, and that GATS does not have primacy over GATT with respect to measures affecting trade in goods.[38] In particular, the United States argued that the fact that Canada has not made any commitments under the GATS on advertising services should not result in insulating all measures having any connection to advertising from review under any other WTO agreement. The United States maintained that Canada's view would open a huge hole in GATT because there is no shortage of "service-related" measures that could be used to discriminate imported goods, like taxing the rental of foreign cars.[39]

On the issue of the relationship between the two agreements, the United States argued that in the absence of an irreconcilable conflict, like the current case, GATT and GATS must be applied according to their terms. "It is theoretically possible that the same measure may be covered by, and may even violate, both agreements. Indeed, a measure may violate more than one goods agreements as well, provided the measure is within the scope of each agreement and is inconsistent with the provisions of each."[40]

In its second round of arguments, Canada admitted that there was no conflict between GATT and GATS in this case. More importantly, Canada refined its position by stressing that the creation of the GATS does not result in the carving out of part of the jurisdiction of GATT and particularly, does not result in "redefining" the scope of Article III of GATT. Canada went on to argue:

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[38] Ibid., para. 3.36.
[39] Ibid., para. 3.37.
[40] Ibid., para. 3.36.

"The interpretation suggested by Canada of the area of application of Article III with respect to the provisions relating to services would have been the same in 1993 before the GATS treaty came into force. The interpretation is autonomous and based on specific terms of Article III: 2 as well as on its intent and its original scope."[41]

In other words, in the second round of arguments, Canada changed the focus of its argumentation. Instead of focusing on arguing against the applicability of GATT due to its "non-commitment" in advertising services under the GATS, Canada focused on the interpretation of Article III: 2 of GATT 94 to make the point that Article III: 2 of GATT 94 was not applicable in this case. Article III of GATT 94 on "National Treatment on Internal Taxation and Regulation" reads in paragraph 2 as follows: "The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, *directly or indirectly,*[42] to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products...". In this regard, Canada essentially argued that the tax is not applied, directly or indirectly, to a "good" within the meaning of Article III: 2, namely to a split-run magazine. The tax is applied to the publishers' advertising services, based on the value of advertising carried by each issue of a split-run magazine.[43]

At the same time, Canada addressed "overlap" issues between the GATT and the GATS explicitly and took the position that they are mutually exclusive. In this

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[41] Ibid., para. 3.38.
[42] Emphasis added.
[43] Ibid., paras. 3.39-3.40. It should be noted that in the context of the EU system, dealing with the same situation, the case law of the ECJ has generally been to consider whether the measure in question "predominantly" affects goods or services. See Gaffney, J. P. (1999) "The GATT and the GATS: Should They Be Mutually Exclusive Agreements?", 12 Leiden Journal of International Law, pp.144-46. It is worth mentioning that this line of reasoning is a natural result of the wording of Article 50 of the EC Treaty, which as already discussed in Chapter 4, suggests that the services provisions have a "complimentary" status and are subordinate to freedom of movement for goods, capital, and persons. Accordingly, due to the non-existence of the same intra-systemic relationship between the GATT and the GATS in the context of the WTO, this line of reasoning is not transferable to the WTO system. It has been suggested, however, that the case law of the ECJ can still provide guidance for formulating an applicability test in the context of the WTO, see ibid., pp.148-53.

context Canada argued that because of the existence of these two treaties which may apply to a given measure, it is necessary to interpret the scope of application of each such as to "avoid any overlap".[44] Canada further suggested that the "dominant or essential characteristics of the economic activity at issue" should control the determination of whether GATT or GATS is applicable.[45]

The United States responded that Canada's test has no support in any of the WTO agreements or their negotiating history and if adopted, would result in altering the rights and obligations of WTO Members, in violation of Article 3.2 of the DSU. The United States stressed that there was no conflict in this case. In fact, applying taxes to imported split-run magazines in a GATT-consistent manner (i.e., without tax discrimination) in no way requires Canada to breach its GATS obligations with regard to advertising services or any other service sector.[46] Turning to the interpretation of Article III of GATT 94, the United States argued that the tax is covered by Article III because it is imposed on the split-run editions which, like all magazines, are "products" for the purposes of GATT.[47]

3. Findings of the Panel

In examining Part V.I of the Excise Tax Act, the Panel announced that since Canada challenges the applicability of GATT 94 to this part of the Excise Tax Act, it should address this issue first. In this regard, the Panel started with examining Canada's initial argument that as mentioned earlier, seemed to exclude the applicability of

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[44] *Periodicals* Panel Report, supra note 22, para. 3.38.
[45] Ibid., para. 3.40.
[46] Ibid., para. 3.42.
[47] Ibid., para. 3.43.

Article III of GATT 94. Paraphrasing Canada's argument, the Panel announced, "Canada seems to argue that if a Member has not undertaken market-access commitments in a specific service sector, that non-commitment should preclude all the obligations or commitments undertaken in the goods sector to the extent that there is an overlap between the non-commitment in services and the obligations or commitments in the goods sector".[48]

The Panel was not "fully convinced" by Canada's characterization of the Excise Tax Act as a measure intended to regulate trade in advertising services. However, for the sake of argument, the Panel assumed that Canada intended to carve out Part V.I of the Excise Tax from the coverage of its GATS commitments by not making any advertising commitments under the GATS. Based on this assumption, the Panel asked, "does that exonerate Canada from the Panel's scrutiny regarding the alleged violation of obligations and commitments under GATT 1994?"[49]

After examining the structure of the WTO Agreement the Panel disagreed with Canada's position. The panel found Article II: 2 of the WTO Agreement as the relevant provision, which reads as follows: "The agreements and associated legal instruments included in Anexxes1, 2 and 3 ... are integral parts of this agreement, binding on all Members". It is worth mentioning that Annex 1A includes multilateral trade agreements on trade in goods including GATT 1994 and Annex 1B includes the GATS. Applying the "general rule of interpretation" stated in Article 31 (1) of the Vienna Convention, the Panel held that the ordinary meaning of the texts of GATT 1994 and GATS as well as Article II: 2 of the WTO Agreement, taken together,

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[48] Ibid., para. 5.14.
[49] Ibid., para. 5.15.

indicates that obligations under GATT 1994 and GATS can "co-exist" and that one does not override the other. The Panel also held that if the consequences suggested by Canada were intended, there would have been provisions similar to Article XVI: 3 of the WTO Agreement, which establishes a higher status for the WTO Agreement within the WTO system:

"In the event of a conflict between a provision of this agreement and a provision of any of the Multilateral Trade Agreements, the provision of this Agreement shall prevail to the extent of the conflict."

The Panel therefore concluded that the absence of such provisions between the two instruments implied that GATT 94 and GATS are standing on the same plain in the WTO Agreement, without any hierarchical order between the two.[50] The Panel went on to maintain that overlaps between the subject matter of disciplines in GATT 94 and in GATS are inevitable and will not undermine the coherence of the WTO system.[51] Accordingly, the Panel rejected Canada's claim and confirmed the applicability of GATT 94 to the dispute.

After ruling on the issue of applicability of GATT 94, the Panel examined whether there was a violation of Article III and confirmed that Part V.1 of the Excise Act was inconsistent with Article III: 2, first sentence, of GATT 94.[52]

4. Findings of the Appellate Body

On Appeal, among other things, Canada submitted that the Panel erred in law by characterizing Part V.I of the Excise Tax Act as a measure regulating trade in goods

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[50] Ibid., para. 5.17.
[51] Ibid., para. 5.18.
[52] Ibid., para. 5.29.

subject to the GATT 1994. In the alternative, Canada argued that even on the assumption that the GATT 94 applies, the Panel erred in law when it found Part V.1 of the Excise Act to be inconsistent with Article III: 2 of GATT 94.[53]

Regarding the possibility of overlapping between the GATT and the GATS, the United States argued that the issue was to some extent irrelevant. According to the United States, the fundamental legal question in the present case was whether the two agreements impose conflicting obligations with respect to Canada's excise tax, and whether one agreement should be given priority over the other.[54]

Accordingly, the Appellate Body first examined the applicability of the GATT 94 to Part V.1 of the Excise Tax Act. The Appellate Body agreed with the Panel's conclusion that Part V.1 of the Excise Tax Act is a measure affecting trade in goods. In this regard, the Appellate Body described a periodical, as a "good" comprised of two components: editorial content and advertising content. Both components can be viewed as having services attributes, but they combine to form a physical product, the periodical itself.[55] The Appellate Body also pronounced that Part V.1 of the Excise Tax Act is a companion to Tariff Code 9958, and is intended to complement the import ban of Tariff Code 9958, which is a measure affecting trade in goods.[56]

More importantly, in examining the applicability of the GATT 94, the Appellate Body agreed with the Panel's statement that:

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[53] *Periodicals* Appellate Report, WT/DS31/AB/R, 30 June 1997, p. 2.
[54] Ibid., p.7.
[55] Ibid., p.13.
[56] Ibid.

"The ordinary meaning of the texts of GATT 1994 and GATS as well as Article II: 2 of the WTO Agreement, taken together, indicate that obligations under GATT 1994 and GATS can co-exist and that one does not override the other".[57]

However, despite the Panel's pronouncement that overlaps between GATT 94 and GATS are "inevitable", the Appellate Body applied the principle of judicial economy. In the sense that although Canada's general argument was the need to avoid overlap between the two agreements, the Appellate Body drew attention to the fact that Canada stated that its principal argument is not based on the need to avoid overlaps. On the contrary, it is based on a textual interpretation of Article III: 2 of the GATT 94. Thus, The Appellate Body stated that:

"We do not find it necessary to pronounce on the issue of whether there can be potential overlaps between the GATT 1994 and the GATS, as both participants agreed that it is not relevant in this appeal".[58]

5. Analysis

As noted previously, the system of international law consists of different partial systems. The WTO system is one of these partial systems. The *periodicals* case is an example of intra-systemic relationship between two pillars of the WTO system, namely the GATT 94 and the GATS. Accordingly, to deal with the situation the starting point should be considering conflict clauses within the WTO system.

It should not be overlooked, however, that the WTO system operates within the wider system of international law. In fact, every new treaty is born into the system of international law and will be governed by customary rules of public international law on issues such as the law of treaties and the relationship between treaties. It follows

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[57] *Periodicals* Panel Report, supra note 22, para. 5.17.
[58] *Periodicals* Appellate Report, supra note 53, p.14.

that general international law fills the gaps left by treaties.[59] This is the case even in relation to law-making treaties. In this regard, the preamble of the Vienna Convention on the Law of Treaties states that, "the rules of customary international law will continue to govern questions not regulated by the provisions of the present Convention". In this regard, the International Law Commission has observed that the fact that international law regimes (such as the WTO regime) are always situated in a "systemic" environment provides the key to understand the very meaning of the "generality" of customary international law and general principles of law.[60]

The Agreement Establishing the World Trade Organization (WTO Agreement) explicitly recognizes the situation of being part of the wider system of international law in Article 3 (2) of the Dispute Settlement Understanding, which refers to the application of customary rules of interpretation of public international law. This is reflected in the Appellate Body's pronouncement in its first report in the *Gasoline* case, where it was held that the GATT is not to be read in clinical isolation from public international law.[61]

More precisely, in the *Korea — Government Procurement* case, the Panel rejected the argument that the reference in Article 3.2 only to rules of treaty interpretation of customary international law means that all other international law is excluded. In this regard, the Panel pronounced that:

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[59] See Pauwelyn, J. (2001) "The Role of Public International Law in the WTO: How Far Can We Go?", 95 American Journal of International Law, p.536.
[60] See Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, Report of the Study Group of the International Law Commission, Finalized by Martti Koskenniemi, A/CN.4/L.682, 13 April 2006, paras. 179-185.
[61] See *United States — Standards for Reformulated and Conventional Gasoline*, WT/DS52/AB/R, p.17.

"Customary international law applies generally to the economic relations between the WTO Members. Such international law applies to the extent that the WTO treaty agreements do not "contract out" from it. To put it another way, to the extent that there is no conflict or inconsistency, or an expression in a covered WTO agreement that implies differently, we are of the view that the customary rules of international law apply to the WTO treaties and to the process of treaty formation under the WTO."[62]

Accordingly, in dealing with overlapping and conflicting obligations within the WTO system, if no guidance can be drawn from WTO law, then customary international law conflict rules such as the *lex posterior* and *lex specialis* principles can be applicable. As regards the relationship between the WTO Agreement and any of the other Multilateral Trade Agreements within the WTO system (namely, the agreements included in Annexes 1, 2 and 3 of the WTO Agreement)[63], Article XVI. 3 of the WTO treaty gives priority to the provisions of the WTO treaty. Furthermore, according to the General Interpretative Note to Annex 1.A, a conflict between GATT 94 and another Annex 1 agreement is resolved in favour of the provision of the other agreement, which is regarded as an application of the *lex specialis* principle.[64]

It is worth pointing out, however, that the WTO system leaves many conflicts questions open.[65] The relationship between the GATT 94 and the GATS is a prime example of the aforementioned situation. Bearing the analysis of the relationship between the WTO system and the wider system of international law in mind, it can be concluded that the issue of overlapping and conflicting obligations under the two agreements should be governed by customary international law conflict rules.

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[62] *Korea — Measures Affecting Government Procurement*, WT/DS163/R, para.7.96.
[63] This includes, *inter alia*, the GATT 1994, the Agreement on Agriculture, the Agreement on the Application of Sanitary and Phytosanitary Measures, the Agreement on Textiles and Clothing, the Agreement on Trade-Related Investment Measures, the Agreement on Subsidies and Countervailing Measures, the GATS, and the TRIPS Agreement.
[64] Matsushita, Schoenbaum and Mavroidis (2003) The World Trade Organization: Law, Practice, and Policy, p.75.
[65] Ibid.

At the same time, the GATT 94 deals with goods, whereas the subject matter of the GATS is services. Accordingly, the *lex specialis* principle cannot be applicable between the two agreements. On the other hand, as noted earlier, the horizontal nature of international law suggests that in principle, there is no hierarchy of rules or systems in international law. Obligations under different treaties derive their binding force from the same source, namely the consent of the states. "Deriving from the same source, they must be equally binding in nature".[66] This provides the key to understand the Panel's pronouncement and the Appellate Body's confirmation that "GATT 1994 and GATS are standing on the same plain in the WTO Agreement, without any hierarchical order between the two".[67]

B. The *Bananas* Case[68]

1. Introduction and Factual Aspects

This case, which due to its importance and publicity is sometimes referred to as the "Bananas War", dates back to the GATT's pre-Uruguay Round dispute resolution mechanism. At the time, individual EC member states had their own banana import regime. Those regimes were in fact bilateral arrangements with developing countries

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[66] Pauwelyn, *supra* note 59, p.538.

[67] *Periodicals* Panel Report, supra note 22, para. 5.17. Commenting on the *Periodicals* case, Professor Pauwelyn criticizes the Appellate Body for what he describes as presuming that once a measure falls within the scope of GATT, it must necessarily apply irrespective of there being a conflicting GATS obligation. According to him, "in the view of the Appellate Body, *any GATT/GATS conflict of the type GATT prohibition/GATS explicit right must be decided in favour of GATT*". See Pauwelyn, supra note 19, p.404 [emphasis is original]. His argument does not seem convincing and effectively overlooks the consensual basis of international obligations. When it comes to international treaties, international law is a fragmented and consensual system. Accordingly, the fact that Canada did not make any advertising commitments under the GATS simply means that it has chosen not to accept the potential obligation already created by the GATS. This situation should not be described as creating an "explicit right" under the GATS for Canada.

[68] *European Communities — Regime for the Importation, Sale and Distribution of Bananas*, Panel Reports, WT/DS27/R/ECU/GTM/HND/MEX/USA, 22 May 1997.

in the African, Caribbean, and Pacific (APC) regions. The individual regimes entailed a combination of quantitative restrictions and licensing agreements. However, particularly in the case of France and the United Kingdom, the individual regimes provided their former colonies — mostly from the ACP countries such as Cote D'Ivoire, Jamaica and the Windward Islands — with preferential arrangements. Obviously, these preferential terms had adverse effect on imports from Latin American countries, so called "dollar bananas".[69]

The individual preferential regimes were the subject of a complaint brought under the GATT dispute resolution mechanism by Colombia, Costa Rica, Guatemala, Nicaragua, and Venezuela. The complaint resulted in a GATT Panel Report, *EEC — Member States' Import Regimes for Bananas* (DS32/R), issued on 3 June 1993, which is sometimes referred to as the "first" banana Panel Report, or *Bananas* I. While the Report recommended various changes to the bilateral import regimes, due to the notorious consensus requirement it was not adopted by the GATT Contracting Parties.

On 1 July 1993, in the process of the implementation of the Forth Lome Convention (signed on 15 December 1989 by the EC and the ACP countries), the EC introduced a common market organization for all banana imports, wherever sourced, through Council Regulation 404/93. The new regime, *inter alia,* replaced the individual import regimes of the member states. Not surprisingly, the new regime became the subject of controversy and the same complaining parties challenged the discriminatory nature of the EC's market organization for bananas. A second GATT

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[69] See Bhala, R. (2000) "The Bananas War" 31 McGeorge Law Review, Issue 3, pt. II.

Panel issued its report, *EEC — Import Regime for Bananas* (DS38/R), or *Bananas* II, on 11 February 1994. Once again, the complaining parties essentially won on the merits. However, the consensus requirement once again stopped the report from being adopted.[70]

With the creation of the WTO and its compulsory dispute settlement system after the conclusion of the Uruguay Round, it was not surprising to see that the EC's preferential banana import regime was challenged once again. Moreover, the conclusion of the Uruguay Round provided the complaining parties with an additional substantive law by adding the GATS agreement to the multilateral trading system. It is worth pointing out that as with the GATT, the GATS agreement provides for the general application of the MFN principles. Accordingly, on 5 February 1996, Ecuador, Guatemala, Honduras, Mexico and the United States challenged the EC regime for the importation, sale and distribution of bananas established by Council Regulation (EEC) 404/93. The Panel was established on 8 May 1996 and among other things, addressed the relationship between the GATT and the GATS.

2. Arguments of the Parties

Before turning to the parties' arguments on the issue of the relationship between the GATT 94 and the GATS, it is worth reminding that in the *Periodicals* case, the issue was whether or not measures directly or purportedly regulating services could actually or potentially adversely affect imported goods. Whereas in the *Bananas*

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[70] Ibid.

case, the issue was whether or not measures directly or purportedly regulating the importations of goods could actually or potentially adversely affect services or service suppliers of foreign origin. Moreover, the report of the Panel in the *Bananas case* was issued before the Appellate Body's report in the *Periodicals* case. Thus, the *Bananas* Panel was not able to rely on the Appellate Body's pronouncement on the relationship between the two agreements.[71]

In turning now to the parties' arguments on the relationship between the GATT 94 and GATS, it is worth pointing out that the complaining parties challenged the same measures (the import licensing rules) simultaneously under the GATS and one or more Multilateral Agreements on Trade in Goods.[72] This was another difference between this case and the *Periodicals* case, which as noted earlier, the United States based its complaint solely on the GATT 94. In justifying challenging the same measures under both goods and services agreements within the WTO system, the complaining parties maintained that trade benefits accruing to their service suppliers under the GATS were distinct from the trade benefits relating to goods.

In response, the EC argued that the same measures could not be condemned both under the GATT and the GATS since their coverage was intended to be "mutually exclusive".[73] According to the EC, the raison d'etre of the GATS was that trade in services could not be covered by the GATT. Hence it was the intention of the

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[71] See Zdouc, W. (1999) "WTO Dispute Settlement Practice Relating to the GATS", 2 Journal of International Economic Law, p.317.

[72] These include the GATT 1994 and the Licensing Agreement. With regard to the GATS, the complaining parties claimed that the EC regime was inconsistent with the EC's obligations under Articles II (Most-Favoured-Nation Treatment) and XVII (National Treatment) of GATS in that it discriminates against distributors of Latin American and non-traditional ACP bananas in favour of distributors of EC and traditional ACP bananas.

[73] *Bananas* Panel Report, Complaint by the United States, para. IV.618.

negotiators in the Uruguay Round to create an instrument that would be distinct *ratione materiae* from, and complementary to, the GATT.[74]

The complaining parties argued further that, the WTO Agreement did not establish a hierarchical order between the GATT and the newer goods agreements. In fact, it would not be uncommon for the same measure to violate more than one multilateral trade agreement for goods - so why not the GATT and the GATS? Accordingly, in the case of Article XVII of the GATS, which was relevant to the present dispute, it would be applicable if, (i) the measure affected trade in services; (ii) the Member had entered a commitment in the relevant sector; and (iii) the measure provided less favourable treatment to foreign services or suppliers in comparison to like domestic ones. This will be the case irrespective of the fact that whether the measure is "good-related" or not.[75]

3. Findings of the Panel

In examining the issue of the relationship between the GATS and the GATT, the Panel drew attention to Article I of the GATS, which defines the scope of the GATS and states in paragraph 1:

"This Agreement applies to measures by Members *affecting* trade in services".[76]

Applying the general rule of treaty interpretation, namely Article 31 of the Vienna Convention on the Law of Treaties, the Panel noted that ordinary meaning of the term "affecting" in Article I:1 does not convey any notion of limiting the scope of the GATS to certain types of measures or to a certain regulatory domain. More

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[74] Ibid., para. IV. 614.
[75] Ibid., para. IV. 619.
[76] Emphasis added.

importantly, that Panel noted that Article I:1 refers to measures in terms of their "effect", which means they could be of any type or relate to any domain of regulation.[77]

Furthermore, in rejecting the EC's position that the GATS and GATT cannot overlap, the Panel noted that such a view was not reflected in any of the provisions of the two agreements. The Panel went on to argue that,

> "On the contrary, the provisions of the GATS referred to above explicitly take the approach of being inclusive of any measure that affects trade in services whether directly or indirectly. These provisions do not make any distinction between measures which directly govern or regulate services and measures that otherwise affect trade in services".[78]

In this regard, the Panel argued further that agreeing with the position that the scope of the GATS and that of GATT are "mutually exclusive" would mean that WTO members could easily circumvent their obligations under the two agreements by the adoption of the measures under one agreement with "indirect" effects on trade covered by the other without the possibility of any legal recourse.[79]According to the Panel, in principle, no measures are excluded *a priori* from the scope of the GATS as defined by it provisions.[80]

4. Findings of the Appellate Body

As noted earlier, in the *Periodicals* case, despite the fact that the parties expressed conflicting views on overlap issues between the GATT and the GATS, and despite the pronouncement by the Panel on the issue, the Appellate body did not feel necessary to pronounce on the issue given the particular circumstances of the case. In

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[77] Ibid., para. 7.280.
[78] Ibid., para. 7.282.
[79] Ibid., para. 7.283.
[80] Ibid., para. 7.285.

the present case, the Appellate Body made an important contribution to the issue by a detailed pronouncement.

The Appellate Body started its analysis by agreeing with the EC position that the GATS was intended to fill a normative gap in the multilateral trading system by regulating different subject matters from the GATT. It continued, however, that it did not follow from this fact that the two agreements could not overlap. According to the Appellate Body, they might or might not overlap, depending on the nature of the measures at issue.

More precisely, certain measures fall exclusively within the scope of the GATT when they affect trade in goods as *goods*. By the same token, certain measures fall exclusively within the scope of the GATS when they affect the supply of services as *services*. However, the Appellate Body referred to a third category, which are measures that involve a service relating to a particular good or a service supplied in conjunction with a particular good:

> "In all such cases in this third category, the measures in question could be scrutinized under both the GATT 1994 and the GATS. However, while the same measure could be scrutinised under both agreements, the specific aspects of that measure examined under each agreement could be different. Under the GATT 94, the focus is on how the measure affects the goods involved. Under the GATS, the focus is on how the measure affects the supply of the service or service suppliers involved."[81]

According to the Appellate Body, in practice, the characterization of a measure and relating it to one of the three aforementioned categories can only be determined on a case-by-case basis.[82] The Appellate Body also agreed with the Panel's pronouncement that in principle, no measures are excluded *a priori* from the scope of

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[81] *Bananas* Appellate Report, WT/DS27/AB/R, 9 September 1997, para. 221.
[82] Ibid.

the GATS. In this regard, it mentioned that the use of the term "affecting" in Article I: 1 of the GATS reflects the intent of the drafters to give a broad reach to the GATS.[83]

5. Analysis

It has been remarked that the Appellate Body's pronouncement in the *Bananas* case settled the overlap issues not only once but forever with respect to the GATS. It has also been remarked that the same line of reasoning would arguably resolve any overlap issues between the TRIPS Agreement, on the one hand, and the GATT 94 or the GATS, on the other hand.[84]

At the same time, the Appellate Body's position opens the door for relying on more than one trade agreement in WTO proceedings, which is particularly important in the energy sector where classification issues are still being debated with a considerable degree of uncertainty. For example, negotiations of the Committee on Specific Commitments (CSC) reveal that classifying issues such as "services relating to production" and "manufacturing on a fee or contract basis" closely link to the general question of the relationship between the GATT and the GATS.[85] In particular, it is worth mentioning that the Committee concluded the debate on manufacturing on a fee or contract basis without drawing any conclusion.[86]

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[83] Ibid., para. 220.
[84] Zdouc, supra note 71, p.320.
[85] See, for example, Committee on Specific Commitments, Report of the Meeting Held on 23 and 24 May 2000, S/CSC/M/15, paras. 27-29.
[86] Committee on Specific Commitments, Report of the Meeting Held on 9 May 2001, S/CSC/M/20, paras. 5,6.

Furthermore, in the *Bananas* case, the Appellate Body dealt with the issue of vertically-integrated companies, which is of particular importance in energy trade. In this case the operators were engaged in certain activities that were not, strictly speaking, within the definition of "distributive trade services". In fact, the operators were vertically integrated with producers, ripeners, and retailers. The Appellate Body held that this situation should not affect the applicability of the GATS:

> "...even if a company is vertically-integrated, and even if it performs other functions related to the production, importation, distribution and processing of a product, to the extent that it is also engaged in providing 'wholesale trade services' and is therefore affected in that capacity by a particular measure of a Member in its supply of those 'wholesale trade services', that company is a service supplier within the scope of the GATS."[87]

III. The Implications of the Relationship between the GATT and the GATS for Trade in Electricity and Gas

The *Periodicals* case highlights the crucial importance of the characterization of the activities for the purpose of determining which sections of the WTO regime apply to them. The Appellate Body confirmed the Panel's characterization and further clarified that "a periodical is a physical good comprised of two components", and that it does not have a "dual nature" as argued by Canada. In the energy sector, there is some ambiguity as to the classification of electricity as a good or a service. Accordingly, addressing this issue is a necessary starting point for our enquiry.

A. The Importance of Distinguishing Energy Services from Energy Goods: The Classification of Electricity

[87] *Bananas* Appellate Report, WT/DS27/AB/R, 9 September 1997, para. 227.

In every day language, the term "energy services" simply refers to services that energy can provide. This is due to fact that energy is always consumed for the services it can provide, rather than as an end in itself.[88] Accordingly, in this context, energy services include: heat, for warming rooms, for washing and for processing materials; lighting, both for interior and exterior; motive power, for a myriad of uses from pumping fluids to driving vehicles; and power for electronic communications and computing.[89] The following quotation from a recently published IEA report gives an example of this ordinary usage:

> "Although steady progress is made in both scenarios in expanding the use of modern household energy services in developing countries, many people still depend on traditional biomass in 2030"[90]

Obviously, in international economic law, the term "energy services" has a specific meaning in the context of "services" versus "goods" dichotomy. Thus, the importance of distinguishing "energy services" from "energy goods" is due to the fact that different legal instruments are applicable to goods and services trade. In this context, there seems to be a generally shared view that the production of energy is a manufacturing activity resulting in goods, whereas transportation and distribution of energy constitute services.[91] Primary energy sources such as oil, coal, and natural gas fall in the goods category. However, there seems to be some degree of uncertainty as to the classification of electricity. The practice of states and international organizations reveals conflicting views with regard to whether electricity should be classified as a "good" or a "service".

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[88] IEA, *World Energy Outlook 2006*, p.283.
[89] Boyle et al (eds.), (2003) Energy Systems and Sustainability, p.34.
[90] IEA, *World Energy Outlook 2006*, p.46.
[91] WTO, *Energy Services, Background Note by the Secretariat, S/C/W/52*, 9September 1998, Para. 9.

It is not disputed that electricity is non-storable, a feature which is typically associated with services. It has been remarked that the non-storability of electricity might have been a factor that led the drafters of the GATT to assume that electricity should not be classified as a commodity.[92] The negotiating history of the GATT with respect to Article XX (g), the general exception relating to the conservation of exhaustible natural resources, confirms this approach. The New York Drafting Committee Report noted that, "as it seemed to be generally accepted that electric power should not be classified as a commodity, two delegates did not find it necessary to reserve the right for their countries to prohibit the export of electric power".[93]

At the same time, electricity is a secondary energy and a power plant "materially transforms" energy stored in various fuel sources into electrical energy. Such material transformation is a characteristic of a manufacturing process.[94] From this point of view, it should not come as a surprise that most GATT Contracting Parties have later regarded electricity as a commodity and some of them have also undertaken tariff bindings on it.[95] Moreover, the practice of the World Customs Organization (WCO) is in line with the latter position. The Harmonized Commodity Description and Coding System (HS) developed by the WCO, classifies electricity as a commodity together with other energy goods such as coal, gas, and oil. However, unlike other energy goods, electrical energy is an optional heading in the WCO HS

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[92] Ibid., para. 8.
[93] Ibid., footnote 4; see also Jackson, John H. (1969) World Trade and the Law of GATT, pp.744-45.
[94] See U.S. International Trade Commission, *Electric Power Services: Recent Reforms in Selected Foreign Markets,* Publication 3370, November 2000, Chapter 21
[95] WTO, *Energy Services, Background Note by the Secretariat,* S/C/W/52, 9 September 1998, para. 8.

classification, which might reflect the fact that some countries regard electricity as a service.[96]

At the regional level, EC energy law and practice is worth considering. For the first time, in 1964 in the *Costa v ENEL* case[97], the ECJ found an opportunity to render its judgement in an electricity-related case under the EEC Treaty. The original case was pending in an Italian court[98], which was related to a contract on the supply of electricity following the nationalization of the electricity industry in Italy in 1962. The case was referred to the ECJ by the Italian court under Article 177 of the EEC Treaty. The ECJ without explicitly classifying electricity as a "good" addressed the issue in the context of Article 37 (now Article 31) of the EEC, which is related to trade in goods. As already discussed in Chapter 4, under Article 31 (1), the Member States are progressively to adjust any State monopolies of a commercial character so as to ensure that when the transitional period has ended[99], no discrimination regarding the conditions under which *goods* are procured and marketed exists. At the same time, Article 31 (2) is aimed at complementing the effect of Article 31 (1) by prohibiting Member States from creating any new State monopolies of a commercial character, which tend to introduce the cases of discrimination.[100]

Three decades later, in the *Almelo* case[101], which was referred to the ECJ by a Dutch court under Article 177 of the EEC Treaty, the ECJ explicitly classified electricity as a "good". Once again, the ECJ was asked to interpret, *inter alia,* Article 37 of the

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[96] Ibid.
[97] Case 6/64 Costa v ENEL [1964] ECR 1141.
[98] Giudice conciliatore di Milano
[99] The end of the transitional period for the six original Member States was 31 December 1969.
[100] In this case, Italy had created its electricity State monopoly (ENEL) in 1962.
[101] Municipality of Almelo and others v NV Energiebedrijf Ijsselmij [1994] ECR I- 1477

EEC Treaty with reference to a ban imposed by the Law of 16 November 1989 and subsequent legislation on the import of electricity for public supply purposes, which created an exclusive right to import electricity for the designated utility (SEP). In this regard, the ECJ pronounced that,

"In Community law, and indeed in the national laws of the Member States, it is accepted that electricity constitutes a good within the meaning of Article 30 [now Article 28] of the Treaty. Electricity is thus regarded as a good under the Community's tariff nomenclature (code CN 27.16). Furthermore, in its judgment in Case 6/64 Costa v ENEL ... The Court accepted that electricity may fall within the scope of Article 37 of the Treaty."[102]

While the above pronouncement seemed to resolve the matter in the context of the EC law, actions by the Commission of the European Communities against some of the Member States that maintained import and export monopolies in the electricity industry[103], provided the Italian Government with the opportunity to challenge the classification of electricity as a good. In the case of Italy, on 14 June 1994, the Commission brought an action under Article 169 of the EC Treaty (now Article 226) for a declaration by the ECJ that, by establishing and maintaining, as regards the other Member States, as part of a national monopoly of a commercial character, exclusive import and export rights in the electricity industry, the Italian Republic had failed to fulfil it obligations under Articles 30 (now Article 28), 34 (now Article 29), and 37 (now Article 31) of the EC Treaty.[104]

The Italian Government, *inter alia,* contended that electricity displays much greater similarity to the category of "services" than that of "goods" and therefore does not fall within the scope of Articles 30 to 37 of the Treaty *ratione materiae.* In supporting its claim, the Italian Government stressed that electricity is an incorporeal

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[102] Ibid., para. 28.
[103] It should be recalled that this issue was fully discussed in Chapter 4.
[104] Commission of the European Communities v Italian Republic, Case C-158/94 [1997] ECR I-5789. The Commission also brought similar actions against other Member States such as France and the Netherlands. However, they did not challenge the classification of electricity as a "good".

substance, which cannot be stored and has no economic existence as such, in that it is never useful in itself but only by reason of its possible applications. It also argued that, in particular; "imports and exports of electricity are merely aspects of the management of the electricity network which, by their very nature, fall within the category of services". [105]

In rejecting the Italian Government's position regarding the classification of electricity, the ECJ did not make any substantive pronouncements and just referred to the relevant part of its judgments in the *Almelo* case.[106] It is worth pointing out that the opinion of the ECJ is in line with the EC secondary legislation for the establishment of an internal market in electricity. Recital 15 of the Preamble to the original Electricity Directive[107] refers to the fact that "the Treaty lays down specific rules with regard to restrictions on the free movement of *goods* and on competition"[108], with no reference to the provisions on the free movement of services.

As regards other trade agreements, it is worth recalling that in the Canada- United States Free Trade Agreement and the NAFTA, electricity is subject to the disciplines on trade in goods.[109] Furthermore, as already noted in Chapter 3, the Energy Charter Treaty mentions "electrical energy" as one of the energy goods covered by the treaty. Moreover, the International Energy Agency (IEA) in one of its recent publications entitled "Competition in Electricity Markets", refers to electric power as a non-storable commodity:

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[105] Ibid., para. 14.
[106] Ibid., para. 17.
[107] Directive 96/92/EC.
[108] Emphasis added.
[109] See Chapter 3 of this study.

"Electricity delivered to the consumer is made up of energy (a non-storable commodity), and transportation (a service) which includes transmission, distribution, and system operation... The commodity component of electricity is similar to many other commodities although it has some special features."[110]

In summary, the review of the practice of states and the relevant international organizations suggests that despite the existence of theoretical debates, there exists a well-established international practice in support of classifying electricity as a good.[111] It is worth mentioning that this classification is not an "economic classification"; it is a "legal classification" for the purpose of the application of international trade rules to energy-related activities.

B. Implications for Access to Energy Networks

As previously discussed in Chapter 6, in the context of the GATS, specific commitments in energy services are very limited. This is partly due to the fact that the energy sector has always been regarded as a sensitive sector and partly due to the fact that as discussed in Chapter 2 at the time of the Uruguay Round negotiations most energy services were performed "in-house" by oil companies and state-owned vertically integrated utilities.

The increasing popularity of the new energy paradigm after the conclusion of the Uruguay Round has resulted in the increase in the independent provision of energy services. However, despite their increasing importance and tradability, energy

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[110] IEA, (2001) Competition in Electricity Markets, p.17.

[111] Referring to the relevant literature, Professor Walde has pointed out: "There is no doubt that electricity now has to be considered as a 'good' under GATT law." See Walde, T. (2003) "The International Dimension of EU Energy Law and Policy" in Malgosia Fitzmaurice and Milena Szuniewicz (eds.) Exploitation of Natural Resources in the 21st Century, p.34. At the same time, it has been argued that under WTO law, the question as to whether electricity is a commodity or a service might not be considered completely settled. See Defilla, S. (2003) "Energy Trade under the ECT and Accession to the WTO", 21 Journal of Energy and Natural Resources Law, p.444.

services are not satisfactorily integrated into the multilateral trading system. This is to some extent due to the fact that contrary to the GATT that requires general applicability of the MFN and national treatment obligations, the GATS agreement only regards the MFN obligation as a general obligation. As a result, by making very limited specific commitments in the energy services sector WTO members escaped the applicability of the national treatment obligation, which is one of the basic principles of international trade and the second component of the principle of non-discrimination.

The Appellate Body's pronouncements in the *Periodicals* case and the *Bananas* case can to some extent "redress" this situation by providing the potential for scrutinizing any restrictive measures imposed by WTO members that "directly" or "indirectly" affect imported network-bound energy products. From the point of view of the rule of law, it is safe to conclude that the Appellate Body's pronouncements have reduced the potential loopholes within the WTO system. Its importance is particularly due to the fact that more often than not, issues such as definition and characterization are not as clear as they might seem to be.

As regards an illustrative scenario in a different context, it has been suggested that if for example, a WTO member has not made any commitments on transport, and allows domestic products to be distributed by rail or truck, but allows imported products to be distributed only by one of these two forms of transportation, it will have violated GATT Article III: 4, due to the fact that the national treatment

obligation in the GATT context is a general obligation. Thus, GATT obligations may come into play even in the absence of specific commitments under the GATS.[112]

The same argument can be made in the electricity and gas sectors. It is worth reminding that our review of the development of competitive market for natural gas revealed that the reform has led to the development of two distinct markets, i.e. the natural gas market, where gas is traded as a "commodity", and the gas transportation market.[113] Furthermore, as reflected in the IEA study, a similar distinction can be made in the electricity sector. At the same time, it can be argued that transmission and distribution of electricity and gas via energy networks are covered by GATT Article III:4, which refers to all laws, regulations and requirements that may discriminate against imported products affecting their internal sale, offering for sale, purchase, transportation, distribution or use. This would result in the applicability of the national treatment obligation even when no commitments relating to energy distribution under the GATS have been made.

IV. The Need for Regulatory Commitments

A. The Interaction between Trade Liberalization and Competition Policy

Competition law[114] exists to preserve the competitiveness of markets, i.e. to protect the process of competition in a free market economy – that is, an economic system in which the allocation of resources is determined solely by supply and demand in free markets and is not directed by government regulation. The goal of competition law is

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[112] See Matsushita *et al*, supra note 64, p.234.
[113] See Chapter 2.
[114] Antitrust law in American terminology.

to achieve economic efficiency and maximize consumer welfare and competition rules seek to promote effective and undistorted competition in the market.[115]

It should be noted that competition law is essentially concerned with the promotion of domestic welfare and has therefore evolved in a "domestic" setting.[116] Its focus therefore has been on domestic trade rather than on cross-border trade. However, competition policy is widely perceived as a "complement" to trade liberalization. Obviously, trade liberalization is aimed at reducing governmental rules that distort and limit trade among nations – specifically tariffs and non-tariff barriers. On the other hand, by regulating the behaviour of market participants, competition law traditionally seeks to combat private restrictions that distort and limit vigorous competition among businesses, to the detriment of consumers. Thus, properly understood, trade liberalization and competition policy are both aimed at increasing prosperity through the promotion of market processes, albeit through different means.[117]

The importance of this complementary role was reflected in the original United States proposal for an International Trade Organization, which contained major provisions regarding "restrictions imposed by private companies and cartels". The Rational of the United States proposal was explained as follows:

"Goods can surmount a tariff if they pay the duty; they can enter despite a quota if they are within it. But when a private agreement divides the markets of the world among the members of a cartel, none of those goods can move between the zones while the contract is in force. Clearly, if trade is to

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[115] Jones, A. and Sufrin, B. (2001) EC Competition Law: Text, Cases, and Materials, pp.3-4.
[116] See, for example, Working Group on the Interaction between Trade and Competition Policy, Submission by the European Community and its Member States, WT/WGTCP/W/45, 24 November 1997, Section 3.
[117] Abbott, A. F. (2004) "Competition Policy as Welfare-Enhancing Complement to Trade Liberalization: A United States Perspective" in Tzong-Leh Hwang and Chiyaun Chen The Future Development of Competition Framework, p.78.

increase as a result of the lightening of government restrictions, the governments concerned must make sure that it is not restrained by private combinations."[118]

As is well known, the Havana Charter contained a chapter with nine articles dealing with the problems arising from restrictive business practices, but none of these were included in the General Agreement. However, the WTO Ministerial Conference held in Singapore in December 1996 established a Working Group to study the interaction between Trade and Competition Policy. Among other things, the Working Group discussed the impact of anticompetitive practices on market access. In this context, it has been argued that the substantial reduction of government obstacles to trade as a result of successive Rounds of trade liberalization has greatly contributed to enhanced conditions of competition. At the same time, in the absence of an effective competition law framework to regulate their behaviour, domestic firms may have an incentive to engage in anti-competitive behaviour with a view to protect the domestic market against foreign competition.[119]

In any event, based on the Working Group discussions, it became clear that there was no consensus on the inclusion of binding competition provisions in the WTO.[120] As a result, in July 2004, the General Council of the WTO decided that the interaction between trade and competition policy would no longer form part of the Work Programme set out in the Doha Declaration and therefore no work towards negotiations on this topic would take place during the Doha Round.[121]

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[118] See Jackson, supra note 93, p.522.
[119] See Submission by the European Community and its Member States, WT/WGTCP/W/45, 24 November 1997, Section 3. The Submission has also pointed out that during 1990-1997 more than 35 developing countries enacted competition laws.
[120] See Abbott, supra note 116, p.85.
[121] According to the "July Package", with the exception of "trade facilitation", other so called "new issues" in the WTO, i.e. the relationship between trade and investment, the interaction between trade and competition policy, and transparency in government procurement, would no longer form part of

B. The Importance of Competition-Related Regulatory Commitments in the Electricity and Gas Industries

In the network-bound sectors, such as the electricity and gas industries, the interaction between competition-related regulation and trade liberalization is more complicated. In fact, as discussed in greater detail below, as a result of the existence of the natural monopoly segments in these industries, normal liberalization commitments would only lead to "theoretical" market access. Thus, making "regulatory commitments" based on competition-related regulations is widely regarded as a prerequisite for a "meaningful" market access.

In this regard, it should be noted that policy reforms usually include structural adjustment to redistribute market power and limit the potential for abuse of either monopoly power (in the natural monopoly segments) or market power (in the competitive segments). Dominant firms can be restructured vertically as well as horizontally. Vertical restructuring, often called unbundling, entails breaking up of a vertically integrated electricity or gas supplier into its components. Establishing a clear separation between industry segments makes it possible to create a barrier between monopoly and competitive activities of incumbents. The strongest form of vertical restructuring entails ownership separation. Weaker forms of separation include functional separation and accounting separation. Horizontal restructuring on the other hand is concerned with the competitive segments of the market and addresses the market power of a dominant firm within a single segment such as

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the Work Programme originally set out in the Doha Declaration (paragraphs 20-22, 23-25, and 26 respectively).

production (generation) or marketing. Market power is reduced by breaking up the dominant firm into smaller components, which then compete with new market entrants and one another.[122]

The need for making regulatory commitments stems from the fact that even after liberalization, previous monopoly suppliers (which are now called incumbents) still dominate.[123] The extent of their dominance depends on the degree of restructuring. The weaker forms of vertical restructuring, for instance, would enable incumbents to engage in anti-competitive practices such as cross-subsidization. From the point of view of competition law, it has been remarked that:

> "Incomplete vertical restructuring permits incumbent service providers to control the network while ostensibly competing with new entrants in the production and marketing segments. Inadequate horizontal restructuring enables incumbent producers and marketers to continue holding a dominant position and have the market power to influence prices for the markets."[124]

There is also the open access or third-party access issue, which is also referred to as the interconnection obligation. As already noted, one of the incumbents' strategic advantages is their control of the existing energy transmission and distribution networks. At the same time, new entrants need to connect to these networks to offer their products and services. Thus, it is feared that by refusing access to network or by asking unreasonable charges, dominant network operators might effectively become the principal barrier to entry to newly liberalized markets. Accordingly, some form of regulation is required to prevent incumbents from extracting monopoly rents at the expense of their competitors.[125]

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[122] See Melly, C. (2003) "Electric Power and Gas Market Reform and International Trade in Services", in Energy and Environmental services: Negotiating Objectives and Development Priorities", UNCTAD/DITC/TNCD/ 2003/3, pp.167-68.
[123] See Slot and Skudder, supra note 1, p.94.
[124] Melly, supra note 122, p.169.
[125] See Cameron, P. D. (2002) Competition in Energy Markets: Law and Regulation in the European Union, pp.23-4. He refers to this situation as "regulated competition".

The concept of third-party access or interconnection obligation can be traced to the "essential facilities" doctrine.[126] The doctrine of essential facilities suggests that a monopolist (e.g. incumbents who control the monopoly segments of the electricity and gas sectors) can be "forced" to sell a product or service when another person needs it to do business.[127] In any event, electricity and gas markets are confronted with the existence of a single transportation network. Thus, ensuring that the common structure is open to all competitors on an equal basis requires the development of rules governing interconnection, access and use of network facilities.[128]

As discussed in Chapter 4, in the context of the EU these challenges have been met through the introduction of the Electricity and Gas Directives. It is worth mentioning that despite the existence of European competition law[129], the development of these sector-specific Directives in the form of *ex ante* regulation of access issues was considered necessary.[130] Therefore, the lack of general competition law in the WTO system *a fortiori* calls for the development of a set of regulatory principles for the energy sector.

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[126] See Bronckers, Marco C.E.J. (2000) "The WTO Reference Paper on Telecommunications: A Model for WTO Competition Law?", in M. Bronckers and R. Quick (eds.) New Directions in International Economic Law, p.378.
[127] Doherty, B. (2001) "JUST WHAT ARE ESSENTIAL FACILITIES?", 38 Common Market Law Review, p.397.
[128] Melly, supra note 122, p.168. It is also worth mentioning that according to the office of the U.S. Trade Representative (USTR), in the context of the Doha Round, the United States is requesting commitments with respect to third-party access to and use of essential facilities for transportation of the energy source necessary to providers of energy marketing services – for example, interconnection with energy networks and grids. See http://usinfo.state.gov/ei/Archive/2003/Dec/31-488867.html.
[129] Articles 81 and 82 of the Treaty of Rome (the provisions on anti-competitive behaviour and abuse of dominant position). These provisions continue to be used in an *ex post* way.
[130] See Slot and Skudder, supra note 1, pp. 94-5.

The experience of the telecommunications sector shows that the Reference Paper, despite creating a "limited" competition law regime[131], is well equipped to meet the challenges mentioned above. Particularly, on interconnection obligation, which is a key issue for network-bound sectors, it is well drafted and can be used, *mutatis mutandis,* as a model for the energy sector.[132] For instance, the network-bound character of telecommunications inevitably expands the scope of measures that might adversely affect the liberalization of this sector. Therefore, apart from measures that are *a priori* defined as market access restrictions, there are other measures such as discriminatory network access practices that represent market access restrictions and have been dealt with in the Reference Paper.[133]

Likewise, the network-bound character of electricity and gas trade represents similar regulatory challenges. Accordingly, the Reference Paper is of particular importance for the development of a set of regulatory principles for cross-border electricity and gas trade. Obviously, more useful guidance can be drawn from the EU experience and the electricity and gas Directives. It should be noted, however, that the liberalization of the generation (production) segment would be beyond the scope of the GATS, since as noted earlier the production of energy is a manufacturing activity resulting in "goods". Moreover, "investment" is not covered by the GATT.

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[131] See Bronckers, supra note 126, pp.378-9. Through its "competitive safeguards", the Reference Paper deals with "abuses of a dominant position". However, it does not deal with merger control and restrictive business practices in general.

[132] Professor Bronckers disagrees with the introduction of more sector-specific competition disciplines: "It would not make much sense to draft specific rules in WTO each and every time in a particular sector or situation the need for competition law is felt. This would not be efficient in terms of negotiating resources; it would easily lead to fragmentation and inconsistent principles. The better approach would be to seek a more global or general understanding on the objectives and application of competition law in WTO." Ibid., p.382. However, the fact that in the telecommunications, electricity and gas sectors Directives are used alongside the competition provisions reveals that they meet different needs and complement each other. As already noted, these sector-specific directives provide the much needed *ex ante* regulation of access issues for the immediate period after liberalization.

[133] On the extended scope of potential market access restrictions see Tuthill, Lee (1997) "The GATS and new rules for regulators", 21 Telecommunications Policy, pp.787-88.

Accordingly, liberalizing investment in the generation (production) segment, i.e. to open up the construction of new generating capacity to competition, cannot be pursued in the context of the current negotiations on energy services.

V. Concluding Remarks

This chapter was aimed at providing an in-depth discussion of regulatory aspects of trade in electricity and gas. The discussion was divided into two parts. The focus of the first part was on the intra-systemic relationship between the GATT and the GATS and its implications for electricity and gas trade. The fact that the national treatment obligation under the GATS is not a general obligation means that the liberalization of international trade in electricity and gas is a challenging task. Our discussion of WTO jurisprudence (the *Periodicals* case and the *Bananas* case), however, revealed that this situation may be "partially" remedied by the application of the case law discussed in this chapter.

Furthermore, it was discussed how the network dependency of electricity and gas would create additional regulatory challenges for national, regional and international regulatory mechanisms. In order to meet these additional regulatory challenges and bring about a meaningful liberalization, it was suggested that as with the telecommunications sector, WTO members should make additional regulatory commitments (preferably based on an energy reference paper containing the relevant regulatory principles) under Article XVIII of the GATS. Moreover, building upon the lessons learnt from the EU experience in electricity and gas liberalization, suggestions were made as to the content of an energy reference paper.

Chapter 8. Conclusions and Perspectives

Energy and agriculture[1] are generally considered to be the most sensitive and strategic sectors of the economy and traditionally have not by and large been fully integrated into the world trading system. The conclusion of the Uruguay Round brought about the integration of agricultural trade into the world trading system and, in the era of wholesale rethinking of ways of structuring the energy sector and regulating energy-related activities, the current negotiations on energy services under the GATS mark the first time that energy issues have been formally negotiated within the GATT/WTO framework.

In fact, when the rules of the GATT were negotiated 60 years ago, opening trade in energy was not a political priority.[2] Not surprisingly, the world trading system was not designed to meet challenges specific to energy trade. Similarly, when the rules of the GATS were negotiated during the Uruguay Round, the energy industry was dominated by state-owned monopolies operating mostly within home markets. Furthermore, most service functions were performed "in-house" by international oil companies and thus were not perceived as "tradable" services. Accordingly, in contrast with telecommunications and financial services, opening trade in energy services was not a political priority in the Uruguay Round.

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[1] It is a commonly held view that agriculture is key to the fate of the Doha Round. Director-General Pascal Lamy, in a speech to the G8 Summit in Germany on 8 June 2007 stressed that agricultural subsidies and the reduction of agricultural and industrial tariffs are the centrepiece of the negotiations. See WTO Online, "Lamy asks G8 for "added political effort" to spur Doha agreement".

[2] See, for a recent confirmation of this point, Pascal Lamy's speech at the 20th World Energy Congress in Rome on 15 November 2007, WTO Online, "Doha Round will benefit energy trade – Lamy".

The change in industry structure since the Uruguay Round has resulted in an unprecedented interest in integrating energy trade into the world trading system. As discussed extensively in Chapter 2, regulatory reform in the electricity and natural gas industries has taken place in the context of the deregulation movement. Furthermore and closely connected with the deregulation movement, there has been the "outsourcing" trend in the provision of oil and field services. These developments have generated new trading opportunities for energy services. Additionally, the fact that major energy-exporting countries either have recently acceded to the WTO or are currently negotiating their accession inevitably has contributed to highlight the necessity of dealing with energy-related issues in the context of the WTO.

Needless to say, the integration of international trade in energy into the WTO system is a formidable task. In fact, there is a crying need for "systematization" of the study of energy trade. The literature on the subject is fragmented and does not provide a coherent analysis of trade and energy issues in the context of an overall critique. The main purpose of the research has therefore been filling this gap through identifying and conceptualizing patterns, rules, policies and practices in the area of energy trade.

Accordingly, the first step has been to identify the scope and elements of the current energy trade debate. It is worth reminding that the scope of the GATS is limited to energy services. Thus, the current negotiations do not cover the whole energy trade debate. A comprehensive treatment of the energy trade debate necessitates analysing the law and practice of the GATT as well as GATT-based regimes. Furthermore, the energy goods debate has an additional aspect, which is related to the issue of dual pricing of energy products and the subsidies debate. Accordingly, it was established

that the energy trade debate comprises two main parts, namely energy services and energy goods (including one subdivision on subsidies), which complement each other.

The next step has been analysing the interaction between the old (petroleum trade) debate and the new debate. Traditionally, the debate on international trade in energy has centred on petroleum trade. In recent years, however, a new dimension (notably, electricity and natural gas trade) is added to the old debate. Before turning to the international trade implications of the liberalization of the electricity and gas industries, it was necessary to discuss extensively the nature and technical aspects of the reforms. In addressing the issue of interaction, it was noted that historically, energy markets have been fragmented and segmented into national and highly protected markets. Thus, trade in electricity and gas[3] virtually did not exist. However, during the last two decades, the implementation of regulatory reforms and privatization programmes in the electricity and gas industries has gained popularity. The emerging energy paradigm has resulted in changing the type and number of energy providers. Instead of traditional monopolies, energy companies and energy traders are new players. In addition, the outsourcing trend in the provision of oil and gas field services has gained popularity. Accordingly, these developments have created new opportunities for international trade in electricity and gas as well as oil and gas field services.

The point was made that an important distinction needs to be drawn between the petroleum trade debate and the new debate. In the case of trade in energy goods, and

[3] It is worth reminding that the focus of the liberalization debate is on the downstream segment of the natural gas industry. Although as discussed earlier oil and gas field services, which are related to the production (upstream) segment, are also included in the GATS agenda.

in particular petroleum, due to uneven distribution of energy sources across the world, the real concern is "access to supplies" rather than "market access". In this context, our review identified two closely related patterns: the particular importance of the GATT exceptions in "major measures" and the applicability of normal GATT rules in "minor measures". It was argued that the key to understand why some controversial practices in the area of energy trade have escaped the legal scrutiny of GATT law and remained unchallenged is the existence of a tacit agreement between both energy-exporting and energy-importing countries to this effect. This mutual toleration effectively means that trade in strategic energy goods is not meant to be "fully integrated" into the world trading system. However, an emerging trend was the subjection of the energy sector to GATT-based regimes, including the Canada-United States Free Trade Agreement, the NAFTA and the Energy Charter Treaty, which is an important development from the point of view of strengthening the rule of law. They offer GATT-plus regimes by limiting the scope of the GATT exceptions[4] or extend the reach of GATT rules beyond the members of the WTO.

The last identified trend was related to the fact that the WTO is gradually approaching universal membership. This means that the dual pricing debate, which despite the insistence of the United States was not contained in the Uruguay Round, can be referred to the WTO dispute settlement system. As already discussed in greater detail, the recent developments of WTO dispute settlement practice in the context of the law of subsidies – despite being criticized as "impermissible judicial activism" – indicate that the SCM Agreement might be used in the future to challenge dual pricing practices of energy-rich countries. Indeed, further

[4] In the case of the CUSFTA and NAFTA.

confirmation of the fact that the thesis has correctly identified how the law was developing recently came from the Negotiating Group on Rules. On 30 November 2007, the chair of the Negotiating Group on Rules circulated his draft consolidated texts on anti-dumping and subsidies and countervailing measures. The draft texts are presented in the form of proposed revisions to the existing agreements. The proposed addition to Article 14 (d) of the SCM Agreement effectively incorporates the pronouncement of the Appellate Body in *US – Softwood Lumber IV* and reads as follows:

> "Where the price level of goods or services provided by a government is regulated, the adequacy of remuneration shall be determined in relation to prevailing market conditions for the goods or services in the country of provision when sold at unregulated prices, adjusting for quality, availability, marketability, transportation and other conditions of sale; provided that, when there is no unregulated price, or such unregulated price is distorted because of the predominant role of the government in the market as a provider of the same or similar goods or services, the adequacy of remuneration may be determined by reference to the export price for these goods or services, or to a market-determined price outside the country of provision, adjusting for quality, availability, marketability, transportation, and other conditions of sale."[5]

As regards energy services, with the aim of cross-fertilization of experiences, the EU model for liberalizing the electricity and gas sectors was examined. The discussion revealed that in the context of the EU, a two-staged approach has been followed. Initially, the general rules of the Treaty were applied to these sectors. However, it soon became apparent that without sector-specific regulation to address competition-related issues a meaningful liberalization would not be possible. Accordingly, in order to transform the theoretical access to a meaningful market access, the Electricity and Gas Directives were designed. They introduced for the first time in these sectors ideas such as network access and unbundling. We also examined how the system was evolving to address its inevitable shortcomings.

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[5] WTO, Negotiating Group on Rules, Draft Consolidated Chair Texts of the AD and SCM Agreement, TN/RL/W/213, 30 November 2007, p.58.

Further in the following chapter, the GATS Agreement as the framework within which the liberalization of energy services should take place was discussed. More importantly, examining the telecommunications sector, which like electricity and gas is a network-bound sector, reaffirmed the need for sector-specific regulation of network-bound industries in order to tackle anti-competitive practices and provide third party access to "essential facilities". The Reference Paper as the first competition-related regulation in the WTO system was particularly discussed.

Our review of the treatment of energy services under the GATS revealed that energy services are ill defined and there is a need for improved classification, taking into account current market realities. It was also noted that due to the "objective nature" of GATS commitments, a clear understanding of the meaning of specific commitments in any services sector and notably energy sector is of crucial importance. The evaluation of the four selected proposals submitted by WTO members revealed that the degree of similarity between them was interesting, which seems to suggest that the negotiations will eventually result in an improved classification of energy services. However, its exact legal form is yet to be decided.

Finally, Chapter 7 examined the relationship between the GATT and the GATS and its implications for electricity and gas trade. It was argued that in the light of the *Periodicals* case and the *Bananas* case, and given that our review of the practice of States and international organizations suggests that there exists a well-established practice in support of classifying electricity as a "good", there is a possibility for the applicability of the national treatment obligation even when no commitments relating to energy distribution under the GATS are made. Furthermore, the point was made

that, as evidenced by the EU liberalization experience, in the network-bound sectors, such as the telecommunications, electricity and gas, as a result of the existence of the "natural monopoly" segments in these industries, normal liberalization commitments would not lead to a meaningful market opening. Accordingly, making "regulatory commitments" in the form of "additional commitments" under the GATS is a prerequisite for the attainment of a meaningful market opening. The experience of the telecommunications sector shows that the development of a "reference paper" containing regulatory principles for the energy services sector is necessary. The Electricity and Gas Directives can make a significant contribution to the content of the proposed reference paper.

Inevitably, regulating energy trade will remain one of the future challenges facing the WTO system.[6] The ongoing GATS process is the first step, which can bring about regulatory improvements and enhance the quality of liberalization commitments. Some commentators, however, have gone further and suggested that an energy reference paper should have a broad coverage to include trade, transit, third party access rules, and also investment rules. They have argued that,

> "Different from the EU energy directives, an energy reference paper to be developed as a GATT protocol or protocol annex on energy and energy services trade, should therefore not only cover trade, transit and TPA rules, but also investment rules.... The 1994 Energy Charter Treaty (in particular its Chapter III dealing with investment protection) provides a more or less ready-made package from which to work. The "energy trade reference paper" we here propose would therefore ideally incorporate Chapter III of the Energy Charter Treaty. Here we have a sophisticated, carefully negotiated and crafted multilateral energy investment protection instrument."[7]

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[6] See, for example, WTO, *World Trade Report 2007*, Foreword by the Director-General in the relevant part reads as follows: "Many of the future challenges facing the WTO system are embedded in the issues ... ranging from the short-term imperative to complete the Doha Round to systemic issues that have been part of GATT/WTO deliberations. But the trading system has to look ahead too, and new issues will emerge. Such issues are likely to include the relationship between environmental challenges such as global warming and trade, and trade and energy."

[7] Walde, T. W. and Gunst, A. J. (2002) "International Energy Trade and Access to Energy Networks", 36 Journal of World Trade, p.218.

It is worth pointing out in this regard that although one can agree with their diagnosis of the problem, their proposal seems to be far from realistic. As noted throughout this study, the strategic importance of energy resources for energy-rich countries means that they would resist limiting their policy options when it comes to regulating energy resources. At the same time, the energy services sector is considered far less strategic. Thus, the key to achieve a meaningful integration of the energy sector into the multilateral trading system is to concentrate on the energy services sector in the context of the GATS as the starting point. Going beyond the scope of the GATS may prove over-ambitious and would bring a considerable degree of politicization to the process, with no realistic chance of success.

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